



# **MODEL GOVERNMENT** **DEGREE COLLEGE SHOPIAN**



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PROGRAMME OUTCOMES, COURSE OUTCOMES AND  
COURSE SPECIFIC OUTCOMES FOR B.A., B.Sc.,  
B.COM. DEGREE PROGRAMMES OFFERED DURING  
YEAR 2017

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**PREPARED BY**  
**INTERNAL QUALITY ASSURANCE CELL**

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## PROGRAMME OUTCOMES FOR B.A. PROGRAMME

The B.A. programme offered by the Govt Degree College Shopian is recognised by University of Kashmir and follows the curriculum prescribed by the concerned university. Our students are allowed to choose the subjects from the pool of subjects. B.A. programme in our college meets the standards prescribed by general Humanities, Education and Social Sciences. This programme offers a wide range of subjects that helps our students to understand how cultural, historical, geographical, political, linguistic and environmental forces that shape the world and recognize the role of the individuals within our communities to effect change. The programme offers a variety of modes in terms of teaching and learning.

The programme is designed to achieve the following outcomes:

- The students are acquainted with knowledge in the fields of social sciences, literature, and humanities which makes them sensitive, conscious and sensible enough. Besides, they appreciate literary and cultural diversity.
- The B.A. students are well equipped to think critically about the issues of contemporary relevance and hold an informed opinion on them.
- The students learn two languages along with the major subjects. At the end of the programme they are capable in reading, writing, speaking and composition skills.
- The B.A. students apply for employment in different Govt. and non-governmental sectors. They appear for various competitive examinations conducted for various public sector jobs.
- The B.A. programme develops the base to be a good and responsible citizen and fostering in them national and emotional integration.
- The B.A. programme acquaints the students with various graduate attributes like deep discipline knowledge and intellectual breadth, intercultural and ethical competency, teamwork and communication skills etc.
- The B.A. passouts are know the fundamental concepts in History, Political Science, Economics and other related disciplines of social sciences during their perusal of B.A Programme
- The B.A students imbibe the values of the Indian Constitution and their significance in everyday life. Besides, they understand historical diversity, political philosophies, which widen their outlook for international understanding and promotion of universal brotherhood.

- The students get well versed with the production and distribution system of goods and services. They attain the knowledge of cultures/thoughts and hence attain best skills to live with peace and strive for human development.

Model Govt. Degree College Shopian

### Course structure and distribution of different courses with their credits for B.A.

#### Arabic

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Arabic Text and Grammar-I	Discipline Specific Course	6 credits
2.	II	Arabic Text and Grammar-II	Discipline Specific Course	6 credits
3.	III	Arabic Text and Grammar-III	Discipline Specific Course	6 credits
4.	IV	Arabic Text and Grammar-IV	Discipline Specific Elective	6 credits
5.	V	Grammar & Translation-I	Discipline Specific Elective	6 credits
6.	VI	Literary Arabic Text-II	Discipline Specific Elective	6 credits
7.	I	Reading and Writing Arabic-I	MIL Course	6 credits
8.	II	Reading and Writing Arabic-I	MIL Course	6 credits

#### Course Outcomes

The main objective of teaching Arabic at undergraduate level is to provide basic knowledge about Arabic language, its grammar and literature. The course acquaints students with exercise and training in four language skills viz. Listening/Understanding, Speaking, Reading and Writing. It help students to learn the language skills in a manner that may create professionals out of them in the fields of literature, language studies (linguistics), translation, media etc. It develops a taste for higher learning in Arabic language and literature by means of suitable study material as prescribed and suggested. Moreover, it provides an insight into Arab history, culture and civilization through various literary and textual works from different historical periods.

**1. Arabic Text and Grammar-I (Discipline Specific Elective-I)**

Semester	Core Course	Course Title	Credit
I	DSC-I	Arabic Text and Grammar-I	Theory: 06; Total: 06

**Course Specific Outcomes**

- Initiate the students into Arabic language starting right from the alphabet level-the base of any language.
- Go through the prescribed text and gradually move to the word and sentence level, simultaneously, focusing on the syntax and semantics.
- Learn basic grammatical and linguistic terms like Alphabet, Vowel signs, various parts of speech and some basic types of phrases used in Arabic language.

**ARABIC TEXT & GRAMMAR-I****CREDITS: 06****THEORY: 06****Unit-I****(Text)**

Lesson No.1 to 8

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الأول)

**Unit-II****(Text)**

Lesson No.9 to 16

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الأول)

**Unit-III****(Grammar)**

1. حروف الهجاء (Arabic Alphabet)

2. الحركات الثلاث، السكون والشدة و المدة (Vowels and Orthographic Signs)

3. الحروف الشمسية و الحروف القمرية (Sun Letters and Moon Letters)

4. الكلمة و تقسيمها الي اسم و فعل و حرف (Word and its kinds: Noun, Verb and Particle)

5. حروف الجر (The Prepositions)

6. المعرفة والنكرة (Definite and Indefinite)

7. الضمائر المتصلة والمنفصلة (Attached and Detached Pronouns)

**Unit-IV****(Grammar)**

(Demonstrative Pronouns)	1. أسماء الإشارة
(Masculine and Feminine)	2. المذكر والمؤنث
(Adjectival Phrase)	3. التركيب التوصيفي
(Possessive Phrase)	4. التركيب الإضافي
(Nominal Sentences)	5. الجملة الاسمية

**BOOK PRESCRIBED:**

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الأول)

Published by: Islamic Foundation Trust 78, Perambur High Road Chennai, 600012.

**SUGGESTED READINGS:**

1. A Practical Approach to the Arabic language Dr. Wali Akhter
2. Arabic for Beginners Dr. Syed Ali

3. النحو الواضح للمدارس الابتدائية، الجزء الأول علي الجارم و مصطفى أمين
4. النحو الواضح للمدارس الابتدائية، الجزء الثاني علي الجارم و مصطفى أمين
5. النحو الواضح للمدارس الابتدائية، الجزء الثالث علي الجارم و مصطفى أمين

## 2. Arabic Text and Grammar-II (Discipline Specific Elective-II)

Semester	Core Course	Course Title	Credit
II	DSC-II	Arabic Text and Grammar-II	Theory: 06; Total: 06

### Course Specific Outcomes

- To learn the grammatical concepts as elaborated in various chapters of the prescribed textbook, sequentially from chapter to chapter.
- To learn new concepts related to various aspects of different parts of speech – noun, verb like their differentiation in terms of number, kind, tense and so on.
- To focus on the four language skills (listening, speaking, reading and writing) throughout the course.

### ARABIC TEXT & GRAMMAR-II

**CREDITS: 06**

**THEORY: 06**

**Unit-I (Text) Lesson No. 17 to 23**

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الأول)

**Unit-II (Text) Lesson No. 1 to 7**

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الثاني)

**Unit-III (Grammar)**

1. المفرد والمثنى والجمع
2. أقسام الجمع
3. الفعل الماضي والفعل المضارع
4. الفعل اللازم و الفعل المتعدي
5. الجملة الفعلية

**Unit-IV (Grammar)**

1. تصريف الفعل الماضي والمضارع
2. فعل الأمر و فعل النهي
3. تصريف فعل الأمر والنهي
4. الفاعل و المفعول به



**BOOK PRESCRIBED:**

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم(الجزء الأول و الجزء الثاني)

Published by: Islamic Foundation Trust 78, Perambur High Road Chennai, 600012.

**SUGGESTED READINGS:**

1. النحو الواضح للمدارس الابتدائية، الجزء الأول علي الجارم و مصطفى أمين
2. النحو الواضح للمدارس الابتدائية، الجزء الثاني علي الجارم و مصطفى أمين
3. النحو الواضح للمدارس الابتدائية، الجزء الثالث علي الجارم و مصطفى أمين
4. Let us speak Arabic S.A. Rahman
5. A Practical Approach to the Arabic language Dr. Wali Akhter
6. Teach Yourself Arabic S.A. Rahman
7. Arabic Phrasebook Harun Rashid & Khalid Perveez

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### 3. Arabic Text and Grammar-III (Discipline Specific Elective-III)

Semester	Core Course	Course Title	Credit
III	DSC-III	Arabic Text and Grammar-III	Theory: 06; Total: 06

#### Course Specific Outcomes

- To go through the different sections of the prescribed textbook and gradual learning of grammatical conceptual framework besides concentrating on the semantics.
- To learn higher concepts in the syntactical/sentence structure in Arabic by moving from simple sentences to the ones involving sentence transcribers (نواسخ الجملة) etc.
- To learn about different verb pronouncers (نواصب و جوازم الفعل) that change their case and the various groupings (ابواب) of tri-literal verb.
- Not to lose focus on the four language skills already mentioned.

#### ARABIC TEXT & GRAMMAR-III

**CREDITS: 06**

**THEORY: 06**

**Unit-I (Text) Lesson No. 8 to 15**

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الثاني)

**Unit-II (Text) Lesson No. 16 to 23**

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الثاني)

**Unit-III (Grammar)**

1. إن و أخواتها

2. كان و أخواتها

3. أدوات الإستفهام

**Unit-IV (Grammar)**

1. أبواب الفعل المجرد

2. نواصب الفعل المضارع

3. جوازم الفعل المضارع

**BOOK PRESCRIBED:**

دروس اللغة العربية لغير الناطقين بها للدكتور ف عبدالرحيم (الجزء الثاني)

Published by: Islamic Foundation Trust 78, Perambur High Road Chennai, 600012.

**SUGGESTED READINGS:**

1. النحو الواضح للمدارس الابتدائية، الجزء الأول علي الجارم و مصطفى أمين
2. النحو الواضح للمدارس الابتدائية، الجزء الثاني علي الجارم و مصطفى أمين
3. النحو الواضح للمدارس الابتدائية، الجزء الثالث علي الجارم و مصطفى أمين
4. Let us speak Arabic S.A. Rahman
5. A Practical Approach to the Arabic language Dr. Wali Akhter
6. Teach Yourself Arabic S.A. Rahman
7. Arabic Phrasebook Harun Rashid & Khalid Perveez
8. Arabic Grammar Amanulla Vadakkangara

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**4. Arabic Text and Grammar-IV (Discipline Specific Elective-IV)**

Semester	Core Course	Course Title	Credit
IV	DSC-IV	Arabic Text and Grammar-IV	Theory: 06; Total: 06

**Course Specific Outcomes**

- To move to the literary level and read the prescribed pieces of prose and poetry with focus on meanings as well as the grammatical concepts.
- To learn about the different genres and the techniques adopted in various forms of prose and poetry (prescribed ones) like short story and simple poems.
- To know about the history of Arabic literature and literary figures through the course of prescribed literary pieces.
- To learn about the different cases of noun- nominative, accusative, genitive in its different numbers (singular, dual, plural).

**ARABIC TEXT & GRAMMAR-III****CREDITS: 06****THEORY: 06****Unit-I****(Prose)**

بنيت الصباغ لكامل كيلاني (الفصل الأول والفصل الثاني)

**Unit-II****(Prose)**

بنيت الصباغ لكامل كيلاني (الفصل الثالث الي اخر القصة)

**Unit-III****(Poetry)**

اسم الشاعر	عنوان القصيدة	رقم
معروف الرصافي	الحرية في سياسة المستعمرين	1
احمد شوقي	الغزال والكلب	2
ابو نواس	الموت	3

**Unit-IV****(Grammar)**

1. اعراب المثنى

2. اعراب جمع المذكر السالم
3. اعراب جمع المؤنث السالم
4. أعراب الجمع المكسر

### BOOKS PRESCRIBED:

1. مجموعة القصص العربية لكامل كيلاني دار الاشاعت ديوبند
2. نخبة الأدب الناشر: قسم اللغة العربية جامعة عليكرة الإسلامية
3. Arabic Grammar Amanulla Vadakkangara, Goodword Books, Nizamuddin West market New Delhi, 110013

### RECOMMENDED BOOKS:

1. النحو الواضح للمدارس الابتدائية، الجزء الأول علي الجارم و مصطفى أمين
2. النحو الواضح للمدارس الابتدائية، الجزء الثاني علي الجارم و مصطفى أمين
3. النحو الواضح للمدارس الابتدائية، الجزء الثالث علي الجارم و مصطفى أمين
4. ديوان أبي نواس
5. ديوان أحمد شوقي
6. ديوان معروف الرصافي
7. Let us speak Arabic S.A. Rahman
8. A Practical Approach to the Arabic language Dr. Wali Akhter
9. Teach Yourself Arabic S.A. Rahman
10. Arabic Phrasebook Harun Rashid & Khalid Perveez

**5. Grammar & Translation-I (Discipline Specific Elective-IB)**

Semester	Course	Course Title	Credit
V	DSE-IB	Grammar & Translation-I	Theory: 06; Total: 06

**Course Specific Outcomes**

- To learn about some grammatical terms of higher standard and techniques involved in translating text from one language to other one.
- To learn about the various noun derivatives like the active participle, the passive participle, the superlative and the like.
- To learn the cardinal numbers in Arabic from 1 to 100 and the different rules involved in the phrase involving number and the countable noun (العدد والمعدود).
- To learn about five special nouns (الأسماء الخمسة) and the conditions for showing their cases in different manner.
- Translate phrases and simple sentences related to Education, Tourism, Politics from Arabic to English and vice versa.
- To develop the skill of writing in Arabic by paragraph writing about simple topics like My College, A Picnic, My Village etc.

**GRAMMAR & TRANSLATION-I****CREDITS: 06****THEORY: 06****Unit-I**

المشتقات

1. اسم الفاعل، اسم المفعول

2. اسم الصفة، اسم التفضيل

3. اسم الظرف، اسم الآلة

**Unit-II**

(الف) العدد والمعدود و تطبيقهما

(ب) الأسماء الخمسة و شروط اعرابها

**Unit-III**

Translation of phrases and simple sentences.

(Arabic into English &amp; vice versa)

1. Tourism
2. Education
3. Politics

## Unit-IV

## Paragraph Writing

1. قريتي
2. كليتي
3. الإسلام في كشمير
4. حديقة الحيوانات

**BOOKS PRESCRIBED:**

النحو الواضح للمدارس الابتدائية (الجزء الأول والجزء الثاني والجزء الثالث) علي الجارم و مصطفى أمين

**RECOMMENDED BOOKS:**

- |  |                               |               |
|--|-------------------------------|---------------|
| كتب خانة رشيدية، دلهي                          | عبدالرحمان أمرتسري            | 1. كتاب النحو |
| كتب خانة رشيدية، دلهي                          | عبدالرحمان أمرتسري            | 2. كتاب الصرف |
| 3. Let us speak Arabic                         | S.A. Rahman                   |               |
| 4. A Practical Approach to the Arabic language | Dr. Wali Akhter               |               |
| 5. Teach yourself Arabic                       | S.A. Rahman                   |               |
| 6. Arabic Phrasebook                           | Harun Rashid & Khalid Perveez |               |

**6. Literary Arabic Text-II (Discipline Specific Elective-IIA)**

Semester	Core Course	Course Title	Credit
VI	DSE-IIA	Literary Arabic Text-II	Theory: 06; Total: 06

**Course Specific Outcomes**

- To go through the different pieces of prose and poetry from different historical eras, as prescribed, with focus on semantics and conceptual learning.
- To mark and try to understand the difference between the literary works of different historical periods in terms of form, structure, theme and subject matter.
- To know about the life and works of distinguished literary figures whose works are prescribed in the syllabus.
- To develop a taste for reading literature and draw aesthetic pleasure out of it.
- To develop the four language skills of listening/understanding, speaking, reading and writing throughout the course.

**LITERARY ARABIC TEXT-II****CREDITS: 06****THEORY: 06****Unit-I (Classical Prose)**

1. سورة الفرقان (من الآية 67 الي 77 ) القرآن الكريم
2. كما تدين تدان نفحة اليمن
3. رجل صالح روض الرياحين لليافعي

**Unit-II (Classical Poetry)**

1. و قال يمدح النبي صلي الله عليه و سلم حسان بن ثابت
2. و قال في زوال الدنيا ابو العتاهية
3. و قال قيس بن الخطيم ( و ما بعض الإقامة.....)

**Unit-III (Modern Prose)**

1. في مدينة الأموات جبران خليل جبران
  2. الكوخ و القصر مصطفى لطفي المنفلوطي
  3. المدنية الإسلامية شكيب أرسلان
- (من البداية إلي ينيمة الدهر إلي اليوم)

**Unit-IV (Modern Poetry)**



1. عصفور الجنة عبد الرحمان شكري
2. إنا غريبان ههنا جميل صدقي الزهاوي
3. عروس خليل مطران

**BOOKS PRESCRIBED:**

1. نخبة الأدب ، الناشر: قسم اللغة العربية جامعة عليكرة الإسلامية
2. شعر العرب من النهضة إلى الإنتفاضة محمد أيوب تاج الدين الندوي، مطبعة البلاغ، دلهي الجديدة

**SUGGESTED READINGS:**

1. ديوان جميل صدقي الزهاوي
2. ديوان عبدالرحمان شكري
3. ديوان أبي العتاهية

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### Modern Indian Languages- MIL Courses

These include a battery of language courses open for all the students of Arts stream for semesters I and II. The students are free to choose one among the given languages as per their own interest and liking. The main aim of these courses is to provide an insight into the rich linguistic heritage of India other than English and some other dominant languages. The focus is mainly on the regional or the foreign languages that have helped in the cultural enrichment of the sub-continent. Arabic is also offered under this category.

#### 7. Reading and Writing Arabic-I (Modern Indian Languages -I)

This course provides students with an in-depth knowledge of the Reading and Writing Arabic-I

Semester	MIL Course	Course Title	Credit
I	MIL-I	Reading and Writing Arabic-I	Theory: 06; Total: 06

#### **Course Specific Outcomes**

- To provide basic knowledge about Arabic language, its script/alphabet and the different orthographic signs used.
- To develop basic vocabulary about different day to day related things like house, school, college, fruits, vegetables, days of week, cardinal numbers etc.
- To understand the relation between Urdu and Arabic by learning some words of Arabic origin used in Urdu.
- To develop basic conversation skill in Arabic using simple nominal and verbal sentences.

#### **READING AND WRITING ARABIC-I**

**CREDITS: 06**

**THEORY: 06**

#### **Unit-I**

1. Arabic Alphabet with different shapes
2. The Moon and the Sun letters
3. Short vowels and Long vowels

#### **Unit-II**

Frequently used Urdu words of Arabic origin (75 Words)

**Unit-III**

Frequently used vocabulary of the following (150 words)

1. House, Kitchen, Class Room, College
2. Vegetables, Fruits
3. Names of Days, Names of Months
4. Numbers (1 to 10)

**Unit-IV**

Conversation by using following words:

في- إلي- من- علي-ل

ما- لا- هل- أ

من- ما- أين- كم

أسماء الإشارة: هذا- هذه

**BOOKS RECOMMENDED:**

- |  |                 |
|--|-----------------|
| 1. A Practical Approach to the Arabic Language | Dr. Wali Akhter |
| 2. Arabic for Beginners                        | Dr. Syed Ali    |
| 3. A New Arabic Grammar                        | John A. Haywood |
| 4. Essential Arabic                            | I.A.Faynan      |
| 5. Teach Yourself Arabic                       | S.A.Rahman      |
| 6. Arabic Made Easy                            | Abdul Hashim    |
| 7. Let's Speak Arabic                          | S.A.Rahman      |

**8. Reading and Writing Arabic-II (Modern Indian Languages -II)**

Semester	MIL Course	Course Title	Credit
II	MIL-II	Reading and Writing Arabic-II	Theory: 06; Total: 06

**Course Specific Outcomes**

- To learn about the different parts of speech like the noun in terms of number, kind-singular, dual, plural, masculine, feminine, definite, indefinite noun etc.
- To learn about other parts of speech like different types of pronouns, adjective and so on.
- To learn about the different types of verb and the verbal sentence.
- To learn about the various types of phrases like the adjective and possessive phrases.
- Try to develop the minimum possible level skills of Listening/Understanding, Speaking, Reading and Writing, which lie at the core of any language learning course.

**READING AND WRITING ARABIC-II****CREDITS: 06****THEORY: 06****Unit-I**

1. Masculine and Feminine
2. Singular and Plural
3. Adjective Phrase
4. Cardinal Numbers (1-10)

**Unit-II**

1. Definite and Indefinite
2. Possessive Phrase
3. Nominal Sentence
4. Preposition

**Unit-III**

1. Demonstrative Pronouns
2. Detached Pronouns
3. Attached Pronouns
4. Words of Proclamation

**Unit-IV**

1. Perfect Tense
2. Imperfect Tense
3. Verbal Sentence
4. Imperative Verb

**BOOKS RECOMMENDED:**

- |  |                 |
|--|-----------------|
| 1. A Practical Approach to the Arabic Language | Dr. Wali Akhter |
| 2. Arabic for Beginners                        | Dr. Syed Ali    |
| 3. A New Arabic Grammar                        | John A. Haywood |
| 4. Essential Arabic                            | I.A.Faynan      |
| 5. Teach Yourself Arabic                       | S. A. Rahman    |
| 6. Arabic Made Easy                            | Abdul Hashim    |
| Let's Speak Arabic                             | S. A. Rahman    |

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**Course Structure and distribution of different courses with their credits for  
B.A. Economics**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Principles of Microeconomics-I	Core Course	6 credits 4(T)+2(T)
2.	II	Principles of Microeconomics-II	Core Course	6 credits 4(T)+2(T)
3.	III	Principles of Macroeconomics-I	Core Course	6 credits 4(T)+2(T)
4.	IV	Principles of Macroeconomics-II	Core Course	6 credits 4(T)+2(T)
5.	IV	Statistics for Economics	Skill Enhancement Course	4 credits 2(T)+2(T)
6.	V	Development Economics	Discipline Specific Elective-I	6 credits 4(T)+2(T)
7.	V	Mathematical Economics	Discipline Specific Elective-II	4 credits 2(T)+2(T)
8.	V	Money and Banking	Skill Enhancement Course	6 credits 4(T)+2(T)
9.	V	Microeconomics	Generic Elective	6 credits 4(T)+2(T)
10.	VI	Public Finance & International Trade	Discipline Specific Elective-I	6 credits 4(T)+2(T)
11.	VI	Economic Development and Policy in India	Discipline Specific Elective-II	6 credits 4(T)+2(T)
12.	VI	Entrepreneurship for Self Employment	Skill Enhancement Course	4 credits 2(T)+2(T)
13.	VI	Macroeconomics	Generic Elective	6 credits 4(T)+2(T)

**Course outcomes**

The main objective of the course is to provide a comprehensive understanding of the discipline of economics to the students who join the B.A. at the undergraduate level in the affiliated colleges' of University of Kashmir.

The course aims at making students understand the fundamental concepts, theories, perspectives, and ideological discourses in Economics.

The course aims at making students understand the economic problems which the world and India in general, and valley of Kashmir in particular are facing, and the resolution thereof.

The course has been designed in such a way that every student is equipped with certain practical skills which can be used for seeking gainful employment if one exits after completing the graduation. The aim is also to train the students in research design and application of tools and techniques for empirical and normative research.

Model Govt. Degree College Shopian

**1. Principles of Microeconomics-I (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Principles of Microeconomics-I	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- This course intends to acquaint the students with the basic Principles in Microeconomic Theory and illustrations with applications.
- To provide students with a thorough knowledge and understanding of foundations of Microeconomic concepts, laws, theories and their applicability.

**PRINCIPLES OF MICROECONOMICS-I****THEORY****(CREDITS 4)****Unit 1 Conceptual Framework**

Nature and Scope of Economics; Scarcity and Choice; Opportunity Cost; Demand: Law of Demand, Determinants of Demand, Shifts in Demand & Movements along the Demand Curve; Market Demand; Supply: Law of Supply; Determinants of Supply; Shifts in Supply Curve versus Movements along the Supply Curve; Market Supply; Market Equilibrium; Elasticity of Demand; Price, Income and Cross Elasticities; Degrees of Price Elasticity.

**Unit 2 Consumer Theory**

Utility-Concept; Cardinal Utility -measurement, Total and Marginal Utility; Diminishing Marginal Utility; Ordinal Utility - Assumptions; Indifference Curves; Marginal Rate of Substitution; Properties of Indifference curves; Budget Constraint; Consumer's Equilibrium.

**Unit 3 Production Theory**

Production function; Law of Variable Proportions; Economies and Diseconomies of Scale; Returns to Scale; Isoquant-Types and Properties; Iso-cost lines; Producer's Equilibrium Output Maximization and Cost Minimization.

**Unit 4 Costs and Revenue**

Cost-Concept and Types; Short-run and Long-run costs; Traditional and Modern Theory of Costs. Revenue-Concept and Types; Revenue Curves under Perfect and Imperfect (Monopoly) Markets; Equilibrium of a firm using Total Revenue and Total Cost approach; Marginal Revenue and Marginal Cost approach.

**TUTORIAL****(CREDITS 2)**



1. Applications of Demand and Supply: Consumer surplus; Producers surplus.
2. Determinants of Price Elasticity.
3. Derivation of Demand Curve through Cardinal and Ordinal approaches.
4. Objectives of firm: Revenue Maximization, Profit Maximization.
5. Relationship between Total Cost, Average Cost and Marginal Cost.
6. Relationship between Total Revenue, Average Revenue and Marginal Revenue.

### **SUGGESTED READINGS**

- Koutsoyiannis A. (2006), Modern Microeconomics, Macmillan Press Ltd; 7<sup>th</sup> Edition.
- Nicholson, Walter, and Christopher M. Snyder (2012), Microeconomic theory: Basic principles and extensions. Nelson Education.
- Dwivedi D. N. (2005), Microeconomics; Tata McGraw Hill, New Delhi
- Ahuja H. L. (2016), Principles of Microeconomics based on UGC model curriculum; S. Chand; 22<sup>nd</sup> Edition.
- Case, Karl E. & Ray C. Fair, Sharon M Oster (2014), Principles of Microeconomics, Pearson Education, Inc., 11<sup>th</sup> Edition.

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## 2. Principles of Microeconomics-II (Core Course-II)

Semester	Core Course	Course Title	Credit
II	CC-II	Principles of Microeconomics-II	Theory: 04; Tutorial: 02 Total: 06

### Course specific outcomes

- This is a sequel to Principles of Microeconomics–I covered in the first semester.
- The objective of the course is same as in Principles of Microeconomics-I.

## PRINCIPLES OF MICROECONOMICS-II

### THEORY

(CREDITS 4)

#### Unit 1 Market Structure

Market Structure: Perfect and Imperfect Markets; Perfect Competition- Characteristics; Demand and Revenue; Equilibrium of the firm in Short-run and long-run under Identical and Differential cost conditions; Supply Curve of the Firm and the Industry; Short-run and Longrun Industry Equilibrium.

#### Unit 2 Imperfect Competition I

Monopoly-Concept and types; Characteristics; Demand and Revenue under Monopoly; Shortrun and Long-run Equilibrium under Monopoly; Economic costs of Monopoly; Deadweight loss; Price Discrimination- Concept.

#### Unit 3 Imperfect Competition II

Monopolistic Competition-Concept and Characteristics; Short-run & Long-run Equilibrium under Monopolistic Competition; Oligopoly- Concept and Characteristics; Duopoly- Concept Characteristics and Equilibrium.

#### Unit 4 Income Distribution and Factor Pricing

Distribution- Concept; Marginal Productivity Theory of Distribution; Wages- Modern Theory of Wages; Wage Differentials; Rent- Ricardian Theory of Rent; Profit- Innovation Theory; Interest- Keynesian Theory.

### TUTORIAL

(CREDITS 2)

1. Long-run Industry Supply Curve: Increasing, Decreasing and Constant Cost Industries.
2. Efficiency of Competitive Markets.
3. Comparison of Monopoly and Perfectly Competitive Markets.
4. Degrees or Types of Price Discrimination.

5. Kinked Demand Curve.
6. Economic and Quasi Rent.

**SUGGESTED READINGS**

- Koutsoyiannis A. (2006), Modern Microeconomics, Macmillan Press Ltd; 7<sup>th</sup> Edition.
- Nicholson, Walter, and Christopher M. Snyder (2012). Microeconomic theory: Basic principles and extensions. Nelson Education.
- Dwivedi D. N. (2018), Microeconomics; Tata McGraw Hill, New Delhi
- Ahuja H. L. (2016), Principles of Microeconomic, based on UGC model curriculum; S Chand; 22<sup>th</sup> Edition.
- Case, Karl E. & Ray C. Fair, Sharon M Oster (2014), Principles of Microeconomics, Pearson Education, Inc., 11<sup>th</sup> Edition.

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### **3. Principles of Macroeconomics-I (Core Course-III)**

Semester	Core Course	Course Title	Credit
III	CC-III	Principles of Macroeconomics-I	Theory: 04 Tutorial: 02 Total: 06

#### **Course specific outcomes**

- In this course the students are introduced to the concepts and measurement of the macroeconomic variables like GDP, Consumption, Savings, and Investment.
- The course also discusses the determination of income and employment in the Classical and Keynesian framework.
- In addition, it introduces students to the Post-Keynesian theories of Consumption.
- To familiarize the students with the various theories explaining the macroeconomic behaviour and make them understand the importance and relevance of various economic policies.

### **PRINCIPLES OF MACROECONOMICS-I**

#### **THEORY**

**(CREDITS 4)**

#### **Unit 1 National Income**

Introduction to Macroeconomics; National Income Aggregates; Circular Flow of Income; Two Sector; Three Sector and Four Sector Economy; Measurement of National Income- Value Added Method, Income Method, Expenditure Method; Nominal and Real Income; Green Accounting.

#### **Unit 2 Classical Theory of Output and Employment**

Classical Postulates; Classical Theory of Income and Employment- Say's law of market; Wage Price flexibility and full employment; Classical Model- without and with saving and investment; Keynes criticism of Classical Theory.

#### **Unit 3 Keynesian Theory of Income and Employment**

Effective Demand- Concept and Determinants; Keynesian Theory of Consumption-APC; MPC; Saving Function- APS; MPS; Investment- Concept and Types; Determination of Equilibrium Output (Income); Saving/Investment Approach to Equilibrium; The Investment Multiplier.

#### **Unit 4 Theories of Consumption and Investment**

Theories of Consumption- Absolute; Relative; Permanent and Life-Cycle Hypotheses; Theories of Investment- Marginal Efficiency of Capital and Rate of Interest; Concept and Principle of Accelerator; Multiplier and Accelerator interaction.

**TUTORIAL****(CREDITS 2)**

1. Limitation of GDP as a measure of National Income.
2. National Income Accounting and its associated concepts.
3. Paradox of Thrift.
4. Foreign Trade Multiplier.
5. Sources of Wage-Price rigidity
6. Kuznets Puzzle

**SUGGESTED READINGS**

- Richard T. Froyen (2013), Macroeconomics Theories and Policies, Pearson Education, New Delhi.
- Edward Shapiro (2013), Macroeconomic Analysis, Galgotia Publications, New Delhi.
- Gardner Ackley (2008), Macroeconomic Theory, Surjeet Publications, Delhi.
- Ahuja H.L (2016), Macroeconomic Theory and Policy based on UGC model curriculum; S Chand; Latest Edition.
- Dwivedi D.N. (2018), Macroeconomics Theory and Policy Tata McGraw Hill New Delhi.
- Case, Karl E. & Ray C. Fair, Sharon M Oster (2012), Principles of Macroeconomics, Pearson Education, Inc., 10<sup>th</sup> Edition.

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**4. Principles of Macroeconomics-II (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	Principles of Macroeconomics-II	Theory: 04 Tutorial: 02 Total: 06

**Course specific outcomes**

- This is a sequel to Principles of Macroeconomics-I.
- It analyses various theories of determination of National Income in greater detail.
- It also introduces students to the concept of Inflation & its relationship with Unemployment and Business Cycles.
- The objective of the course is same as in Macroeconomics-I.

**PRINCIPLES OF MACROECONOMICS-II****THEORY****(CREDITS 4)****Unit 1 Money Supply, Money Demand and the Interest Rate**

Money–Meaning and Evolution; Money Supply- Concept and its Measurement; Four Measures of Money Supply; Interest Rates and Bond Prices; Keynes Theory of Demand for Money and Rate of Interest; Determination of Interest Rate: Equilibrium in the Money Market.

**Unit 2 IS-LM Analysis**

Goods Market Equilibrium; Derivation of IS curve; Slope and Shifts in IS curve; Money Market Equilibrium: Derivation of LM Curve; Slope and Shifts in LM Curve; IS-LM Model Equilibrium.

**Unit 3 AD-AS Model with Variable Prices**

Derivation of Aggregate Demand curve using IS-LM; Aggregate Demand Curve with variable prices; Multiplier analysis with AD curve and changes in price levels; Slope and Shifting of AD Curve; Aggregate supply in the Short-run and Long-run; AS-AD model; Short-run and Long-run Equilibrium.

**Unit 4 Inflation and Business Cycles**

Inflation -Concept and Types; Causes of Inflation -Demand Pull and Cost-Push Inflation; Relationship between Inflation and Unemployment: Phillips Curve; Business Cycles-Concept; Causes and Phases.

**TUTORIAL****(CREDITS 2)**

1. Liquidity Measures of Money- L1, L2 and L3.
2. IS-LM model: Explaining the role of Fiscal and Monetary Policies.
3. Role of Fiscal and Monetary Policies in AD-AS Model.
4. Real Balance Effect, Rate of interest and Foreign Trade effect.
5. Phillips Curve in Short-run and Long-run.
6. Measures to control Business cycles by Classical and Keynesian economics.

### **SUGGESTED READINGS**

- Richard T. Froyen (2013), Macroeconomics Theories and Policies, Pearson Education, New Delhi.
- Edward Shapiro (2013), Macroeconomic Analysis, Galgotia Publications, New Delhi.
- Gardner Ackley (2008), Macroeconomic Theory, Surjeet Publications, Delhi.
- Ahuja H. L. (2016), Macroeconomic Theory and Policy based on UGC model curriculum; S Chand; Latest Edition.
- Dwivedi D. N. (2018), Macroeconomics Theory and Policy Tata McGraw Hill New Delhi.
- Case, Karl E. & Ray C. Fair, Sharon M Oster (2012), Principles of Macroeconomics, Pearson Education, Inc., 10<sup>th</sup> Edition.

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**5. Statistics for Economics (Skill Enhancement Course -I)**

Semester	Core Course	Course Title	Credit
IV	SEC-I	Statistics for Economics	Theory: 02 Tutorial: 02 Total: 04

**Course specific outcomes**

- This course introduces the students to the basic statistical methods used for analyzing and drawing Statistical inferences which include Measures of Central Tendency, Dispersion, Skewness, Correlation, Regression, Index Numbers and Time series.
- To enable the students to understand basic and advanced concepts of Statistics and their application in Economics.

**STATISTICS FOR ECONOMICS****THEORY****(CREDITS 2)****Unit 1 Statistics – Conceptual Framework**

Relationship of Statistics with Economics; Measures of Central Tendency- Mean; Median and Mode; Measures of Dispersion- Mean Deviation; Quartile Deviation; Standard Deviation and Coefficient of Variation; Distributions- Normal; Binomial and Poisson.

**Unit 2 Correlation and Regression**

Correlation- Meaning and Types; Coefficient of Correlation- Karl Pearson's; Spearman's Rank Correlation; Regression- Meaning; Regression Coefficients; Regression Equations- Two and Three variable Regression; Correlation vs Regression.

**TUTORIAL****(CREDITS 2)**

1. Index Numbers- Meaning, Uses; Merits and Demerits.
2. Methods of constructing Index Number's - Laspeyres, Paasche's and Fisher's methods.
3. Moment generating function: Mean and Variance.
4. Time Series- Meaning; Components of Time Series.
5. Measurement of Trends- Graphic method, least square method, Semi-average method; Moving average method.
6. Random Variables and Types.

**SUGGESTED READINGS**

- Elhance and Elhance (2016), Fundamentals of Statistics, Kitab Mahal New Delhi.



- Gupta S. C. (1993), Fundamentals of Applied Statistics, S. Chand & Sons, New Delhi.
- Gupta S. P. (2010), Fundamentals of Statistics. Himalaya Publishing House.
- Gupta S. C and V.K. Kapoor (latest addition), Fundamentals of Mathematical Statistics. S. Chand & Sons, New Delhi

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**6. Development Economics (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Development Economics	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- This course covers the social and political aspects of development.
- A section is also devoted to the study of approaches to development and some models and policy issues.
- It aims to familiarize students with alternative approaches to economic development and the associated contemporary issues in economic growth and development.

**DEVELOPMENT ECONOMICS****THEORY****(CREDITS 4)****Unit 1 Economic Growth and Development**

Concept of Economic Growth and Development; Inclusive Growth- Concept and Significance; Sustainable Development -Meaning and Objectives; Characteristics of an underdeveloped country; Obstacles to Economic Development; Measurement of Development- GNP; PCI; PQLI and HDI.

**Unit 2 Theories of Economic Growth and Development**

Classical Theory; Marxian Theory; Schumpeter's Theory; Nurkse's Theory; Rostow's Stages of Economic Growth; Balanced and Unbalanced Growth Strategy; Leibenstein's Critical Minimum Effort Hypothesis and Theory of Big Push.

**Unit 3 Domestic Aspects of Development**

Economic Development through- Agriculture; Industry; Capital Formation; Population Growth; Fiscal & Monetary policies.

**Unit 4 International Aspects of Development**

International Trade and Economic Development; Role of Foreign Borrowings; Dual Gap analysis; International Capital Flows-Types and Motives; A critique on International Aid; Role of World Bank and IMF in Economic development of Less Developed countries (LDC's).

**TUTORIAL****(CREDITS 2)**

1. New Economic view of Development- Sen's Capability Approach.

2. Human Capital and Economic Development.
3. Deficit Financing and Economic Development.
4. Macroeconomic Impact of Aid.
5. New International Economic Order
6. Millennium Development Goals.

### **SUGGESTED READINGS**

- Thirlwal A. P (2011), Growth and Development, Palgrave Macmillan, Replika Press Pvt. Ltd., India.
- Todaro & Smith (2008), Economic Development, Longman, London.
- Y. Hayami (2005), Development Economics, Oxford University Press, New York.
- Jhingan M. L. (2016), The Economics of Development and Planning, Vrinda Publications, New Delhi.
- Misra and Puri (2018), Development Economics, Himalayan Publishing House, New Delhi

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**7. Mathematical Economics (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-II	Mathematical Economics	Theory: 02; Tutorial: 02 Total: 04

**Course specific outcomes**

- This course introduces students to the Mathematical Techniques to be applied in core subjects of Economics like Microeconomics, Macroeconomics, Public Economics and Econometrics at advanced stages.
- To enable the students to apply various mathematical techniques to a multitude of Economic discourse.

**MATHEMATICAL ECONOMICS****THEORY****(CREDITS 2)****Unit 1 Matrices & Determinants**

Types of Matrices; Operations of Matrices-Addition; Subtraction and Multiplication. Determinants; Characteristics and Applications. Inverse of a Matrix; Solution of Simultaneous Equations, Cramer's Rule and Cofactor Method.

**Unit 2 Differentiation**

Limits; Continuity and Derivative-Definition and Evaluation; Rules of Differentiation; Partial Differentiation; Uses of Differentiation in Economics- Marginal concepts and Elasticities.

**TUTORIAL****(CREDITS 2)**

1. Role of Mathematics in Economics.
2. Gradient and Equation of a Straight line.
3. Functions- Concept and Types.
4. Different Functions used in Economics.
5. Concept of Integration and use in Economics.
6. Introduction to Optimization- Concept of Maxima and Minima.

**SUGGESTED READINGS**

- Edward T. Dowling (2011), Introduction to Mathematical Economics, Schaum's Outline.

- Chiang A.C. (2017), Fundamental Methods of Mathematical Economics, Tata McGraw Hill, New Delhi.
- Allen R. G. D. (2008), Mathematical Analysis for Economists, The Macmillan Press, New Delhi.
- Veerachamy R. (2018), Quantitative Methods for Economists, New Age International Publishers, New Delhi.

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**8. Money and Banking (Skill Enhancement Course-II)**

Semester	Core Course	Course Title	Credit
V	SEC-II	Money and Banking	Theory: 04 Tutorial: 02 Total: 06

**Course specific outcomes**

- This course exposes students to the theory and functioning of the Monetary and Financial sectors of the economy.
- It highlights the organization, structure and role of Financial Markets and Institutions.
- It also discusses Monetary Management and Instruments of Monetary control.
- To familiarize the students about the role of money in facilitating the economic transactions, various determinants of demand and supply of money and the overall structure and functioning of commercial and central banks.

**MONEY AND BANKING****THEORY****(CREDITS 4)****Unit 1 Concept and Role of Money**

Evolution of Money; Money- Meaning, different approaches to the definition of money; Functions and kinds of Money; Characteristics of good money; Money and Near Money; Significance of Near Money.

**Unit 2 Demand and Supply of Money**

Quantity Theory of Money – Fisher's Transaction Approach and Cambridge Cash Balance Approach; Keynes Theory of Demand for Money; Concept of Money Supply; Different approaches to the definition of Money Supply; Measures of Money Supply; Determinants of Money Supply- High Powered Money and Money Multiplier.

**Unit 3 Commercial Banking**

Origin and Evolution of Commercial Banking; Types of Banks; Functions of Commercial Banks; Balance Sheet of Commercial Banks ; Liability Asset Portfolio Management; Credit Meaning and Functions; Credit Creation Mechanism of Commercial Banks; Credit Multiplier Cash Reserve Ratio and Deposit Multiplier.

**Unit 4 Central Banking**

Evolution and Growth of Central Banking; Central Bank- Functions; Methods of credit control Quantitative vs Qualitative methods; Monetary Policy- Objectives; Instruments; Effectiveness and Limitations; Role of Central Banks in Developing Countries.

**TUTORIAL****(CREDITS 2)**

1. Investment policy of Commercial Banks in general.
2. Indian Money Market- Structure and Functions.
3. Instruments of Indian Money market.
4. An introduction to the Indian Capital market.
5. Development Banking in India- IFCI, IDBI and ICICI.
6. Recent Monetary policy of RBI.

**SUGGESTED READINGS**

- Mishkin F. S. and S. G. Eakins (2009), Financial Markets and Institutions, Pearson Education, 6<sup>th</sup> edition.
- Bhole L. M. and J. Mahukud (2011), Financial Institutions and Markets, Tata McGraw Hill, 5<sup>th</sup> edition. 3. Khan M. Y. (2011), Indian Financial System, Tata McGraw Hill, 7<sup>th</sup> edition.
- Gupta S. B (2010), Monetary Economics, S. Chand and Company, New Delhi.
- Jhingan M. L. (2013), Money, Banking, International trade and Public Finance, Vrinda Publications, New Delhi.
- Fabozzi, F. J., F. Modigliani, F. J. Jones, M. G. Ferri (2009), Foundations of Financial Markets and Institutions, Pearson Education, 3<sup>rd</sup> edition.

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**9. Microeconomics (Generic Elective -I)**

Semester	Generic Elective	Course Title	Credit
V	GE-I	Microeconomics	Theory: 04 Tutorial: 02 Total: 06

**Course specific outcomes**

- This course introduces the students to basic principles in Microeconomic Theory.
- To develop a basic understanding of foundations of microeconomic concepts, laws, theories and their applicability among students from Non-Economic background

**MICROECONOMICS****THEORY****(CREDITS 4)****Unit 1 Conceptual Framework**

Definition and Scope of Economics; Microeconomics and Macroeconomics; Positive and Normative Economics; Demand- Law of Demand; Determinants of Demand; Supply- Law of Supply; Determinants of supply; Market Equilibrium.

**Unit 2 Consumer Theory**

Utility- Meaning and types, Cardinal Utility- Measurement, Total and Marginal Utility; Diminishing Marginal Utility. Ordinal Utility- Assumptions; Indifference Curve; Marginal Rate of Substitution; Properties of Indifference Curves; Budget Constraint; Consumer's Equilibrium.

**Unit 3 Production Theory**

Production Function, Law of Variable Proportions; Economies and Diseconomies of Scale; Returns to scale; Isoquant- Concept and Properties; Iso-cost lines; Equilibrium of the Firms Distribution- Concept, Marginal Productivity Theory of Distribution.

**Unit 4 Market Structure**

Market- Concept; Perfect and Imperfect markets; Demand and Revenue curves under Perfect and Imperfect Markets; Perfect Competition, Monopoly; Monopolistic Competition, Oligopoly and Duopoly- Concept and Characteristics.

**TUTORIAL****(CREDITS 2)**

1. Elasticity- Concept and Types.
2. Degrees and Determinants of price elasticity.
3. Cost- Concepts; Costs in Short-run and Long-run; Relationship between AC and MC.



4. Revenue- Concepts; Relationship between AR and MR.
5. Distribution- Concept; Marginal Productivity Theory of Distribution.
6. Comparison between Perfect Competition and Monopoly.

**SUGGESTED READINGS**

- Koutsoyiannis A. (2006), Modern Microeconomics, Macmillan Press Ltd; 7<sup>th</sup> Edition
- Dwivedi D. N. (2005 ), Microeconomics Tata McGraw Hill, New Delhi
- Ahuja H. L. (2016), Principles of Microeconomic based on UGC model curriculum; S. Chand; 22<sup>nd</sup> Edition.
- Case, Karl E. & Ray C. Fair, Sharon M Oster (2014), Principles of Microeconomics, Pearson Education, Inc., 11<sup>th</sup> Edition.

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**10. Public Finance & International Trade (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-I	Public Finance & International Trade	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- This course introduces the students to the working and functions of Government.
- It acquaints the student about the different sources of Revenue and the subsequent Expenditure of the same by the Government.
- It also highlights the basis of International Trade and Balance of Payments for a country.
- The course will be useful for students aiming towards career in the government sector, policy analysis and business.

**PUBLIC FINANCE & INTERNATIONAL TRADE****THEORY****(CREDITS 4)****Unit 1 Public Finance and Public Expenditure**

Public Finance- Meaning; Scope and Importance; Distinction between Public and Private Finance; Principle of Maximum Social Advantage; Public Expenditure- Classification; Wagner's law; Wiseman-Peacock Hypothesis.

**Unit 2 Public Revenue and Taxation**

Budget- Concept and types; Public Revenue-Types and Sources of Public Revenue; Public Debt Types; Sources of Public Borrowing; Taxation- Classification of Taxes; Characteristics of a good tax system; Impact, Incidence; Evasion and Effects of Taxation; Canons of Taxation- Adam Smith.

**Unit 3 International Trade**

Inter-regional and International trade; Theories of Absolute Advantage; Comparative Cost Advantage and Opportunity Cost theory; Terms of Trade; Gains from trade; Free trade vs Protection; Tariffs Meaning and Types; Quotas-Meaning and types.

**Unit 4 Balance of Payments and Foreign Exchange**

Balance of Payments- Current and Capital account; Disequilibrium in the Balance of Payments; Foreign Exchange- Meaning; Foreign Exchange Market; Rate of Exchange-Meaning and Types; Determination of Exchange rate- Demand and supply approach.

**TUTORIAL****(CREDITS 2)**

- Role of Public Finance in Economic Development of a country.
- Budget Deficit- Concept and Types.
- Classification of Public Revenue- Adam Smith, Taylor and Hugh Dalton.
- Direct Benefit approach and Ability to Pay approach.
- Concept and working of GST.
- Trade as an Engine of Economic Growth.

### **SUGGESTED READINGS**

- Musgrave, R.A. and P.B. Musgrave (2017), Public Finance in Theory and Practice, Mc-Graw Hill, New Delhi.
- Lekhi, R.K & Joginder Singh (2015), Public Finance, Kalyani publishers, New Delhi.
- Chand S.N. (2008), Public Finance, Atlantic Publishers, New Delhi.
- Jhingan M.L (2013), Money, Banking, International Trade & Public Finance, Viranda Publishers, New Delhi.
- Francis Cherunilam (2017), International Economics, Tata Mc-Graw Hill, New Delhi.
- Dominick Salvatore (2014), International Economics, John Wiley and Sons, New York.

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**11. Economic Development and Policy in India (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Economic Development and Policy in India	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- This course is designed to acquaint the students with a foundational level understanding of Indian Economy.
- Its approach is both historic and contemporary. Issues like Unemployment, Poverty, Agriculture, Industry and Human capital in the Indian economy are discussed to develop an informed outlook among students about Macroeconomic issues of Indian economy.
- To sharpen the analytical faculty of students by highlighting an integrated approach to the functioning of the Indian Economy and the scope for alternative policies imperative for a sustainable growth trajectory.

**ECONOMIC DEVELOPMENT AND POLICY IN INDIA****THEORY****(CREDITS 4)****Unit 1 Indian Economy - An Overview**

Impact of British Rule on Indian Economy; the Drain Theory; Natural Resources- Land; Water and Forest Resources. Economic Planning in India; Types; Plan Models; Contemporary Status.

**Unit 2 Unemployment and Poverty**

Population Growth and Policy; Demographic Dividend; Unemployment in India; Nature; Measures; Causes and Remedies; Poverty and inequality in India- Nature; Estimates and Poverty Elevation Strategy.

**Unit 3 Agriculture and Industry**

Issues in Indian Agriculture; Land Reforms and Land Acquisition; Green Revolution; Food Security & PDS; Review of Industrial Development in India; Industrial Policy Resolution 1956 and 1991; Privatization and Disinvestment- Concept; Causes and Impact.

**Unit 4 HRD – Conceptual Framework**

Human Resource Development- Concept; Theories, Education and Human Development; Health and Human Development; Education in India with focus on Higher Education- Problems and Policy; Health in India- Problems and Policy.

**TUTORIAL****(CREDITS 2)**

- Land Tenure System under Colonial Rule.
- Employment & Output in Agriculture.
- Demographic Transition Theory.
- Types and Measures of Poverty.
- Introduction to Human Capital .
- Role of Education to Economic Development.

**SUGGESTED READINGS**

- Misra, S. K., & Puri, V. K. (2011), Indian economy (p. 174). Himalaya Publishing House.
- Dutt, R., & Sundaram, K. P. M. (2008), Indian Economy, S Chand & Co. New Delhi.
- Kapila, U. (Ed.). (2019), Indian Economy since independence. Academic Foundation. 29th edition.
- Jalan, B. (2004), Indian Economy. Penguin UK.
- Brahmananda, P. R., & Panchamukhi, V. R. (Eds.). (2001), Development Experiences in the Indian Economy: Inter-state Perspectives. Bookwell Publications.

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**12. Entrepreneurship for Self Employment (Skill Enhancement Course -III)**

Semester	Core Course	Course Title	Credit
VI	SEC-III	Entrepreneurship for Self Employment	Theory: 02 Tutorial: 02 Total: 04

**Course specific outcomes**

- The major thrust of this course is to introduce the students to various employment generation schemes and avenues available in Jammu and Kashmir.
- This course develops into a thorough practical guide to Self-employment and entrepreneurship processes of Jammu and Kashmir.

**ENTREPRENEURSHIP FOR SELF EMPLOYMENT****THEORY****(CREDITS 2)****Unit 1 Entrepreneurship: Introduction & Main Concepts**

Entrepreneurship- Concept and Definition; Nature and Importance of Entrepreneurship; Classification and Types of Entrepreneurs; Entrepreneurial Traits and Motivation; Entrepreneurship vs Entrepreneur; Entrepreneurship vs Professional Managers; Entrepreneurial Environment; Process of Entrepreneurial Development; Development of Women Entrepreneurs.

**Unit 2 Entrepreneurship in J&K**

Entrepreneurship in J&K -Role of Entrepreneurship Development Institute (EDI); Appraisal of Capital Fund Scheme– Objectives; Eligibility and Strategy; Sanctioning of Seed Capital; Mode of Payment of Seed Capital; Monitoring and Appraisal.

**TUTORIAL****(CREDITS 2)**

1. Self-employment – Concept and Importance.
2. Potential and Challenges of Dairy farming, Sheep Farming, Poultry in J&K.
3. Employment Opportunities for Educated Youth in Mushroom Cultivation; Bee Keeping and Fisheries in J&K.
4. Youth Startup Loan Scheme: Introduction; Objectives; Implementing Agency(s).
5. Eligibility Strategy; Sanctioning of Loan, Mode of Repayment; Security; other terms & conditions for Startup Loan Scheme
6. An Evaluation and Appraisal of Microfinance in J&K.

**SUGGESTED READINGS**

- Bakal G. M. (1993), Entrepreneurship Development for Small-Scale Industries.
- Kuratko and Rao (2012), Entrepreneurship: A South Asian Perspective, Cengage Learning.
- Robert Hisrich (2006), Michael Peters, Dean Shepherd, Entrepreneurship, McGraw-Hill Education
- Desai, Vasant (2011), Dynamics of Entrepreneurial Development and Management. Mumbai, Himalaya Publishing House.
- Khanka S. S. (2006), Entrepreneurial Development, S. Chand & Co, Delhi.
- Ramachandran K (2008), Entrepreneurship Development, McGraw-Hill Education
- Government of Jammu and Kashmir Department of Labour and Employment Guidelines for Seed Capital Fund Scheme, available at: <http://jkedi.org/Seed-Capital.aspx>
- Government of Jammu and Kashmir Labour & Employment Department Civil Secretariat Srinagar/ Jammu Guidelines for Youth Startup Loan Scheme, available at <http://jkedi.org/ysls.aspx> A guide to opening up self-employment venture.

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**13. Macroeconomics (Generic Elective-II)**

Semester	Generic Elective	Course Title	Credit
VI	GE-II	Macroeconomics	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- This course intends to acquaint the students with the basic principles in Macroeconomic Theory.
- To familiarize students with various theories explaining the macroeconomic behaviour and make them understand the importance and relevance of various economic policies.

**MACROECONOMICS****THEORY****(CREDITS 4)****Unit 1 National Income and Related Aggregates**

Macroeconomics - Concept and Evolution; National Income- Meaning; Concepts of National Income; Measurement of National Income- Value Added Method; Income Method; Expenditure Method; Nominal and Real income.

**Unit 2 Classical and Keynesian Theory**

Classical postulates; Classical Theory of Income and Employment- Say's law of markets; Keynes criticism of Classical Theory. Aggregate Expenditure; Keynesian Theory of Consumption- APC and MPC; Saving Function- APS and MPS.

**Unit 3 Concept and Role of Money**

Money- Meaning, Evolution and Functions; Kinds of Money; Characteristics of good Money; Four Measures of Money Supply; Money and Near Money; Significance of Near Money.

**Unit 4 Inflation and Business Cycle**

Inflation- Concept and Types; Causes of Inflation- Demand pull and Cost Push Inflation; Consequences of Inflation; Business cycle- Concept, Causes and Phases.

**TUTORIAL****(CREDITS 2)**

- Limitations of GDP as a measure of National Income.
- Circular flow of Income in Two-sector, Three-sector and Four-sector economy.
- Investment- Concept and types.
- Determination of Equilibrium output in Keynesian framework.
- Concept of Investment Multiplier.



- Measures to control Inflation.

### **SUGGESTED READINGS**

- Richard T. Froyen (2013), Macroeconomic Theories and Policies, Pearson Education, New Delhi.
- Edward Shapiro (2013), Macroeconomic Analysis, Galgotia Publications, New Delhi.
- Gardner Ackle (2008), Macroeconomic Theory, Surjeet Publications, Delhi.
- Ahuja H.L. (2016), Macroeconomic Theory and Policy based on UGC model curriculum; S Chand; Latest Edition.
- Dwivedi D.N. (2005), Macroeconomics Theory and Policy, Tata McGraw Hill New Delhi.
- Case, Karl E. & Ray C. Fair, Sharon M Oster (2012), Principles of Macroeconomics, Pearson Education, Inc., 10<sup>th</sup> Edition.

Model Govt. Degree College Sheopur

**Course Structure and distribution of different courses with their credits for B.A. Education**

S. No.	Semester	Course Title	Course Type	Total Credits
1.	I	Educational Sociology	Core Course	6 credits
2.	II	Educational Psychology	Core Course	6 credits
3.	III	Educational Philosophy	Core Course	6 credits
4.	III	Early Childhood Care & Education	Skill Enhancement Course	4 credits
5.	IV	History of Education system in India	Core Course	6 credits
6.	V	Issues and trends in contemporary Indian Education-I	Core Course	6 credits
7.	V	Guidance and Counseling	Skill Enhancement Course	4 credits
8.	VI	Issues and trends in contemporary Indian Education-II	Core Course	6 credits

**Course Outcomes**

Subject Education is being introduced at undergraduate level to acquaint students with necessary skills, aptitudes, etiquettes to pursue teaching as profession. After the completion of the course students develop an aptitude to go for B.Ed and Masters in Education to develop further efficiency in teaching. The course develops the basic insight and understanding of accepted principles of teaching and learning and widens their horizon to understand the basic foundations of Education viz philosophical, sociological, psychological bases of Education. Besides, various skill enhancement courses have been introduced in subject Education to develop various skills in undergraduates related to Early Childhood Care and Education (ECCE) and Guidance and Counseling.

**1. Educational Sociology (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Educational Sociology	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- To develop basic understanding of concept, aims and functions of Education.
- To enable students to get basic idea, concept of Sociology, Educational Sociology and relationship between the two.
- To acquaint students with concept, factors and barriers of social change and role of education in bringing social change.
- To enable students to understand the basic idea of culture, its components, types and characteristics; also the role of Education towards Culture and Culture towards Education.
- To acquaint students to understand various social processes and social problems like child labour, drug abuse, Gender Discrimination which our country India is facing.

**EDUCATIONAL SOCIOLOGY****THEORY****(CREDITS: 06)****Unit-I Educational Sociology & Culture**

- Education – Concept, Aims and Objectives
- Meaning and Scope of Sociology & Educational Sociology
- Meaning, Definitions, Characteristics and Components of Culture
- Relationship of Culture with Education.

**Unit-II Social Change**

- Meaning and Definitions
- Factors: Economic, Social and Political
- Resistance to Social Change
- Education and Social Change (Education as an Agent, Instrument & Effect of Social change)

**Unit-III Social Process/Social Mobility**

- Concept of Social Process
- Meaning of Social Interaction
- Kinds of Social Interaction – Conflict, Competition, Co-operation, Accommodation and Assimilation
- Social Norms and Values

- e) Social Mobility – Concept and Types (Vertical and Horizontal)

#### **Unit-IV Social Problems – Consequences & Remedies**

- a) Poverty
- b) Illiteracy
- c) Child Labour and Child Abuse
- d) Drug Abuse
- e) Gender Sensitization
- f) Urbanization

#### **SUGGESTED READINGS**

- Bhat, M. S. Educational Sociology APHPublishing House New Delhi (2012)
- Bhatt, B. D & Sharma, S. R. Sociology of Education, Kasnishka Publishing House
- Giddens, A. Sociology Wiley India Pvt. Ltd
- Haralambos, M. Sociology: Themes and Perspectives
- Khan, M. A. & Bhat, S. A Basics in Education Dilpreet Publishing House New Delhi (2013).
- Maclver, R. M. & Page, C. H. Society: An introductory Analysis Macmillan India Limited
- Mattoo, M. I. Foundation of Education, Mattoo Publication Srinagar (2003)
- Rao, Shankar, C. N. Sociology: Principles of Sociology with an introduction to social thought S. Chand and Company
- Sharma, Y. K Foundations in Sociology of Education Kanishka Publishers, Distributors New Delhi-110002
- Sollivan, E. E. Education in Social Change. Asia Publishing House
- Taneja, V. R. Socio-Philosophical Approach to Education Atlantic Publishers and Distributors.
- Shaker Rao, C. N. Principles of Sociology with an Introduction of Social Thoughts publication: S. Chand & Company Ltd. New Delhi.

## 2. Educational Psychology (Core Course-II)

Semester	Core Course	Course Title	Credit
II	CC-II	Educational Psychology	Theory: 04 ; Tutorial: 02 Total: 06

### Course specific outcomes

- To enable students to get an insight of meaning, scope of Psychology and educational psychology and the relationship between Education and Psychology.
- To acquaint students with concept, nature and factors of learning. Besides, to understand the different theories of learning like Trial and Error, Classical conditioning, Operant Conditioning and Gestalt Theory and their educational implications.
- To acquaint undergraduate students with the basic idea of intelligence, I.Q. and various theories of intelligence.
- To enable students to understand the basic concept, determinants and theories of personality viz Sigmund Freud's Psycho-analytic theory, Allport's and Cattles Trait theory.

## EDUCATIONAL PSYCHOLOGY

### THEORY

(CREDITS: 06)

#### Unit-I Educational Psychology & Learning

- Meaning, Scope of Educational Psychology
- Concept of Learning
- Trial and Error Theory – Thorndike
- Conditioning Theory – Pavlov
- Insightful Learning – Kohler et.al.

#### Unit-II Intelligence & Creativity

- Concept of Intelligence & I.Q.
- Theories of Intelligence – Two factor theory (Spearman)
  - Multi factor theory (Thorndike)
  - Group factor theory (Thurstone)
- Detailed description of the following tests
  - Simon – Binet Scale (Verbal test)
  - Cattell's Culture – Fair Test (Non-verbal test)
  - Bhatia Battery Test (Performance test)
- Creativity – Concept, Characteristics and its Nourishment

**Unit-III Personality**

- a) Meaning and Definitions
- b) Theories of Personality:
  - i. Type Theory – William Sheldon & Jung
  - ii. Trait Theory – Allport
  - iii. Self Theory – Carl Rogers
  - iv. Psychoanalytical theory – Sigmund Freud

**Unit-IV Adolescence & Mental Health**

- a) Concept, Characteristics & Problems of Adolescents
- b) Role of Education in solving problems of Adolescents
- c) Concept and Characteristics of Mental Health
- d) Adjustment and Defense Mechanism – Sublimation, Compensation, Rationalization and Projection.

**SUGGESTED READINGS**

- Aggarwal, J. C. Essentials of Educational Psychology (2nd Revised Ed.) Vikas Publishing House Pvt. Ltd New Delhi
- Baron, R. A Psychology (5th Ed.) Published by Dorling Kindersiey India) Pvt. Ltd.
- Chauhan, S. S. Advanced Educational Psychology (6th Revised Ed.) Vikas Publishing House Pvt. Ltd. New Delhi.
- Dandapani, S. Advanced Educational Psychology (4th Revised Ed.) Anmol Publications Pvt. Ltd New Delhi 110002 (India)
- Mangal, S. K. Advanced Educational Psychology 92nd Ed.) Published by Ashoke K. Ghosh
- Mattoo, M. I. Foundation of Education, Mattoo Publication Srinagar (2011)
- Parveen, A. Fundamentals of Education. Info-world, Srinagar (2011)
- Walia, J. S. Foundations in Educational Psychology (6th Revised Ed.) Vikas Publishing House Pvt. Ltd., New Delhi.

### 3. Educational Philosophy (Core Course-III)

Semester	Core Course	Course Title	Credit
III	CC-III	Educational Philosophy	Theory: 04; Practical: 02 Total: 06

#### Course specific outcomes

- To enable students to get an insight of meaning, scope of Psychology and educational psychology and the relationship between Education and Psychology.
- To acquaint students with the meaning, nature and scope of philosophy and its relationship with Education, Religion and Science.
- To enable students to understand the major philosophies of Education like Idealism and Pragmatism and their bearings on Education.
- To enable students to understand the educational contribution of John Dewey, R.N Tagore, Dr. Sir Mohammed Iqbal, Moulana Abul Kalam Azad, M.K Gandhi with special reference to the concept, aims, curriculum, methods of teaching and role of teacher in Education.

### EDUCATIONAL PHILOSOPHY

#### THEORY

(CREDITS: 06)

#### Unit-I Philosophy & Education:

- Concept – Philosophy, Religion & Science
- Relationship between Philosophy with Science and Religion
- Relationship between Philosophy and Education.
- Branches of Philosophy – (Epistemology, Axiology, Ontology)

#### Unit-II Idealism

- Underlying Assumption of Idealism as a school of Philosophy
- Aims of Education
- Curriculum
- Methods of Teaching
- Concept of freedom and discipline.
- Role of Teacher

#### Unit-III Pragmatism

- Underlying Assumption of Pragmatism as a school of Philosophy
- Aims of Education
- Curriculum
- Methods of Teaching
- Concept of freedom and discipline.
- Role of Teacher

**Unit-IV Educational thought of the following**

- a). John Dewy
- b). Allama Iqbal
- c). M. K. Gandhi
- d). Tagore
- e). Maulana Abul Kalam Azad.

**SUGGESTED READINGS**

- Brubacher, J. S. Modern Philosophies of Education Tokyo: McGraw Hill Book Company, Inc.
- Butter, J. D. Four Philosophies and their practice in Education and Religion New York and London: Harper and Row.
- Khan, M. A. & Bhat, S.A. Basics in Education Delpreet Publishing House New Delhi (2013)
- Mattoo, M. I. Foundation of Education - II, Srinagar Book Vision (2005)
- Seetharamu, A. S..Philosophies of Education Ashish Publishing House.
- Sharma, P. Philosophy of Education New Delhi: APH Publications
- Sing, Y. K. Philosophical Foundations of Education APH Publishing Corporation.
- Walia, J. S. Philosophical Foundations in Educational Paul Publishing House Pvt. Ltd., New Delhi.

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**3a. Early Childhood Care & Education (Skill Enhancement Course)**

Semester	Skill Course	Course Title	Credit
III	SC-I	Early Childhood Care & Education	Theory: 04 Total: 04

**Course specific outcomes**

- To acquaint students with meaning, importance and objectives of ECCE in India.
- To understand the methods of child study viz Observation and Case study.
- To acquaint them to understand the growth and development of early childhood stage in domains viz, physical, mental, social and emotional.
- To equip students with the measures of fostering creativity among young children.
- To understand the role of ICDS, Balwardis and Anganwadi's in all round development of the child.
- To understand the role of NGOS in ECCE.

**EARLY CHILDHOOD CARE & EDUCATION****THEORY****(CREDITS: 04)****Unit I****Concept & Methods**

- Meaning of Early Childhood Care & Education.
- Aims & objectives of Early childhood care and Education
- Need and importance of Early Childhood Care & Education
- Methods of studying child behavior— Observation and Case study—A case study shall be prepared by students (five to ten in each groups)

**Unit II****Development of Childhood**

- Concept of Development
- Social and Personal Development
- Emotional and Motor development
- Development of Creativity.

**Unit III****Recommendations and Programmes**

- Recommendations of NPE 1986
- Recommendation of NCF (2005)
- ECCE Programme in India with special reference to ICDS
- Role of NGOs in ECCE

**Unit IV****Contribution of Education thinkers with reference to ECCE**

- Froebel

- b. Montessori
- c. Dewy

**SUGGESTED READINGS:**

- Austin, Gilbert R Early Childhood Education. An International Perspective, New York Academic Press.
- Banta, T. Are these Really a Montessori Method? Columbus, Ohio: Ohio Psychological Association and Ohio Psychiatric Association.
- Bloom, Benjamin, S. Stability and Change in Human Characteristics. New York: John Wiley & Sons Inc.
- Brown, G. Child Development. London: Open Books, Central Advisory Board of Education (CABE)
- Butts, R. Freeman. A Cultural History of Western Education. New York: McGraw-Hill Book, Co., Inc.
- Cole, Luella. A History of Education-Socrates to Montessori. New York: Holt Rinehart and Co.
- Gupta, M. S. Early Childhood Care and Education. Eastern Economy Edition. PHI Learning Private Limited, New Delhi.

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**4. History of Education System in India (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	History of Education system in India	Theory: 06 ; Total: 06

**Course specific outcomes**

- To enable students to gain knowledge about the system of Indian education during Vedic, Buddhist and Medieval periods.
- To gain an insight of impact of various British Commissions and Committees on Indian Education.
- To enable students to understand growth and development of education in post-independence Era.
- To enable students to understand growth and development of education in J&K with special reference to Kazmi report, K.G Saiyadain report and Bhagwan Sahay Committee report.

**HISTORY OF EDUCATION SYSTEM IN INDIA****THEORY****(CREDITS: 06)****Unit-I Education in Ancient and Medieval India**

- Vedic Education- Salient Features, Aims, Process of Education and Curriculum
- Buddhist Education- Salient Features, Aims , Process of Education and Curriculum
- Muslim Education- Salient Features, Process of Education and Curriculum

**Unit-II Education in British India**

- Macaulay's Minute (1835)
- Wood's Despatch (1854)
- Indian Education Commission (1882)
- Wardha Scheme (1937)
- Sargent Report (1944)

**Unit –III Education in Post Independence Era**

- Radha Krishnan Commission ( 1948-49)
- Mudaliar Commission (1952-53)
- Kothari Commission (1964-66)
- National Policy on Education NPE (1986) and Programme of Action (POA)

**Unit-IV Education in J &K State**

- Sharp Committee (1916)

- b) K.G.Sayiddin (1939)
- c) Kazmi Report (1950)
- d) Baghwan Sahai Committee (1972)

**SUGGESTED READINGS:**

- Aggarwal, A.K. Development of Education System in India Anmol Publication Pvt. Ltd.
- Altekar, A.S. Education in Ancient India ,New Delhi ,Motilal Banarsidass
- Ganie, M.Y and Bhat ,S.A. Development of Educational System in India.Dilpreet Publishing House New Delhi
- Jayapalan. History of Education in India, Atlantic Publishers
- Khan ,M.A and Parveen, A. Educational Philosophy and Educational Scenario, Kashmir Info Srinagar
- Kothari Education Commission (1964-66)
- Mehta, D.D. Development of Education System in India. Tandon Publications Ludhiana
- Mohanty, J. Current Issues in Education , Cosmos Publication New Delhi
- Mukherji, R.K. Ancient Indian Education New Delhi, Motilal Banarsidass
- National Policy on Education (1986)
- Rather, R.A. Development of Educational System in India
- Saini ,S.K. Development of Educational System in India. Cosmo Publishers New Delhi
- Secondary Education Commission (1952-53)
- University Education Commission (1948-49)
- Walia ,J.S. Development of Educational System in India. Paul Publishers
- Rasool and Chopra. Education System in J&K.

### **5. Issues and trends in Contemporary Indian Education-I (Core Course-V)**

Semester	Core Course	Course Title	Credit
V	CC-V	Issues and trends in contemporary Indian Education-I	Theory: 06 ; Total: 06

#### **Course specific outcomes**

- To enable students in understanding the meaning, objectives and present status of secondary education in India.
- To enable them to understand the role of RMSA in secondary education.
- To acquaint them to understand meaning and objectives of higher education.
- To enable the students to understand the role of RUSA in higher education.
- To understand the major problems of quality control in higher education.
- To get an insight about the issues related to women Education, its causes and remedial measures and role of education in empowerment of women.
- To galvanize the minds of students to understand the need and importance of value education and environmental education.

### **ISSUES AND TRENDS IN CONTEMPORARY INDIAN EDUCATION-I**

#### **THEORY**

**(CREDITS: 06)**

#### **Unit-I Secondary Education**

- a) Objectives
- b) Present Status of Secondary Education Institutions
- c) Vocationalization of Secondary Education and it's Remedial Measures
- d) Rashtriya Madhyamik Shiksha Abhiyan (RMSA)

#### **Unit-II Higher Education**

- a) Objectives
- b) Present Status of Higher Education Institutions
- c) Problems of Quality Control and Finances and Remedial Measures
- d) Private Initiative in Higher Education
- e) Rashtriya Uchachtra Shiksha Abhiyan (RUSA)

#### **Unit-III Women's Education**

- a) Need and Importance
- b) Problems of Women's Education and their Remedies
- c) Role of Education in Empowerment of Women

**Unit -IV Value Education and Environmental Education**

- a) Need, importance and Development of Human Values
- b) Education for Human Rights
- c) Nature, Meaning and Importance of Environmental Education
- d) Programmes of Environmental Education

**SUGGESTED READINGS**

- Aggarwal, A.K. Development of Education System in India Anmol Publication Pvt. Ltd.
- Bhat, B.D. Modern Indian Educational Planning and Development. Kanishka Publishers, Distributors
- Chand, J. Value Education Anshah Publication House Ghosh, D.N. A Textbook of Value Education Document Publishers and Distributors New Delhi
- Mukherji, R.K. Ancient Indian Education New Delhi Motilal Banarsidass
- Shrivastava, K.K. Environmental Education Principles Concept and Management Kanishka Publications, Distributors
- Sirohi, S.S. Environmental Education Tandon Publications

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**6. Guidance and Counseling (Skill Enhancement Course-II)**

Semester	Skill Course	Course Title	Credit
V	SC-II	Guidance and Counseling	Theory: 04 ; Total: 04

**Course specific outcomes**

- To enable students to understand the basic concept, objectives of guidance and counseling and the relationship between the two.
- To understand the basic idea of guidance services viz placement services and follow-up services.
- To enable students to understand the guidance services at secondary level.
- To give them an insight about the theories of counseling.
- To enable them to know the qualities of a good counsellor and teacher as a counsellor.

**GUIDANCE AND COUNSELING****THEORY****(CREDITS: 04)****Unit I: Guidance**

- Concept of Guidance
- Need and importance
- Aims and objectives of Guidance
- History of Guidance Movement in India

**Unit II: Foundation of Guidance**

- Philosophical
- Psychological Foundation
- Socio-cultural Foundations
- Importance of Intelligence and Personality Tests

**Unit III: Guidance Service**

- Information Service - Educational, Occupational, Personal.
- Appraisal Service - Interview, Case study and Cumulative Record card
- Placement Service - Educational and occupational.
- Follow-up Service

**Unit IV: Counseling**

- Meaning, Purpose and process in Counseling
- Qualities of a Counsellor.

- c. Directive theory of Counseling
- d. Non-directive theory of Counseling.

**SUGGESTED READINGS**

- Crow and Crow; Introduction to guidance. Eurasia Publishing House (P) Ltd., New Delhi
- Gibson, R.L. & Mitchell, M.H. Introduction to Guidance. New York: McMillan
- Hasnain Quraishi Educational Counselling. Anmol Publications
- Hoppock, Robert       Group Guidance: Principles, Techniques and Education, Tata McGraw Hill, New York.
- Kochhar, S.K, Hoppock, Robert;       Occupational Information: Where to get it and how to use it in counselling in and in teaching. Tata McGraw Hill New York.
- Mehdi, B. & Stone Guidance in School, New Delhi NCERT, 1978.
- Miller, F. W. Guidance & Principles of Guidance, New York, McGraw Hill.

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**7. Issues and Trends in Contemporary Indian Education-II (Core Course-VI)**

Semester	Core Course	Course Title	Credit
VI	CC-I	Issues and trends in contemporary Indian Education-II	Theory: 06; Total: 06

**Course specific outcomes**

- To enable students to understand the need and importance of adult education.
- To understand the basic concepts of National Literacy Mission (NLM) and Total Literacy campaign (TLC).
- To enable students to understand the types of exceptionality, identification and educational provisions of gifted, mentally retarded and delinquents.
- To enable students to understand the basic principles of guidance and counseling.
- To enable students to understand and compute the measures of percentile and percentile rank.

**ISSUES AND TRENDS IN CONTEMPORARY INDIAN EDUCATION-II****THEORY****(CREDITS: 06)****UNIT -I Adult Education & Distance Education**

- Concept, Need and Importance of Adult Education and Life Long Learning
- National Literacy Mission (NLM) and Total Literacy Campaign (TLC)
- Meaning, Need and Importance of Open and Distance Learning (ODL)
- Salient Features of Distance Education
- Open University System

**Unit -II Exceptional Children**

- Gifted – Concept, Identification and Education of the Gifted
- Mentally retarded- Concept, Identification and Education
- Delinquent – Concept, Identification and Education
- Concept of Inclusive Education

**Unit -III Guidance and Counseling**

- Concept and Principles of Guidance
- Types of Guidance: Education, Vocational and Personal
- Need and Importance of Guidance at Secondary Level
- Concept and Elements of Counseling

**Unit IV Statistics in Education**

- a) Relative Measures: Concept, Computation of Percentile and Percentile Rank, Standard Scores
- b) Bivariate Correlation: Meaning, Computation of Correlation by Rank Difference Method & Product Moment Method (Raw Score Only).

**SUGGESTED READINGS:**

- Aggarwal, R. Education, Vocational Guidance & Counselling Principles, Techniques and Programmes. Shipra Publication.
- Basu, N. Adult Education: Trends and Strategies Modern Book. Publication, New Delhi
- Garret, H.E. Statistics in Psychology & Education. Surjeet publication
- Malik, G.M. Understanding Adult Education, Crown Pub, N.D.Srinagar
- Mangal, S.K. Statistics in Psychology and Education.
- Mohanty ,J. Adult and Non-formal Education Deep and Deep Publication
- Mohanty,S. Libelons and Adult Education APH Publishing Corporation
- Nadeem,N.A and Farooq, F.A. Statistics in Education and Psychology Dilpreet Publishing House New Delhi.
- Sharma, R.N. Guidance and Counselling Surjeet publication
- Shrivastava, K.K. Foundation of Educational Psychology. Paul Publishers

**Course Structure and distribution of different courses with their credits for B.A.  
English Literature**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	British Poetry	Core Course	6 credits 4(T)+2(T)
2.	II	British Drama	Core Course	6 credits 4(T)+2(T)
3.	III	British Poetry-II	Core Course	6 credits
4.	IV	British Novel	Core Course	6 credits
5.	V	American Literature	Core Course	6 credits
6.	V	Literary Criticism	Core Course	6 credits
7.	VI	English literature: Indian writing in English	Core Course	6 credits
8.	VI	Post Colonial Literature	Core Course	6 credits

**Course Outcomes:**

English literature is being part of curriculum from 1<sup>st</sup> semester to 6<sup>th</sup> semester to acquaint students with the wide and varied cosmos of world literature. After completion of the course, the students are competent enough to speak and write professional English as well as try their hands in writing creative literature. Along with compulsory general English and communicative English, English literature is also part of curriculum with addition to it certain skill courses related to writing skills and translation are also taught to smooth the edges for future of students. The department has already groomed few young writers who have already published their books on national and international platforms.

**1. British Poetry (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	British Poetry	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes:**

- To introduce students of English literature to roots of English poetry
- To introduce students to G. Chaucer
- To familiarize students with narrative poetry
- To introduce to concept of sonnet and metaphysical poetry
- To familiarize with Neo-classical British literature
- To introduce to the world of John Milton

**BRITISH POETRY****THEORY****(CREDITS 4)****Unit I:** Prologue to Canterbury tales by G. Chaucer**Unit II:** sonnets of Shakespeare and poems of John Donne Sonnet 12, 18, 66; Batter my heart valediction: forbidden mourning**Unit III:** John Dryden, Absalom and Achitophel, Macflecknoe**Unit IV:** Paradise lost book- John Milton**Tutorials:** *Unit III & IV*

**2. British Poetry (Core Course-II)**

Semester	Core Course	Course Title	Credit
II	CC-II	British Drama	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes:**

- To introduce students to world of British Drama
- To familiarize students with classical dramas of Marlowe and Shakespeare
- To familiarize students with realistic plays of G. B. Shaw
- To introduce students with plays of modern and postmodern age with reference to John Osborne

**BRITISH DRAMA****THEORY****(CREDITS 4)****Unit I:** Tamburlaine the great part I Christopher Marlowe**Unit II:** Twelfth night - William Shakespeare**Unit III:** Pygmalion G.B Shaw**Unit IV:** Look Back in Anger- John Osborne**Tutorials:** *Unit III & IV*

**3. British Poetry II (Core Course-III)**

Semester	Core Course	Course title	Credit
III	CC-III	British Poetry II	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To introduce to world of Romanticism in poetry
- To familiarize with earlier and late romantic poetry writers
- To introduce to Victorian world of literature
- To familiarize with Tennyson A. L.
- To introduce to modern English poetry through W. B. YEATS

**BRITISH POETRY-II****THEORY****(CREDITS 4)****UNIT I:** Tintern abbey, Ode on intimation of immortality -William Words worth**UNIT II:** Shelley: ode to the west wind, ozymandias; Keats: ode on Grecian urn, ode to a nightingale**Unit III:** Tennyson: Ulysses, the lady of shallot, The Defense of Lucknow**Unit IV:** Yeats: Easter 1916, A dialogue between self and soul

**4. British Novel (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	British Novel	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To introduce students to concept of Novel
- To familiarize students with art of novel writing
- To develop patience in students for extended reading hours
- To develop habits of reading
- To introduce to world of Jane Austen ,Charles Dickens and D H Lawrence
- To familiarize students with feminist writings with reference to Virginia Woolf

**BRITISH NOVEL****THEORY****(CREDITS 4)****Unit I:** Jane Austen -Pride and Prejudice**Unit II:** Charles Dickens -Oliver twist**Unit III:** D H Lawrence -Sons and Lovers**UNIT IV:** Virginia Woolf -Mrs Dalloway

**5a. American Literature (Core Course-IV)**

Semester	Core Course	Course Title	Credit
V	CC-V	American Literature	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To introduce students to world of American theater (post modern )
- To familiarize students with American classical writings (Mark Twain)
- To introduce students to the world of American novel
- To familiarize students with mysticism of EMILY DICKINSON
- TO familiarize students to world of Robert Frost

**AMERICAN LITERATURE****THEORY****(CREDITS 4)****Unit I:** The Glass Menagerie-Tennessee Williams**Unit II:** The adventures of Tom-Sawyer Mark Twain**Unit III:** For whom the bell tolls-Ernest Hemingway**Unit IV:** Poetry: Emily Dickinson

Hope is the thing with feathers

Because I could not stop for Death

I am nobody; A bird came down the walk

Robert Frost

Mending wall

Home burial

Stopping by the woods



**5b. Literary Criticism (Core Course-V)**

Semester	Core Course	Course Title	Credit
V	CC-V	Literary Criticism	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To introduce students with concepts of literary criticism
- To introduce students to romantic criticism (Wordsworth and Coleridge)
- To introduce students with feministic experience
- To introduce students to modern school of critical thought
- To familiarize students with multiple levels of looking at a text

**LITERARY CRITICISM****THEORY****(CREDITS: 4)**

**Unit I:** Wordsworth .... Preface to lyrical ballads -1802 S T Coleridge : Biographia Literaria chapter 4 ,13 ,14

**Unit II:** Virginia Woolf -Modern Fiction

T S Eliot -Tradition and individual talent

**Unit III:** I A Richards -Principles of literary criticism; Chapter 1, 2, 34

**Unit IV:** Cleanth Brooks-the heresy of paraphrase and the language of paradox

**6a. English Literature: Indian writing in English (Core Course-VI)**

Semester	Core Course	Course Title	Credit
VI	CC-VI	English literature: Indian writing in English	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To introduce students to Classics of Indian English literature
- To familiarize students with world of R. K. Narayan
- To introduce students to Indian history and literature
- To familiarize students with confessional poetry
- To familiarize students with voice of diaspora
- To familiarize students with Indian English drama

**ENGLISH LITERATURE: INDIAN WRITING IN ENGLISH****THEORY****(CREDITS 4)****Unit I:** R K Narayan- Swami and friends**Unit II:** Anita Desai -Clear light of a day**Unit III:** Kamala Das-My grandmother's house

The stone age

The old playhouse

Agha shahid Ali

Postcard from kashmir

Dhaka Gauzes

I see Kashmir from New Delhi at midnight

**Unit IV:** Girish Karnad Tughlaq

**6b. Post Colonial Literature (Core Course-VI)**

Semester	Core Course	Course Title	Credit
VI	CC-VI	Post Colonial Literature	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To introduce students to the world of African English literature
- To familiarize students with tradition of African writing
- To familiarize students with postcolonial literature
- To familiarize students with world of different writings away from British literature
- To Globalize understand and perception of English literature students

**POST COLONIAL LITERATURE****THEORY****(CREDITS 4)****Unit I:** Chinua Achebe ..... Arrow of God**Unit II:** Salman Rushdie ..... Midnight's Children**Unit III:** Short story ; Bessie Head ..The collector of treasures

Ama Ata Aidoo .... The Girl Who Can

Grace ogot ...the green leaves

**Unit IV:** Poetry

Pablo Neruda ...Tonight I can write , the way Spain was

Derek Walcott .....A far cry from Africa ..Names

David Malouf ..... Revolving Days wild Lemons

**Course Structure and distribution of different courses with their credits for B.A. English**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	English Communication Skills-I	Ability Enhancement Course	2 credits)
2.	II	English Communication Skills-II	Ability Enhancement Course	2 credits
3.	III	General English-I	Core Course	6 credits
4.	IV	General English-II	Core Course	6 credits
5.	V	General English-III	Core Course	2 credits
6.	V	English Writing Skills	Skill Enhancement Course	4 credits
7.	VI	General English-IV	Core Course	4 credits
8.	VI	English Translation Skills	Skill Enhancement Course	4 credits

**Course Outcomes:**

Subject English along is being part of curriculum from 1<sup>st</sup> semester to 6<sup>th</sup> semester to acquaint students with linguistic competence and other skills related to English language and English literature. After completion of the course, the students are competent enough to speak and write professional English as well as try their hands in writing literature. Along with compulsory general English and communicative English, English literature is also part of curriculum with addition to it certain skill courses related to writing skills and translation are also taught to smooth the edges for future of students.

**1. English Communication Skills-I (Ability Enhancement Course-I)**

Semester	Ability Enhancement Course	Course Title	Credit
II	AECC-II	English Communication Skills-I	Theory: 02; Total: 02

**Course specific outcomes:**

- To develop basic understanding of communication
- To familiarize students with phonetic sounds and symbols
- To develop skills like dialogue group discussions, presentation and interview
- To familiarize students with concept of listening
- To imbibe acquaintance with reading comprehension and skills
- To Familiarize with concept of translation
- To introduce students to art of paragraph writing
- To make students understand concept of book review and report writing
- To familiarize students with poetry and short story

**ENGLISH COMMUNICATION SKILLS-II****THEORY****(CREDITS: 02)****Unit I: Introduction to communication**

- Process of communication
- Levels of communication
- Flow of communication
- Verbal and non verbal communication
- Barriers to communication

**Unit II: Reading and writing skills**

- Techniques of Reading, reading comprehension
- Translation from Urdu to English
- Paragraph writing and Letter writing
- Report writing, Book review
- Literature component
- Robert Frost: The Road not taken
- James Kirkup ... No men are foreign
- Saki the open window
- O, Henry The Romance of Busy Broker

**2. English Communication Skills-I (Ability Enhancement Course-II)**

Semester	Ability Enhancement Course	Course Title	Credit
II	AECC-II	English Communication Skills-II	Theory: 02; Total: 02

**Course specific outcomes:**

- To introduce to concept of Travel writing
- To familiarize students with Biographies
- To introduce students to world of human interest
- To introduce students to concept of Disaster Management
- To familiarize students with world of cinema and films

**ENGLISH COMMUNICATION SKILLS-II****THEORY****(CREDITS: 02)****Unit I:***Travel*

Heaven's Gate .....pico Iyer

*Biography*

Sir C V Raman .....shubashree Desikan

*Human interest*

The Connoisseur.....Nargis Dalal

**Unit II:***Disaster Management*

The Cuddalore Experience Anu George

*Humour*

Bubbling Well Road .....Rudyard Kipling

*Films*

The Odds against us ..... Satyajit Ray

**3. General English-I (Core Course)**

Semester	Core Course	Course title	Credit
III	CC	General English-I	Theory: 04; Tutorial: 02; Total: 06

**Course specific outcomes**

- To familiarize students with grammar in use
- To introduce tenses and use of articles and practice
- To Familiarize with phonetic sounds and symbols
- To Familiarize with use of punctuation
- To introduce students to Shakespearean sonnets
- To familiarize students with poetry of John Milton and William Blake
- To introduce concept of essay and short story
- To acquaint students with Charles Lamb ,Leo Tolstoy and Sadat Hassan Manto

**GENERAL ENGLISH-I****THEORY****(CREDITS: 06)****Unit I: Grammar in use**

Tenses and articles

**Unit II: Writing/English sound system**

Use of punctuation

Phonetic symbols

**Unit III: Poetry**

William Shakespeare ...sonnet 2, 13, 18

John Milton..... ON HIS BLINDNESS, ON HIS HAVING ARRIVED AT THE AGE OF TWENTY THREE

William Blake ...LONDON, GARDEN OF LOVE

**Unit IV: Essay/ Short story**

CHARLES LAMB....DREAM CHILDREN A REVERIE

LEO TOLSTOY..... HOW MUCH LAND DOES A MAN NEED

SAADAT HASAN MANTO ....Toba Tek Singh

#### 4. General English-II (Core Course)

Semester	Core Course	Course title	Credit
IV	CC	General English-II	Theory: 04; Tutorial: 02; Total: 06

#### Course specific outcomes

- To introduce students with use of grammar
- To familiarize with narration and Concord
- To familiarize students with Report writing and letter writing
- To familiarize students with poetry of Wordsworth, Arnold and TS ELIOT
- Introduction into world of Biography
- To familiarize students with life of greats in various fields

### GENERAL ENGLISH-II

#### THEORY

(CREDITS: 06)

#### Unit I: Grammar in use

Narration

Agreement of subject and verb

#### Unit II: writing skills

Report writing

Letter writing

#### Unit III: Poetry

Wordsworth.... Lucy Gray, The World is too much with us

Mathew Arnold ..Dover Beach , Growing Old

T S ELIOT.... Preludes

#### Unit IV: Biography

Abraham Lincoln

Sir Mohammad Iqbal

Mother Teresa



**5. General English-III (Core Course)**

Semester	Core Course	Course Title	Credit
V	CC-III	General English-III	Theory: 02; Total: 02

**Course specific outcomes**

- To introduce students with Grammar in use
- To familiarize students with use of models
- To familiarize students with concept of transformation of sentences
- To familiarize students with poems of Agha shahid Ali and A K Ramanujan

**GENERAL ENGLISH-III****THEORY****(CREDITS: 02)****Unit I: Grammar in use**

- Models
- Transformation of sentences

**Unit II: Poetry**

Agha shahid Ali....POSTCARD from Kashmir, the wolf's postscript

A K Ramanujan..... of mothers among other things, Obituary

**6. English Writing Skills (Skill Enhancement Course)**

Semester	Skill Course	Course Title	Credit
V	SEC	English Writing Skills	Theory: 04; Total: 04

**Course specific outcomes**

- To familiarize students with letter writing
- To familiarize students with CV writing ,advertisement writing, poster writing and other skills

**ENGLISH WRITING SKILLS****THEORY****(CREDITS: 4)****Unit I:** Paragraph writing**Unit II:** Letter writing**Unit III:** cv poster writing**Unit IV:** Report writing

**7. General English-IV (Core Course)**

Semester	Core Course	Course Title	Credit
VI	CC	General English-IV	Theory: 02; Total: 02

**Course specific outcomes**

- To familiarize students with writing art with specific focus on Advertisement, i.e. mails and essays
- To familiarize students with concept of Globalization
- To familiarize students with political issues of world with specific references to Martin Luther king

**GENERAL ENGLISH-IV****THEORY****(CREDITS 4)****Unit I:** writing skills .... Advertisement/e mails / Essay**Unit II:** Prose

Amartya Sen : How to Judge Globalism

Martin Luther king: I have a dream

**8. English Translation Skills (Core Course)**

Semester	Core Course	Course Title	Credit
VI	CC	English Translation Skills	Theory: 04; Total: 04

**Course specific outcomes**

- To introduce students to concept of translation
- To imbibe in students the urge to translate
- Creating writing skill and habits in students

**ENGLISH TRANSLATION SKILLS****THEORY****(CREDITS 4)****Unit I:** Translation: meaning history**Unit II:** Types of translation**Unit III:** Machine translation**Unit IV:** Practice of translation

**Course Structure and distribution of different courses with their credits for B.A. History**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Ancient India/Ancient Kashmir	Core Course	6 credits 4(T)+2(T)
2.	II	Medieval India/Medieval Kashmir	Core Course	6 credits 4(T)+2(T)
3.	III	Modern India/Modern Kashmir	Core Course	6 credits 4(T)+2(T)
4.	IV	Themes in World History	Core Course	4 credits 2(T)+2(T)
5.	V(a)	India Since Independence	Core Course	6 credits 4(T)+2(T)
6.	V(b)	Themes in Cultural and Religious Traditions of Kashmir	Core Course	6 credits 4(T)+2(T)
7.	V	Indian economy and Society through ages	Core Course	6 credits 2(T)+2(T)
8.	VI	Historiography: An Introduction	Core Course	6 credits 4(T)+2(T)

**Course outcomes:**

The undergraduate course in history covers major aspects of Indian and World History. In addition, 'Skill Enhancement' courses are also part of this curriculum. The aims and objectives/expected learning outcomes are as follows:

The undergraduate course in history aims to acquaint students with developments in human culture, polity, society and economy of Indian subcontinent from earliest times until present day. This in turn makes students aware about myriad developments that have occurred in various fields over the course of time and have moulded humans inhabiting Indian sub-continent, politically, socially, religiously, ideologically as well as economically. This gives a better understanding of past and present while enabling students to predict future course; and importantly making them responsible human beings. The portions on world history acquaint students with major developments that have occurred in different parts of the globe and have significantly altered the course of human history. Such knowledge makes students understand the present geo-political environment of the world.

Further, various Skill Enhancement courses give students knowledge of technical aspects of the subject besides opening new job avenues for them in today's technical world.

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### 1. Ancient India/Ancient Kashmir (Core Course-I)

Semester	Core Course	Course Title	Credit
I	CC-I	Ancient India/Ancient Kashmir	Theory: 04; Tutorial: 02 Total: 06

#### Course Specific Outcomes

The course deals with the remote past of ancient Indian subcontinent. One chapter of the course specially focuses on the development of various historical processes in ancient Kashmir. The course talks about the history and archaeology of ancient Indian subcontinent from stone ages up to the beginning of medieval ages. The students will be acquainted with the various Stone Age cultures, civilizations, kingdoms, chiefdoms and empires that flourished in the area. It focuses on the achievements of rulers especially in the field of polity, economy, culture and religion.

The paper aims to teach students various aspects of historical development particularly related to art of governance, growth of cultures, advancements made in art, architecture and learning etc.

The students are expected to understand:

- a.* The origin and development of various cultures in ancient Indian subcontinent and their relations with various outside cultures.
- b.* The students will be able to have an understanding of involvement of Indians in the growth and development of historic processes.
- c.* It also aims to underline the contribution made by Indians in the field of polity, economy, culture, religion, art, architecture, technology etc.
- d.* The students are expected to know about the glorious past of ancient Kashmir.

#### **ANCIENT INDIA / ANCIENT KASHMIR**

#### **THEORY**

**(CREDITS: 04)**

#### **Unit – I (Pre and Proto- History)**

- I. Sources: Archaeological and literary- An Introduction
- II. Pre and Proto-History: Paleolithic, Mesolithic, Neolithic and Chalcolithic Cultures- Features.
- III. Indus Valley Civilization: Emergence, Features and Decline

#### **Unit-II (From Vedic to Mauryas)**

- I. Early Vedic and Later Vedic Age: Polity and Culture
- II. Second Urbanization: Features

- III. Rise of Magahda
- IV. Mauryas: Administration, Ashoka's Dhamma and Decline.

### **Unit-III (Post –Mauryan Period upto Harshavardhana)**

- I. Central Asian Contacts: Indo-Greeks, Kushans: Polity and Cultures
- II. Gupta Empire: Polity and Culture
- III. Harshavardhana: Administration and Religion
- IV. Sangam Age: Features

### **Unit-IV (Ancient Kashmir)**

- I. Pre-historic Kashmir: Paleolithic and Neolithic Culture.
- II. Kashmir Between 1000 BCE to 600 CE: Indo-Greeks, Kushanas and Huns
- III. Karkotas: Empire Building.
- IV. Utapalas: Economy with special reference to Avantivarman
- V. Loharas: Polity

### **TUTORIALS**

**(CREDITS 02)**

Tutorials-I: Visit and Report writing on any ancient Monument/ Archaeological Site.

Tutorials-II: Brief report writing on any primary source of Ancient India/Ancient Kashmir

### **SUGGESTED READINGS:**

- Agrawal, D.P. and Chakrabarti, D.K. 1979, Essays in Indian Proto-history, New Delhi: B.R. Publishing Corporation.
- Allchin, F.R.A. and Allchin, B. 1995, The Origins of a Civilization. Delhi: Viking.
- Singh, Upinder. 2009. A History of Ancient and Early Medieval India from the stone age to the 12th century. Delhi: Pearson Longman.
- Thapar, Romila, Interpreting Early India, Delhi, 1999. Oxford University Press.
- Jha, D. N., 1998, Ancient India: A Historical Outline, New- Delhi.
- Sharma, R. S., 2005, India's Ancient Past, Oxford University Press.
- Sharma, R.S. Indian Feudalism, 3rd edition, Macmillan India, Delhi, 2006.
- Sharma, R.S. : Early Medieval Indian Society : A Study in Feudalization, Orient Longman, Delhi, 2001.
- Sharma, Ram Sharan, Advent of the Aryans in India, Manohar, Delhi, 1999.
- Thapar, Romila, The Aryan: Recasting Constructs, Three Essays Collective, Gurgaon, 2008.
- Banday A. A. (2009) Prehistoric Kashmir: New Delhi Dilpreet Publishers



- Shali, S. L. (1993) Kashmir: History and Archaeology through the Ages, Delhi Indus Publishers
- Aggarwal, R. C. (1998) Kashmir and its Monumental Glory, New Delhi, Aryan Books.
- Bamzai, P. N. (1973) A History of Kashmir (2nd ed), New Delhi, Metropolitan Books

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**2. Medieval India/Medieval Kashmir (Core Course-II)**

Semester	Core Course	Course Title	Credit
II	CC-II	Medieval India/Medieval Kashmir	Theory: 04; Tutorial: 02 Total: 06

**Course Specific Outcomes**

- A) To acquaint students with the rich Indo-Islamic heritage of Indian Sub-continent.
- B) An appreciation of Functioning of administrative apparatus of state in Medieval India
- C) Evaluation in lounge duree the evolution, change and continuities in political and economic structures of Medieval India

The course discusses the establishment of Delhi Sultanate; its polity and administration besides, the causes and consequences of its decline. The unification of Indian sub-continent under Mughal rule fostered a uniform pattern of governance that the paper highlights. The paper offers insights into the functioning of state institutions and policies.

The fall of Mughal Empire is surrounded by a highly informed scholarly debate that the paper discusses at length. The socio-cultural afflorences of Kashmir under Sultan Zain-ul-Abidin will be highlighted. The changes in polity and economy under Mughals in Kashmir; the tyrannies of Afghan rule and changes in economy under Lahore Darbar are addressed. In short, the paper offers the holistic view of rich history of medieval India.

After pursuing the course students are expected to:

- A) Identify and appreciate the prominent sources of medieval Indian History
- B) Analyse nature of state and politics in medieval India
- C) Understand socio-political developments and evolution of composite culture in Medieval India.

**MEDIEVAL INDIA / MEDIEVAL KASHMIR****THEORY****(CREDITS: 04)****Unit-I (Sultanate Period)**

- I. Introduction to Prominent Primary Sources
- II. Foundation of Delhi Sultanate, Significance
- III. Polity: A Brief Survey
- IV. Administration: Central and Provincial

**Unit –II (Mughal India)**

- I. Introduction to Prominent Sources
- II. Foundation of Mughal Rule
- III. Consolidation under Akbar- Manasabdari System and Religious policy

IV. Aurangzeb: Religious policy.

V. Decline of Mughal Empire-Debate

**Unit –III (Medieval Kashmir-I)**

I. Emergence of Sultanate

II. Contribution of Zain-ul- Abidin to Economy and Culture

III. Chak Rule: Main Developments

**Unit-IV (Medieval Kashmir-II)**

I. Mughals and Kashmir-Changes in Polity and Economy.

II. Kashmir under Afghans – An Assessment

III. Lahore Darbar -Changes in Economy.

**TUTORIALS**

**(CREDITS: 02)**

Tutorials-I: Site visit and Report writing on any medieval monument of Kashmir.

Tutorials-II: Reviewing excerpts on any Primary source of Medieval India/ Medieval Kashmir.

**SUGGESTED READINGS:**

- Chandra Satish, 2003, Medieval India, Orient Blackswan, New Delhi.
- Rizvi, S.A AA; 1993, The Wonder That was India, Delhi.
- Habib and Nizami, Comprehensive History of India Vol. V., Indian History Congress.
- Richards, J.F, The Mughal Empire, Oxford University Press.
- Bamzai, P. N. K., A History of Kashmir, 2nd edn. Metropolitan Book Co., Delhi, 1973.
- Hassan, Mohib-ul-, Kashmir under Sultans, Delhi, 1959.
- Kak, R. C., Ancient Monuments of Kashmir, New Delhi, 1971.
- Khan, M. Isaq, Kashmir's Transition to Islam: The Role of Muslim Rishi's, Fifteenth to Eighteenth Century, Manohar
- Mattoo, A. Majid, Kashmir under the Mughals, 1586-1752, New Delhi, 1988.
- Rafiqi, Abdul Qaiyum, Sufism in Kashmīr, from the fourteenth to the sixteenth century, Bharatiya Publication House, 2009.
- Kaw, M. A., Agrarian System of Kashmir, Aiman Publications, Srinagar, 2001.
- Wani, Muhammad Ashraf, Islam in Kashmir: Fourteenth to Sixteenth century, Oriental Publishing House, 2004
- Parmu, R. K., A History of Muslim rule in Kashmir, 1320-1819, People's Publishing House, 1969.

### 3. Modern India/Modern Kashmir (Core Course-III)

Semester	Core Course	Course Title	Credit
III	CC-III	Modern India/Modern Kashmir	Theory: 04; Tutorial: 02 Total: 06

#### Course Specific Outcomes

This course intends to develop basic understanding of how India was colonized and what impact it had on the Indian economy and society. The course also underlines how the colonized people responded to policies of the colonizer. The movements launched by the colonized people are discussed to underline the role of masses in putting colonialism to end. The course also aims at acquainting the students with the forces that brought into existence the Princely state of Jammu and Kashmir. Political developments in the Princely state are discussed to make the students understand the complexities of Indian partition and the issue of accession.

After the successful completion of the course the students are expected to critically engage with some of the important contemporary political, economic and social issues. The students are also expected to appreciate the contribution of common masses in bringing big changes.

#### **MODERN INDIA / MODERN KASHMIR**

##### **THEORY**

**(CREDITS: 04)**

##### **Unit-I (Modern India-I)**

- I. Foundation of British Rule
- II. Expansion of Empire with special reference to Subsidiary Alliance and Doctrine of Lapse
- III. Revolt of 1857: Nature, Causes and Failure

##### **Unit-II (Modern India-II)**

- IV. Formation of Indian National Congress and its Role
- V. Foundation of Muslim League
- VI. Era of Mass Politics: Khilafat and Non-Cooperation, Civil Disobedience and Quit India Movements
- VII. Partition of India- An Overview

##### **Unit-III (Modern Kashmir-I)**

- VIII. The Making of Jammu and Kashmir State- Treaty of Amritsar.
- IX. Nature of Dogra State
- X. British Residency-Establishment and Role

##### **Unit-IV (Modern Kashmir-II)**

- XI. Political Awakening - Causes

XII. Muslim Conference: Foundation and Role

XIII. Conversion of Muslim Conference into National Conference: Causes

XIV. Lapse of Paramountcy and the Issue of Accession.

### **TUTORIALS**

**(CREDITS:02)**

Tutorials-I: Life sketches of any one of the following:

- a. M.K. Gandhi
- b. B.R. Ambedkar
- c. Abul Kalam Azad
- d. Shaikh Mohammad Abdullah
- e. Prem Nath Bazaz.

Tutorials-II: A critical Review of any one of the following:

- a. The valley of Kashmir by Walter Lawrence
- b. My Experiments with Truth by M.K. Gandhi
- c. Annihilation of Cast by B.R. Ambedkar
- d. History of Srinagar by M.I. Khan
- e. Kashmir Misgovernment by Robert Thorpe

### **SUGGESTED READINGS:**

- Chandra, Bipin, Mridula Mukherjee, Aditya Mukherjee, K.N Panikar and Sucheta Mahajan. 1989. India's Struggle for Independence, New Delhi : Penguin Books India.
- Chandra, Bipin, Modern India, Orient Longman.
- Sarkar, Sumit, 1983, Modern India, 1885-1947. New Delhi: Macmillan
- Grover, B.L.: Advanced History of Modern India, S. Chand
- Chand, Tara. 1961, History of the Freedom Movement in India.
- Bamzai, P.N.K, Political and Cultural History of Kashmir, Vol. III, Srinagar.
- Bazaz, P.N; History of Freedom Struggle in Kashmir.
- Bose, Sumantra, The challenge in Kashmir: Democracy, Self Determination and a Just Peace, New Delhi and London: Sage and Thousand Oaks, 1997.
- Zutshi, Chitrakha, Languages of Belonging: Islam, Regional identity, and the Making of Kashmir, Delhi: Permanent Black, 2004.
- Ganai. M. Y., Kashmiris Struggle for Independence (1931-39), Moshin Publishers.
- Khan, G. H., Kashmir's Struggle for Freedom, Light and Life, New-Delhi, 1980.
- Rai, Mridu, Hindu Rulers, Muslim Subjects: Islam, Rights, and the History of Kashmir, New Delhi: Permanent Black, 2004.
- Zutschi, U.K; Emergence of Political Awakening in Kashmir.
- Dr. Dar Ali Mohd , Trade and Commerce during Dogra Rule in Kashmir 1846-1947.
- Khan, M. Isaq, History of Srinagar, Aamir Publications, Srinagar, 1978

**4. Themes in World History (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	Themes in World History	Theory: 04; Tutorial: 02 Total: 06

**Course Specific outcomes**

This course aims at imparting basic knowledge to students about the different ideas, movements and revolutions that shaped the course of world history. The positives and negatives of revolutions are underlined to make the students to critically engage with different events of historical significance.

At the completion of the course the students are expected to have developed a nuanced understanding of different historical events and their impact on the world at large.

**THEMES IN WORLD HISTORY****THEORY****(CREDITS: 04)****Unit –I (Beginning of the Modern World)**

- I. Renaissance: Emergence
- II. Reformation: Role of Martin Luther King
- III. Enlightenment: An Introduction

**Unit-II (Age of Revolutions)**

- I. American Revolution: Causes and Significance
- II. French Revolution: Causes and Significance
- III. Industrial Revolution: Causes and Impact
- IV. Russian Revolution: Causes and Consequences.

**Unit –III (Era of Conflicts-I)**

- I. World War-I; Causes and Impact
- II. League of Nations; Causes of Failure
- III. Rise of Nazism and Fascism

**Unit-IV (Era of Conflicts-II)**

- I. World War-II; Causes and Consequences
- II. Formation and role of UNO
- III. Cold War and its End.

**TUTORIALS****(CREDITS: 02)**

Tutorials-I: Life sketch of any of the following:

- a. Issac Newton
- b. Michealangelo
- c. Emanuel Kant
- d. Voltaire

Tutorials-II: Review of any one of the following works:

- a. Das Capital by Karl Marx
- b. History of Modern World by Arjun Dev
- c. Mastering World History by Norman Love
- d. Age of Empires by Eric Hobsbawn
- e. Age of Revolutions by Eric Hobsbawn

**SUGGESTED READINGS:**

- Lowe, Norman: Mastering World History
- Dev Arjun, Indra Arjun: History of Modern World
- Charravarty Ramjan: A History of Modern World
- Perry Marvin: Western Civilization
- Hobsbawn Eric: Age of Extremes
- Hobsbawn Eric: Age of Empires
- Burns Edward: A History of Modern World
- Hobsbawn Eric: Age of Revolutions
- Hobsbawn Eric: Age of Empires

**5a. India since Independence (Core Course-V)**

Semester	Core Course	Course Title	Credit
V	CC-V	India Since Independence	Theory: 04; Tutorial: 02 Total: 06

**Course Specific outcomes**

This course has been designed to acquaint students with some of the most important political and economic developments in India since 1947. The endeavor is to make the students understand that most of the economic and administrative problems of the post independent India were the legacies of colonialism. The course also aims to underline the legacies of Indian National Movement with the purpose to showcase that the progressive steps taken by the post 1947 state were guided by the values inculcated by the Indian National Movement during the course of its tussle with the colonial state. The course also discusses how the Nationalist Government in Jammu and Kashmir emancipated the lives of people through the radical restructuring of land relations. The course also aims at making the students to understand the intricacies of constitutional arrangement between Centre and the State of Jammu and Kashmir.

**INDIA SINCE INDEPENDENCE****THEORY****(CREDITS: 04)****Unit-I (India after Independence-I)**

- I. Legacies of Colonialism
- II. Legacies of Nationalism
- III. Indian Constitution- Salient Features

**Unit –II (India after Independence-II)**

- I. Linguistic Re-organization of states
- II. Land Reforms
  - a. Tenancy Reforms
  - b. Abolition of Landlordism
  - c. Bhoodan Movement

**Unit –III (Kashmir after 1947-I)**

- I. Formation of Nationalist Government
- II. Article 370 and Delhi Agreement
- III. Land Reforms with special reference to Big Landed Estates Abolition Act- 1950.

**Unit- IV (Kashmir after 1947-II)**

- I. Praja Parsihad Agitation



II. Plebiscite Movement

III. Accord of 1975

**TUTORIALS**

(CREDITS: 02)

Tutorial-I: Critical evaluation of any one of the following:

- a. Delhi Agreement of 1952.
- b. Big Landed Estates Abolition Act
- c. Article 370
- d. Accord of 1975

Tutorial-II: Life history interview of any two senior citizens of your locality along with report.

**SUGGESTED READINGS:**

- Bipin Chandra, Murdula Mukherjee, Aditya Mukherjee: India since Independence
- Ramchandra Guha: India after Gandhi
- Rudolph and Rudolph: In Pursuit of Laxmi
- Paul Brass: Politics of India Since Independence
- Chitrlekha Zutshi: Languages and Belongings
- M. Y. Saarf: Kashmniri's Struggle for Freedom
- Mirdu Rai: Hindu Rulers, Muslim Subjects

**5b. Themes in Cultural and Religious Traditions of Kashmir (Core Course-V)**

Semester	Core Course	Course Title	Credit
V	CC-V	Themes in Cultural and Religious Traditions of Kashmir	Theory: 04; Tutorial: 02 Total: 06

**Course Specific outcomes**

A) Create much needed awareness about literary, religious and architectural heritage of Kashmir

B) Expose students to variegated sources of history writing from literary to architectural sources.

C) Inculcate a sense of preservation and appreciation of rich repositories of knowledge and testimonies of literary and religious heritage of Kashmir.

The course highlights and brings forth the otherwise neglected literary, religious, architectural and cultural heritage of Kashmir. The course is expected to cultivate a sense of preservation and spread the knowledge in respect of heritage of Valley. The paper also enunciates role of religions and religious movements in promotion of a sense of cultural inclusivism, tolerance of dissent and unity in diversity. The appreciation of rich legacy of heritage as a potential source of history will guide the students to pursue the subject further and stimulate the interest of student community the responsible and informed citizens of tomorrow.

After undergoing the course students are expected to:

A) Analyse and appreciate the historical value of literary and cultural heritage

B) Study and situate religion in proper context and elucidate the teachings of various religions to inculcate a sense of appreciation of

human values.

C) To augment the heritage for bringing forth the un-narrated and untapped aspects of rich history of Kashmir.

**THEMES IN CULTURAL AND RELIGIOUS TRADITIONS OF KASHMIR****THEORY****(CREDITS: 04)****Unit I: Literary Tradition:**

I. Sanskrit Tradition: Nilmatapurana; Rajatarangini of Kalhana

II. Persian Tariekh: Waqiat- i- Kashmir of Azam Deedmari; Tariekh-i-Hassan of HassanShah Khoihami

**Unit II Architectural Tradition:**

- I. Stone Architecture: Martand and Parihaspora- Main Features
- II. Wooden Architecture: Khankah-i-Moulla -Main Features
- III. Garden Architecture: Shalimar Garden

**Unit III: Religious Traditions of Kashmir-I**

- I. Naga Worship in Kashmir
- II. Buddhism in Kashmir
- III. Kashmiri Shaivism

**Unit IV Religious Traditions of Kashmir-II**

- I. Conversion to Islam-Debate
- II. Sufism in Kashmir: Major Silsilas
- III. Rishi Movement of Kashmir: Main Proponents and Centres.

**TUTORIAL****(CREDITS: 02)**

Tutorial-I: Reviewing/Report writing on excerpts from any Sanskrit or Persian literary text mentioned in the course.

Tutorial-II: Site visit and report writing of any nearby Sufi/Rishi shrine, highlighting its importance for the local populace.

**SUGGESTED READINGS:**

- Aggarwal, R. C. (1998) Kashmir and its Monumental Glory, New Delhi, Aryan Books
- Bamzai, P. N. (1973) A History of Kashmir (2nded), New Delhi, Metropolitan Books
- Banday A. A. (2009) Prehistoric Kashmir: New Delhi Dilpreet Publishers
- Basu, Arabinda, "Kashmiri Saivism" in The Cultural Heritage of India, Calcutta, 1937.
- Bhandarkar, R. G, Vaisnavism, Saivism and Minor Religious Systems, New-Delhi, 2000
- Chatteji, J.C. Kashmir Saivism, Chandigarh, 1981.
- Dwivedi, R. C. "Kashmiri Saivism and Tantric Buddhism." Proceedings of the 26th International Congress of Orientalises, 1969.
- Shali, S. L. (1993) Kashmir: History and Archaeology through the Ages, Delhi Indus Publishers
- Ganhar, J. N. And Ganhar, P. N., Buddhism in Kashmir and Ladakh, New-Delhi, 1956.
- Madan, T. N., Religious Ideology and Social Structure: The Muslims and Hindus of Kashmir". In Imtiyaz Ahmad (ed.) Ritual and Religion among Muslims in India, New Delhi, 1981.

**6a. Indian economy and Society through ages (Core Course-VI)**

Semester	Core Course	Course Title	Credit
VI	CC-VI	Indian economy and Society through ages	Theory: 04; Tutorial: 02 Total: 06

**Course Specific outcomes**

This course aims at acquainting the students with the forces and processes that transformed the Indian economy and society since the beginning of human settlements. The nature of various transformative processes is discussed with the intention to make the students understand that changes and continuities go hand in hand in any historical process.

After the completion of the course the students are expected to develop a nuanced understanding of some of the agrarian ideas and categories presently in vogue. Moreover, the course also aims at making the student's conscious of the everyday struggles of the marginalized communities with a purpose to make them a responsible citizen.

**INDIAN ECONOMY AND SOCIETY THROUGH AGES****THEORY****(CREDITS: 04)****Unit-I (Ancient Period)**

I. Bronze Age Urbanism to Iron Based Agriculture (Harappan and Vedic):

Characteristic Features

II. State Production to Feudal Economy: Murayas and Guptas

III. Religious Developments: Vedic, Buddhist and Jain Traditions

IV. Social Structure: Varna System

**Unit-II (Medieval Period)**

I. Changes in Agrarian Structure: Iqta and Jagirdari System

II. Non-Agrarian Economy: Trade and Crafts

III. The Medieval Society: Classes and Communities

IV. Sufi and Bhakti Movements: Main Teachings

**Unit-III (Modern Period: Economy)**

I. Agrarian Restructuring: Land Revenue Settlements

II. Drain of Wealth

III. De-Industrialization

**Unit –IV (Modern Period: Society and Religion)**

I. Introduction of Modern Education: Macaulay's Minute

II. Socio-Religious Reform Movements: Brahmo Samaj, Aligarh Movement and Arya Samaj

III. Dalit Movements: Jyotiba Phule and B.R. Ambedkar

**TUTORIALS****(CREDITS : 02)**

Tutorial-I: Report on any one burning social or religious issue of contemporary relevance

Tutorial-II: Critical evaluation of any one movie/ documentary on Caste, Communalism or Politics.

**SUGGESTED READINGS:**

- Singh, Upinder. 2009. A History of Ancient and Early Medieval India from the stone age to the 12th century. Delhi: Pearson Longman.
- Thapar, Romila, Interpreting Early India, Delhi, 1999. Oxford University Press.
- Sharma, R. S., 2005, India's Ancient Past, Oxford University Press.
- Bandyopadhyay, Shekhar, 2004, From Plassey to Partition. Orient Longman.
- Jones, Kenneth W., 1994, Socio-Religious Reform Movements in British India, Cambridge University Press.
- Metcalf, Barbara and Metcalf, Thomas, 2006, A Concise History of Modern India, Cambridge
- Chandra, Bipin, Rise and Growth of Economic Nationalism in India.
- Chandra Satish, 2003, Medieval India, Orient Blackswan, New Delhi.
- Chatto Padhay, B.D., 1998, The Making of Early Medieval India, O.U.P. New Delhi
- Hassan.S. Nurul, 1971, Thoughts on Agrarian Relations in Mughal India, New Delhi.
- Habib Irfan, Agrarian System of Mughal India (1556-1707), New Delhi
- Jha, D. N., 1998, Ancient India: A Historical Outline, New- Delhi.
- Habib Irfan, Ray Chaudary Tapan (ed), 1982, Cambridge History of India Vol-I, Cambridge University Press.
- Kumar, Dharma, (ed.), Cambridge Economic History of India, Cambridge University Press.

**6b. Historiography: An Introduction (Core Course-V)**

Semester	Core Course	Course Title	Credit
VI	CC-VI	Historiography: An Introduction	Theory: 04; Tutorial: 02 Total: 06

**Course Specific outcomes**

The course exposes students to the idea of history, its nature, utility and scope. The historical evolution of scholarship from rich Greeco-Muslim to Post-Modernist schools is traced immaculately. The course enables the students to distinguish between past and history, subjectivity and objectivity, generalization and causation in a lucid manner. The scholarly debates regarding the finding of historical truth and value in the otherwise cobwebs of assertions are expected to be made clear.

After going to the course, the students are expected to:

- A) Develop the understanding of art of history writing.
- B) Map the trajectory of evolution of historiography as an independent discipline.
- C) To be able to appreciate the scholarly debates in history writing.
- D) An analysis of nature and scope of History.
- E) To understand the evolution of history of history writing.
- F) Fostering the knowledge of basic concepts of history writing like facts, interpretation, causation and so on.

**HISTORIOGRAPHY: AN INTRODUCTION****THEORY****(CREDITS: 04)****Unit I (Introduction)**

- I. What is History?
- II. Sources in History: Types and Importance

**Unit II (Early Historiography)**

- I. Greek Historiography: Herodotus and Thucydides
- II. Medieval Muslim Historiography: Ibn-i-Khaldun

**Unit III (Modern Historiography)**

- I. Renaissance Historiography
- II. Leopold von Ranke and History Writing

**Unit IV (Schools of Historiography: Basic Introduction)**

- I. Marxist
- II. Annals
- III. Postmodern
- IV. Subaltern

**TUTORIALS****(CREDITS: 02)**

Tutorial-I: Historians at Work- Analysing any one of the following works on parameters of Historiography (Sources, interpretation, Conclusions)

- a. Kashmir Under Sultans by Mohibul Hasan
- b. Sufism in Kashmir by A.Q. Rafiqi
- c. History of Srinagar by Mohammad Ishaq Khan
- d. Islam in Kashmir by Mohammad Ashraf Wani
- e. Kashmir's Struggle for Independence by M.Y. Ganai

Tutorial-II: Visiting an Archive/Library Collection/Personal Collection and Report Writing on it.

**SUGGESTED READINGS:**

- Shreedaran. A Textbook of Historiography, Orient Blackswan, 2004.
- Richard Evans, In Defence of History, Granta Books, London, 1997
- Arthur Marwick, What History is and why is it Important, 1970, Buckinghamshire; Open University Press
  
- Harbans Mukhia, Historians and Historiography during the reign of Akbar, 1976. New Delhi, Vikas Publishing house
- E.H. Carr. What is History, Macmillan, London. 1983,
- R.G. Collingwood. The Idea of History, OUP, 1946.

**Course Structure and distribution of different courses with their credits for B.A.**

**Islamic Studies**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Introduction to Islamic Civilization (Up to Umayyads)	Core Course	6 credits 4(T)+2(T)
2.	II	Islamic Civilization under the Abbasids and the Muslim Spain	Core Course	6 credits 4(T)+2(T)
3.	III	Islamic Religious Sciences	Core Course	6 credits 4(T)+2(T)
4.	IV	Muslim Philosophy and Tasawwuf	Core Course	6 credits 4(T)+2(T)
5.	V	Islamic Culture and Society in Kashmir	Discipline Specific Elective-I	6 credits 4(T)+2(T)
6.	V	Islam in the Modern World (South Asia and West Asia)	Discipline Specific Elective-II	6 credits 4(T)+2(T)
7.	V	Basic Islamic Sciences (Qur'an, Hadith and Fiqh)	General Elective	4 credits 2(T)+2(T)
8.	VI	Islamic Social Sciences	Discipline Specific Elective-I	6 credits 4(T)+2(T)
9.	VI	Islam and Science	Discipline Specific Elective-II	6 credits 4(T)+2(T)
10.	VI	Da'wah and its Practices	General Elective	4 credits 2(T)+2(T)

**Course outcomes**

The course aims to study the Islamic civilization in terms of polity, society, education and sciences under the Abbasids and in Muslim Spain. It acquaints students with the political and social developments of Khilafatul Rashidah and Umayyad period. It will also acquaint the students with the rich intellectual, scientific and architectural heritage of Islam that had an impact on the West as well. It provides students the knowledge about the origin and development of tasawwuf and its orders during the various phases of history, religious



sciences of Islam- the Qur'an, Hadith and Fiqh and the contribution of the prominent Muslim sufis and Ulama who served Kashmir society. It will also boost students with knowledge about the prominent Islamic thinkers and movements.

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**1. Introduction to Islamic Civilization (Up to Umayyads) (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Introduction to Islamic Civilization (Up to Umayyads)	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- The objective of the course is to have preliminary knowledge of Islamic doctrine and ritual worship (ibadat) as propounded in the teachings of Islam and Prophet Muhammad (S.A.A.S) including his role in establishing a welfare society at Madinah.
- The course also introduces the political and social developments of Khilafatul Rashidah and Umayyad period.
- The course forms a study of the early development of Islamic civilization.

**INTRODUCTION TO ISLAMIC CIVILIZATION (UP TO UMAYYADS)****THEORY****(CREDITS 4)****Unit 1**

Jahilliyah Arabia 1) Topography: An Overview 2) Religious Beliefs and Practices 3) Social Conditions

**Unit 2**

Prophet Muhammad S and His Times 1) The Early Life of Prophet Muhammad 2) Da'wah and Major Events at Makkah 3) Establishment of Islamic Society at Madinah with Special Reference to Major Events (Ghuzawah Badr, Treaty of Hudabiyyah and Fath-i-Makkah)

**Unit 3**

Al-Khilafah al-Rashidah (the Pious Caliphate) 1) The Institution of Khilafah (Caliphate) 2) The Role of Khalifah Abu Bakr (RA) in Consolidation of the State 3) Administration under Khalifah Umar ibn al-Khattab (RA)

**Unit 4**

Banu Umayyah (The Umayyad Period) 1) Emergence of Banu Umayyah 2) Contribution of Prominent Khulafa: (a) Muawiyah-I (b) Umar ibn Abdul Aziz 3) Administration: Central and Judiciary

**TUTORIAL****(CREDITS 2)**

1) Islamic Studies: Nature and Scope 2) Economic Conditions of Arabia during Jahilliyah Period 3) Constitution of Madinah: Its Salient Features 4) Role and Policies of Khalifah Uthman (RA) and Khalifah Ali (RA) in Stabilizing the State 5) Decline of the Umayyads

### SUGGESTED READINGS

- Mubarakpuri, Safi ur Rahman, Al-Raheeq al-Makhtum (The Sealed Nectar), Darus Salam Publishers, Riyadh.
- Hassan, Masudul, History of Islam, Adam Publishers & Distributors, New Delhi.
- Hamidullah, Muhammad, Muhammad Rasullulah, V. P. Book Depot. New Delhi.
- Sawlat, Sarwat, Millat-i-Islami Ki Mukhtasar Tarikh, Markazi Maktaba Islami, Delhi.
- Rafiabadi, Hamid Naseem, Hijrah a Turning Point in Islamic Movement, Adam Publishers, Delhi.
- Bhat, Manzoor Ahmad, The Pious Caliphate: A Study of Hadrat Ali (R. A.).
- Hussain, S. Athar, The Glorious Caliphate, Academy of Islamic Research, Lucknow.
- Siddiqi, M. Muhammad Mazharuddin, Development of Islamic State and Society, Institute of Islamic Culture, Lahore
- Maududi, Abul Ala, Khilafat wa Malukiyat, Markazi Makatiba Islami, New Delhi.
- Nadwi, Shah Muin ud Din, Tarikh Islam, Darul Musanifeen, Azamgarh.
- Nicolson, R. A. Literary History of the Arabs, Adam Publishers and Distributors, New Delhi.
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London)

## 2. Islamic Civilization under the Abbasids and the Muslim Spain (Core Course-II)

Semester	Core Course	Course Title	Credit
II	CC-II	Islamic Civilization under the Abbasids and the Muslim Spain	Theory: 04; Tutorial: 02 Total: 06

### Course specific outcomes

- The course aims at the study of Islamic civilization in terms of polity, society, education and sciences under the Abbasids and in Muslim Spain.
- It will also acquaint the students with the rich intellectual, scientific and architectural heritage of Islam that had an impact on the West as well.

### ISLAMIC CIVILIZATION UNDER THE ABBASIDS AND THE MUSLIM SPAIN

#### **THEORY**

**(CREDITS 4)**

#### **Unit 1**

Rise of the Abbasids 1) Establishment of the Abbasid Dynasty 2) The Golden Age of the Abbasids: Al-Mansur and Al-Mamun 3) Abbasid Administration: Central and Judiciary

#### **Unit 2**

Intellectual Developments under the Abbasids 1) Development of Education and Literature 2) Bayt ul Hikmah and Translation Movement 3) Intellectual Contribution to the Development of: (a) Science and Medicine (b) History, Geography and Philosophy

#### **Unit 3**

Islam in Spain 1) Socio-Political Conditions of Spain on the eve of Muslim Rule: An Overview 2) Establishment of Muslim Rule in Spain 3) Contribution of Abd al-Rahman-I and Abd al-Rahman-III

#### **Unit 4**

Intellectual and Cultural Developments in Muslim Spain 1) Natural Sciences (Astronomy and Medicine) 2) Social Sciences (History and Philosophy) 3) Contribution to the Development of Arts and Architecture

#### **TUTORIAL**

**(CREDITS 2)**

1) Development of Religious Sciences during the Abbasid Period 2) Trade and Commerce during the Abbasid Period 3) Main features of Hispano-Arab Society 4) Decline of the Umayyad Rule in Spain

**SUGGESTED READINGS**

- Hassan, Masadul, History of Islam, Adam Publishers & Distributors, New Delhi.
- Sawlat, Sarwat, Millat-i-Islami Ki Mukhtasar Trikh, Markazi Maktaba Islami, Delhi.
- Nadwi, Muin ud Din Ahmad, Tarikh-i-Islam, Darul Musanifin, Azamgarh.
- Hussain, Athar, The Arab Administration, Academy of Islamic Research, Lucknow.
- Najeeabadi, Akbar Shah, Tarikh Islam, Adam Publishers & Distributors, New Delhi.
- Hitti, P. K., History of the Arabs, Macmillan Publications, UK.
- Nadvi, Riyasal Ali, Tarikh Andalus, Darul Musanifeen, Azamgarh.
- Shah, Naseem Ahmad, Islamic Technology: An Illustrated History, UNESCO Project, Sahil Publications Srinagar
- Muhammad Ishaque, Andalus aur Sicily ki Muslim Tareekh o Saqafat, al Balagh Publication, New Delhi
- Arnold, Thomas, The Preaching of Islam, Adam Publishers & Distributors, New Delhi.
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London).

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**3. Islamic Religious Sciences (Core Course-III)**

Semester	Core Course	Course Title	Credit
III	CC-III	Islamic Religious Sciences	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- The course aims at the introductory study of religious sciences of Islam- the Qur'an, Hadith and Fiqh
- It also acquaints the students to know the fundamental significance of Divine knowledge in human life and method of approaching them through the study of principles (usul) of these sciences.

**ISLAMIC RELIGIOUS SCIENCES****THEORY****(CREDITS 4)****Unit 1**

Ulum al-Qur'an 1) The Quran: Wahi (Revelation) and its Compilation 2) An Introduction to the Quranic Ulum (a) Muhkamat and Mutashabihat b) Asbab-i-Nuzul 3) Tafsir: Meaning, its Principles and early Development

**Unit 2**

Hadith 1) Meaning and Definition of Hadith 2) Place and Importance of Hadith in Islam 3) Compilation and Types of Ahadith

**Unit 3**

Fiqh (Jurisprudence) 1) Meaning and Importance of Fiqh 2) Sources of Fiqh 3) Early Development of Fiqh

**Unit 4**

Important Schools of Fiqh (An Introduction) 1) Hanafi 2) Maliki 3) Shafi'I 4) Hanbali 4) Ja'fari

**TUTORIAL****(CREDITS 2)**

1) An Introduction to Tafsir Ibn Kathir and Tafhimul Qur'an. 2) Brief Introduction to Sihah-i-Sittah. 3) An Introduction to International Fiqh Academy, Jeddah and Indian Fiqh Academy, New Delhi. 4) An Introduction to Fiqh al-Sunnah authored by Asim al-Hadad.

**SUGGESTED READINGS**

- Uthmani, Muhammad Taqi, Ulum al-Qur'an, Adam Publishers & Distributors, New Delhi.
- Salih, Subih Salih, Ulum al-Quran, Taj Company New Delhi.
- Salih, Suhih, Ulum al-Hadith, Taj Company, New Delhi.
- Siddiqi, Zubair, Hadith Literature: Its Origin, Development and Special Features, Suhail Academy, Delhi.
- Gilani, Manazir Ahsan, Tadwin-i-Hadith (Urdu), Deoband.
- Hassan, Ahmad, Early Development of Islamic Jurisprudence, Adam publishers, Delhi.
- Khan, Hamidullah, The Schools of Islamic Jurisprudence, Kitab Bhawan, Delhi.
- Rafiabadi, Hamid Naseem, The Qur'an Illustrated, Sarup and Sons, New Delhi.
- Azmi, Muhammad Mustafa, Studies in Early Hadith Literature, Cambridge University Press, London.
- Azmi, Muhammad Mustafa, The History of the Quranic Text from Revelation to Compilation, Islamic Academy, UK.
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London).

**4. Muslim Philosophy and Tasawwuf (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	Muslim Philosophy and Tasawwuf	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- The course is meant to attain the knowledge of early development of Muslim theology and philosophy.
- It also aims at introducing the origin and development of tasawwuf and its orders during the various phases of history.

**MUSLIM PHILOSOPHY AND TASAWWUF****THEORY****(CREDITS 4)****Unit 1**

Ilm al-Kalam 1) Origin and Development of Ilm al-Kalam 2) Important Schools-I a) Jabariyah b) Qadariyah 3) Important Schools-II a) Mu'tazilah b) Ashariyah

**Unit 2**

Contribution of the following Muslim Philosophers 1) Al-Kindi 2) Al-Farabi 3) Imam Ghazzali

**Unit 3**

Tasawwuf 1) Meaning and Origin of Tasawwuf 2) Development of Tasawwuf 3) Early Sufis a) Hassan Basri (RA) b) Junaid al-Baghdadi (RA) c) Rabia Basri (RA)

**Unit 4**

Sufis of Later Period 1) Shaykh Sayyid Abdul Qadir Jilani (RA) 2) Khawaja Muin al-Din Chishti (RA) 3) Shaykh Shihab al-Din Suhrawardi (RA)

**TUTORIAL****(CREDITS 2)**

1) Common Characteristics of major Sufi Silsilas 2) A detailed Introduction to Kashf al-Mahjub by Ali Ibn Uthman al-Hujwiri (Eng. Tr. By R. A. Nicolson 3) Khawaja Muhammad Bahauddin Naqashband: An Introduction.



**SUGGESTED READINGS**

- Sharif, M. M. (ed.), A History of Muslim Philosophy, Adam Publishers & Distributors New Delhi.
- Sharif, M. M., Muslim Thought, Adam Publishers Adam Publishers & Distributors New Delhi.
- Saeed Sheikh, Studies in Muslim Philosophy, Adam Publishers & Distributors New Delhi.
- Rizvi, Athar Abbas, A History of Sufism in India, Manohar Publishers, New Delhi.
- Bhat, Manzoor Ahmad, Sufi Thought of Shaykh Sayyid Abdul Qadir Jilani, D. K. Print World, New Delhi.
- Khanam, Farida, Sufism: An Introduction, Goodword Books, New Delhi.
- Attar, Farid al-Din, Tadhkiratul Awliya, Taj Company New Delhi
- Jilani, Abdul Qadir, Ghuniyat al-Talibeen, Areeb Publications, New Delhi.
- Ghazzali, Abu Hamid, Kimya-i- Saadat, Adbi Dunya, Delhi
- Trimingham, J. P. S. Sufi Orders in Islam, Oxford University Press, UK.
- Numani, Shibli, Al-Kalam, Darul Musanifin, Azamgarh
- Numani, Shibli, Ilm al-Kalam, Darul Musanifin, Azamgarh
- Leaman, Oliver, A Brief Introduction to Islamic Philosophy, Polity Press Cambridge, UK
- Ali Ibn Uthman al-Hujwiri, Kashf al-Mahjub (Eng. Tr. By R. A. Nicolson)
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London).

**5. Islamic Culture and Society in Kashmir (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Islamic Culture and Society in Kashmir	Theory: 04 ;Tutorial: 02 Total: 06

**Course specific outcomes**

- The objective of the course is to acquaint the students with the advent and spread of Islam in Kashmir and the social, educational, art and literary developments under Muslim rulers.
- It will also introduce the life and contribution of the prominent Muslim sufis and Ulama who served Kashmir society.

**ISLAMIC CULTURE AND SOCIETY IN KASHMIR****THEORY****(CREDITS 4)****Unit 1**

Kashmir History: 7<sup>th</sup> - 14<sup>th</sup> Century (Overview) 1). Advent of Islam in Kashmir 2). Social Conditions during 12<sup>th</sup> -14<sup>th</sup> Centuries 3). Religious Conditions during 12<sup>th</sup> -14<sup>th</sup> Centuries

**Unit 2**

Kashmir under the Sultans 1). Establishment of Muslim Sultanate (1339-1470) 2). Development of Arts during the Sultanate Period (1339-1586) 3). Education and Literature during the Sultanate Period (1339-1586)

**Unit 3**

Sufis and Rishis 1). Sayyid Bulbul Shah (RA): Life and Contribution 2). Sayyid Ali Hamadani (RA): Life and Role 3). Shaykh Nur al-Din (RA): Life and Teachings

**Unit 4**

Sufis and the Influence of Central Asia and Iran 1). Shaykh Hamzah Makhdum (RA): Life and Role 2). Shaykh Yaqub Sarfi (RA): Life and Works 3). Influence of Central Asia and Iran on Kashmir Society (1339-1586)

**TUTORIAL****(CREDITS 2)**

1) An Introduction to the below mentioned Socio-Religious Organization: a) Anjuman-iNusratul Islam, J&K a) Anjuman-i-Tablighul Islam, J&K b) Jamiat-i-Ahl-i-Hadith, J&K c) Jamat-i-Islami, J&K 2) Educational Tour to the Places of Religio-Historical Significance

**SUGGESTED READINGS**

- Kalhana. Rajatarangini, (English Translation by M. A. Stein, 2 Vols).
- Ray, S. C., Early History and Culture of Kashmir.
- Dar, G.M., Social and Religious Conditions of Kashmir on the Eve of Foundation of Muslim Sultanate.
- Sofi, G.M.D., Islamic Culture in Kashmir, Delhi.
- Sofi, G.M.D., Kashir, Delhi.
- Hasan, Mohibul, Kashmir Under the Sultans, Srinagar.
- Rafiqui, A. Q. Sufism in Kashmir, Srinagar.
- Khan, Muhammad Ishaq, Kashmir's Transition to Islam, Srinagar.
- Bamzai, P. N. K, History of Kashmir (3 Vols), Srinagar.
- Shah, Pir Hasan, Tarikh-i-Hasan, Srinagar.
- Wani, Muhammad Ashraf, Islam in Kashmir, Gulshan Books, Srinagar.
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London).

**6. Islam in the Modern World (South Asia and West Asia) (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-II	Islam in the Modern World (South Asia and West Asia)	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- The objective of the course is to acquire knowledge about Islamic intellectual, educational and social developments in the modern South Asia and West Asia
- It also to focus on the study of some prominent Islamic thinkers and movements.

**ISLAM IN THE MODERN WORLD (SOUTH ASIA AND WEST ASIA)**

**THEORY**

**(CREDITS 4)**

**Unit 1**

Religio-Political Movements in West Asia 1) Muhammad ibn Abdul Wahhab and his Movement 2) Muhammad ibn Ali and his Movement (Sanusi Movement) 3) Hassan al-Banna and his Movement (Al-Ikhwan al-Muslimun)

**Unit 2**

Iran & Turkey 1) Constitutional Movement of Iran during the Pahlavis 2) Islamic Revolution in Iran and its Impact 3) Tanzimat and Young Turks Movement in Turkey

**Unit 3**

India 1) Muslim Response to Modern Challenges a) Sir Syed Ahmad Khan and His Movement b) Nadwatul Ulama, Lucknow 2) New Educational Developments a) Darul Ulum Deoband b) Jamia Millia Islamia, New Delhi

**Unit 4**

Modern Reformist Thinkers and Their Role 1) Jamal al-Din Afghani 2) Allama Iqbal 3) Maulana Azad

**TUTORIAL**

**(CREDITS 2)**

1) Said Nursi and his Movement 2) An Introduction to Shah Waliullah Dehalvi 3) Maulana Ilyas and his Movement 4) Maulana Maududi and his Movement

**SUGGESTED READINGS**

- Jameelah, Maryam Islam in Theory and Practice, Taj Company, Delhi.
- Nadwi, Abul Hasan Ali., Muslim Mamalik Main Islamiyat aur Maghribiyat ki Kashmakash, Idarah Nashr-oIshat wa Tehqiqat, Lucknow.
- Hasan, Masudul, History of Islam, Vol. 2, Adam Publishers and Distributors, New Delhi.
- Ahmad, Aziz, Islamic Modernism in India and Pakistan, OUP, London.
- Ahsanul Haq, Towards Revolution: Development of Religio-Political Thought in Contemporary Iran. 1941- 1979, Aligarh
- Algar Hamid, The Roots of Islamic Revolution, Islamic Publications International, USA.
- Siddiqi, Iqtidar Hussain, Islam and Muslims in South Asia, Adam Publishers & Distributors, New Delhi.
- Tara Chand, Influence of Islam on Indian Culture, Indian Press Ltd. Allahabad.
- J.L. Esposito, Voices of Resurgent Islam, Oxford University Press UK.
- Muazzam, Anwar, Jamal al-Din Afghani, Genuine Publications, New Delhi.
- Parray, Tawseef Ahmad, Mediating Islam and Modernity: Sir Sayyid, Iqbal and Azad, VIVA Books, New Delhi
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London).

**7. Basic Islamic Sciences (Qur'an, Hadith and Fiqh) (General Elective-I)**

Semester	General Elective	Course Title	Credit
V	GE-I	Basic Islamic Sciences (Qur'an, Hadith and Fiqh)	Theory: 04 ;Tutorial: 02 Total: 06

**Course specific outcomes**

- The course aims at the introductory study of religious sciences of Islam- the Qur'an, Hadith and Fiqh
- It also acquaints the students to know the fundamental significance of Divine knowledge in human life and method of approaching them through the study of principles (usul) of these sciences.

**BASIC ISLAMIC SCIENCES (QUR'AN, HADITH AND FIQH)****THEORY****(CREDITS 4)****Unit 1**

Ulum al-Qur'an 1) The Quran: Wahi (Revelation) and its Compilation 2) An Introduction to the Quranic Ulum (b) Muhkamat and Mutashabihat b) Asbab-i-Nuzul 3) Tafsir: Meaning, its Principles and early Development

**Unit 2**

Hadith 1) Meaning and Definition of Hadith 2) Place and Importance of Hadith in Islam 3) Compilation and Types of Ahadith

**Unit 3**

Fiqh (Jurisprudence) 1) Meaning and Importance of Fiqh 2) Sources of Fiqh 3) Early Development of Fiqh

**Unit 4**

Important Schools of Fiqh (An Introduction) 1) Hanafi 2) Maliki 3) Shafi'I 4) Hanbali 4) Ja'fari

**TUTORIAL****(CREDITS 2)**

1) An Introduction to Tafsir Ibn Kathir and Tafhimul Qur'an 2) Brief Introduction to Sihah-i-Sittah. 3) An Introduction to Indian Fiqh Academy, New Delhi and International Fiqh Academy, Jeddah 4) An Introduction to Fiqh al-Sunnah authored by Asim al-Hadad.

**SUGGESTED READINGS**

- Uthmani, Muhammad Taqi, Ulum al-Qur'an, Adam Publishers & Distributors, New Delhi.
- Salih, Subih Salih, Ulum al-Quran, Taj Company New Delhi.
- Salih, Subih, Ulum al-Hadith, Taj Company, New Delhi.
- Siddiqi, Zubair, Hadith Literature: Its Origin, Development and Special Features, Suhail Academy, Delhi.
- Gilani, Manazir Ahsan, Tadwin-i-Hadith (Urdu), Deoband.
- Hassan, Ahmad, Early Development of Islamic Jurisprudence, Adam publishers, Delhi.
- Khan, Hamidullah, The Schools of Islamic Jurisprudence, Kitab Bhawan, Delhi.
- Rafiabadi, Hamid Naseem, The Qur'an Illustrated, Sarup and Sons, New Delhi.
- Azmi, Muhammad Mustafa, Studies in Early Hadith Literature, Cambridge University Press, London.
- Azmi, Muhammad Mustafa, The History of the Quranic Text from Revelation to Compilation, Islamic Academy, UK.
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London).

**8. Islamic Social Sciences (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-I	Islamic Social Sciences	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- The course is meant to know the concept and developments of Social Sciences in Islam by studying basic themes of Islamic polity, economy, sociology and psychology including prominent Muslim thinkers in the field.

**ISLAMIC SOCIAL SCIENCES****THEORY****(CREDITS 4)****Unit 1**

Polity in Islam 1. Main Political Teachings in the Qur' an 2. Development of early Islamic Political Thought 3. Medieval Islamic Political Thought: al-Farabi and al-Mawardi

**Unit 2**

Economy in Islam 1. Essential Principles of Economy in Islam 2. Interest Free Banking in Islam: Concept and Principles 3. Bait al-Mal and Waqaf

**Unit 3**

Sociology in Islam 1. Islamic Sociology: An Introduction 2. Development of early Islamic Sociological Thought 3. Contemporary relevance of Islamic Sociology

**Unit 4**

Psychology in Islam 1. Islamic Psychology: An Introduction 2. Principles of Islamic Psychology 3. Contemporary relevance of Islamic Psychology

**TUTORIAL****(CREDITS 2)**

1) Concept of Khilafah and Shura: Nature and Scope 2) Baqir al- Sadr as Islamic Economic Thinker 3) Muhammad Nejatullah Siddiqi as Islamic Economic Thinker 4) An Introduction to Ibn Khaldun's Al-Muqaddimah



**SUGGESTED READINGS**

- Sharif, M. M., A History of Muslim Philosophy, Adam Publishers and Distributors, New Delhi.
- Sherwani, Haroon Khan, Early Muslim Political Thought and Administration, New Delhi.
- Siddiqi, Muhammad Nejatullah, Interest-Free Banking in Islam, Markazi Makataba Islami, New Delhi.
- Siddiqi, Muhammad Nejatullah, Some Aspects of Islamic Economy, Markazi Makataba Islami, New Delhi.
- Choudhary, Masudul Alam, Studies in Islamic Social Sciences, Palgrave MacMillan, UK.
- A. Wahab, An Introduction to Islamic Psychology, New Delhi.
- Hussain Akbar, Islamic Psychology, Global Vision Publishing House, New Delhi.
- Ibn Khaldun, Al-Muqaddimah, Princeton University Press, UK.
- Al-Sadr, Baqir, Iqtisaduna, WOFIS, Iran.
- Ahmad, Khurshid, Family in Islam, Markazi Maktab Islami Publishers.
- Momin, A. R. Introduction to Islamic Sociology, IOS, New Delhi.
- Khan, Mohd. Latief, Economic Thought of Muhammad Baqir al-Sadr, unpublished thesis, Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir.
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, London).

**9. Islam and Science (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Islam and Science	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- The objective of the course is to know the concept of Islamic Science in the context of the Qur'an and the Sunnah and Islamic view of universe, man and environment.
- It will also acquaint the students with Muslims' contribution in various branches of science during the medieval and the modern times.

**ISLAM AND SCIENCE****THEORY****(CREDITS 4)****Unit 1**

A Survey of Relevant Quranic Verses Related to 1) The Universe 2) The Origin of Life 3) The Embryology

**Unit 2**

Contribution of Medieval Muslim Scholars in the Field of Science 1) Jabir ibn Hayyan (d. 803 C.E.) 2) Muhammad ibn Musa al-Khwarizmi (d. 840) 3) Abul Qasim al-Zahrawi (d. 1013)

**Unit 3**

Contribution of Contemporary Muslim Scholars in the Field of Science 1) Dr. Abdul Qadir Khan 2) Dr. A. P. J. Abdul Kalam 3) Sayyid Waqar Ahmad Hussaini

**Unit 4**

Scientific Pursuit in Muslim Centres 1) The Islamic World Academy of Science (IAS) 2) Association of Muslim Scientists and Engineers (AMSE) 3) The Islamic Organization of the Medical Sciences (IOMS)

**TUTORIAL****(CREDITS 2)**

1) An Introduction to the Scientific Perspective in the Quran 2) An Introduction to the Scientific Perspective in the Sunnah of Prophet Muhammad # 3) An Introduction to the

works of Zia ud Din Sardar and Zaki Kirmani 4) An Introduction to Ibn Sina Academy of Medieval Medicine and Sciences, Aligarh, India

### SUGGESTED READINGS

- Kirmani, M. Zaki, The Qur'an and the Future of Science, New Delhi.
- Nadwi, Razi ul Islam, Islam, Musalman aur Science, New Delhi.
- T. W. Arnold, Legacy of Islam, Adam Publishers & Distributors, New Delhi.
- Hussaini, S. Waqar Ahmad., Islamic Science, New Delhi.
- Khan, Majid Ali, Islam on Origin and Evolution of Life, New Delhi.
- Abdul Ali and Sayyid Ahsan (ed.) The Qur'an and Science, Aligarh.
- Nadvi, Ibrahim Ahmad, Musalman Sciencedan aur unkay Karnamay, New Delhi.
- Sardar, Zia ud Din, An Early Crescent, Mansal UK.
- Sardar, Zia ud Din, Arguments for Islamic Science, MAAS, Aligarh.
- Saud, Muhammad, Islam and Evolution of Science, Adam Publishers & Distributors, New Delhi.
- Bhat, Abdul Wasey, Major Perspectives on Islam and Science, Unpublished Thesis in the Library of Shah-iHamadan Institute of Islamic Studies, University of Kashmir.
- Relevant Articles in Encyclopedia of Islam.
- Relevant Articles in Encyclopedia of Modern Muslim World.
- Relevant Articles in Insight Islamicus (Vol. 1-18), Shah-i-Hamadan Institute of Islamic Studies, University of Kashmir (Indexed in Index Islamicus, sLondon).

**10. Da'wah and its Practices (General Elective-II)**

Semester	General Elective	Course Title	Credit
VI	GE-II	Da'wah and its Practices	Theory: 04 ; Tutorial: 02 Total: 06

**Course specific outcomes**

- The objective of the course is to acquaint the students with Islamic concept of da'wah, its ethics and contemporary approaches and prospects.
- The knowledge of these aspects of da'wah is prospective for promoting a proper understanding of Islam.

**DA'WAH AND ITS PRACTICES****THEORY****(CREDITS 4)****Unit 1**

Conceptual Aspects of Islamic Da'wah 1) Da'wah: Meaning and Scope 2) Importance of Da'wah 3) Aims and Objectives of Da'wah

**Unit 2**

Dimensions of Islamic Da'wah 1) Qualities of Dai 2) Da'wah and Adab al-Ikhtilaf (Ethics of Disagreement) 3) Da'wah among non-Muslims

**Unit 3**

Contemporary Approaches 1) Jama'at-i-Islami 2) Tablighi Jama'at 3) Salafi Movement

**Unit 4**

Contemporary Prospects 1) Da'wah in Pluralistic Societies 2) Communication Skills in Da'wah 3) Errors in Da'wah Methodologies

**TUTORIAL****(CREDITS 2)**

- 1) Ways and means of Daw'ah 2) Daw'ah among Muslims 1) Introduction to Ikhwan-al-Muslimun 2) Consideration of Human Psychology in Daw'ah

**SUGGESTED READINGS**

- Islahi, M.A. Ahsan, Dawat-i-Din Aur us ka Tarik-i-Kar, (Urdu). Delhi.

- Nadvi, S.A. Hasan, Life and Mission of Maulana Muhammad Ilyas, Lucknow
- Tayyi, Qazi M., Dini Dawat ka Qurani Usul, (Urdu) 2) Yaqin, Fathi, Dawat Tabligh ka Rahnama Usul, (Urdu). 3) Umri, S. Jalal al-Din, Islam ki Dawat, (Urdu). Markazi Maktabah Islami, Delhi.
- Alam, Manzoor, The Message of Islam and Approaches of Dai, Delhi
- Hasanah, Umar Ubaid, Tehrik-i-Islami: Dawat, Fikr, (Urdu). Saudi Arabia
- Nadwi, A. H. Ali, Tabligh-o-Dawat ka Muajizana Aslub, (Urdu)
- Khan, Wahid ud Din, Tablighi Tehrik, Maktabah Al-Risalah, Delhi.
- Siddiq, Mawlana M. Maslak-i-Ahl-i-Hadith aur Iskey Buniyadi Masa'il, (Urdu)
- T. W. Arnold, The Preaching of Islam, Cambrodege University Press.
- Zargar, Nazir Ahmad, Dawah in Contemporary World, Wisdom House, Srinagar.
- Sayyid Amir Ali, Sprit of Islam, Kitab Bhawan, Delhi.
- Abdussalam, Dawah Guide (Towards Performing Dawah), Students Islamic Publication.

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**Course Structure and distribution of different courses with their credits for B.A.  
Kashmiri**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Kashmiri Literature-I كشمیری لٹریچر ۱	Core Course	6 credits 4(T)+2(T)
2.	II	Kashmiri Literature-I كشمیری لٹریچر ۲	Core Course	6 credits 4(T)+2(T)
3.	III	Kashmiri Literature-I كشمیری لٹریچر ۳	Core Course	6 credits 4(T)+2(T)
4.	IV	Kashmiri Literature-I كشمیری لٹریچر ۴	Core Course	6 credits 4(T)+2(T)
5.	IV	Tarjama Kari ترجمہ کاری	Skill Enhancement Course	6 credits 4(T)+2(T)
6.	IV	Kashmiri Literature كشمیری لٹریچر	Discipline Specific Elective	6 credits 4(T)+2(T)
7.	V	Zabaen Hund Tarseeli Vartaw زبان نی ہند ترسیلی ورتاو	Skill Enhancement Course	6 credits 4(T)+2(T)
8.	V	Kaeshri Adbuk Taruf-I کاشر ادبک تعارف ۱	General Elective Course	6 credits 4(T)+2(T)
9.	VI	Ilmi Te Gair Afsanvi Adab	Discipline Specific Elective	6 credits 4(T)+2(T)
10.	VI	Zaban Te Bawath زبان تہ باوتہ	Skill Enhancement Course	6 credits 4(T)+2(T)
11.	VI	Kaeshri Adbuk Taruf-II کاشر ادبک تعارف ۲	General Elective Course	6 credits 4(T)+2(T)

**Course Outcomes:**

Kashmiri language has been initially included in the 8<sup>th</sup> schedule of Indian constitution. Since the establishment of Kashmiri Department, numerous students have graduated with Kashmiri as one of the core subjects from this Institution and are rendering their services in both public

and private Sectors. The new BA Kashmiri Syllabus forms the innovative and expansive thrust of the previous one and is designed to prepare students to understand and use the Kashmiri language effectively, build vocabulary and introduce them to current ideas and issues and equip the students to take the next logical steps in their career after getting their B. A. degrees. After completing BA course having major in Kashmiri, students can pursue careers in teachings, creative writings, journalism and other fields where the demand of the Kashmiri language is very high in Kashmir. The aim of this course is to provide the student an opportunity to read and respond to representations, issues in contemporary life and culture in the Kashmiri Language. The selection of texts is aimed to present themes and topics that are stimulating and informative. The syllabus comprises of Poetry, Drama, Novel, Short stories, Essays, Grammer, Reading & Writing Skills and Translations etc.

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## 1. Kashmiri Literature (Core Course-I)

Semester	Core Course	Course Title	Credit
I	CC-I	Kashmiri Literature-I كشمیری لٹریچر I	Theory: 04; Tutorial: 02 Total: 06

### Course Specific Outcome:

- After the thorough study of this paper, it is expected from the students that they may identify the genres of poetry like nazam and genres of prose like short story and could comprehend the basic poetics.

Students may be able to :

- Familiarize with selection of texts written in the Kashmiri Language
- Critically examine the prescribed poems by major writers like Mehmood Gami ,Rasul Mir , Maqbool Shah kralavari ,Ghulam Ahmad Mehjoor, Abdul Ahad Azad and short stories by major writers of kashmiri language like Amin Kamil & Muhammad Shafi Sumbli.
- Acquaint themselves with the developments in the genre of essay in the 21th century.

### KASHMIRI LITERATURE-I

#### THEORY

(CREDITS: 04)

یونٹ ۱: ادبک تعارف

۱- ادب تہ ادبک مقصد ۲- ادبی زبان

۳- شعر اصطلاح: استعار ، تشبیہ ، علامت ، تمثیل ، تہ تلمیح

یونٹ ۲: افسانہ

۱- افسانک فن ۲- بردواو ۳- خود غرض

یونٹ ۳ :

۱- نظم: اکھ تعارف ۲- پوشہ بہار ، جدائی ۳- ییمبرزل ، بہار

یونٹ ۴:

۱- علمی نثر: اکھ تعارف ۲- گلستان سعدی ۳- کشیر بند ی باغ



## 2. Kashmiri Literature (Core Course-II)

Semester	Core Course	Course Title	Credit
I	CC-II	Kashmiri Literature-II كشمیری لٹریچر II	Theory: 04; Tutorial: 02 Total: 06

### Course specific outcomes:

- The specific paper provides the knowledge about the basic genres of the Kashmiri literature
- Gives brief description about the Gazal and Nazam
- Below mentioned poets are focused in this paper :  
Rasheed Nazki  
Rafiq Raz  
Rahman Rahi  
Amin Kamil,  
Dina Nath Nadim  
Qazi Ghulam Muhammad

### KASHMIRI LITERATURE-II

#### THEORY

(CREDITS: 04)

- |                              |                     |                                 |
|------------------------------|---------------------|---------------------------------|
|                              |                     | یونٹ ۱۔ غزل                     |
| ۳۔ غزل (رفیق راز)            | ۲۔ غزل (رشید نازکی) | ۱۔ غزلک فن                      |
|                              |                     | یونٹ ۲: نظم                     |
| ۲۔ سونہ لانکہ پیٹھ، نیلہ ناگ |                     | ۱۔ عصری نظم : امتیازی خصوصیات   |
|                              |                     | ۳۔ اکھ پروں شہر، زندگی بیڑ وسیع |
|                              |                     | یونٹ ۴: افسانہ                  |
| ۳۔ پرا لب                    | ۲۔ آبنو سُنک رُوَلر | ۱۔ شہزادی یوسہ زُون اَس منگان   |
|                              |                     | یونٹ ۴: علمی نثر                |
| ۳۔ کَا شُر دیو ما لا         | ۲۔ بٹل چھے تتان     | ۱۔ خوا بن ہنز علامتی زبان       |

### 3. Kashmiri Literature (Core Course-III)

Semester	Core Course	Course Title	Credit
I	CC-III	Kashmiri Literature-II كشمیری لٹریچر III	Theory: 04; Tutorial: 02 Total: 06

#### Course specific Outcome:

- After the completion of this course ,students may understand the role of theatre and drama in the introduction and shaping of modernity.
- They may be able to write about innovations introduced into the theatrical practice in the late 20<sup>th</sup> century.
- The students may get an insight into the differential sensibilities that emanate from the dramas written by playwrights of different regions of Kashmir.
- The local flavour infused in the poetic forms by the writers would also be an area of concern for the students.
- The students would gain a brief understanding of the socio-political issues of the times in which the poems were written.

### KASHMIRI LITERATURE-III

#### THEORY

(CREDITS: 04)

- یونٹ ۱ : علمی نثر
- ۱- برزبوم      ۲- فطرتس منز ما حولیاتی تواژن      ۳- سری نگر
- یونٹ ۲ : افسانہ
- ۱- بیله مے نیک تے لاج      ۲- تیلیک لطف      ۳- طوطہ سنز کتھ
- یونٹ ۳ : کاشر نظم
- ۱- بہار نامہ      ۲- فر نگین سنی کو بلین ہند جنگ      ۳- آ سما نکی تارک ونا ن انسانس
- یونٹ ۴ : کاشر ڈراما
- ۱- ڈرامہک فن تہ تر کیبی جز      ۲- لکھ پاتھر : اکھ تعارف      ۳- منزلی نکہ

#### 4. Kashmiri Literature (Core Course-IV)

Semester	Core Course	Course Title	Credit
I	CC-IV	Kashmiri Literature-II کشمیری لٹریچر IV	Theory: 04; Tutorial: 02 Total: 06

#### Course Specific Outcomes:

After the thorough study of this paper, Students may be able to:

- Examine the genre of the Short Story & Essays.
- The students are introduced to the deeper understanding of these genres, and the reflection of human emotions in these essays & short stories .
- have an opportunity to write essays on various subject matters which are of contemporary relevance
- relate the essays against the intellectual and socio-cultural background

#### KASHMIRI LITERATURE-IV

#### THEORY

(CREDITS: 04)

۳. کشمیر ہند تواریخ

۲. کلچر تہ زبان

یونٹ ۱ : علمی نثر

۱- بوئی

یونٹ ۲: افسانہ

۱- توتن خامون

یونٹ ۳: کاشر نظم

۱- بی لانہ لیوکھنم

۳- بلبلس گن

یونٹ ۳ : ایے

۱- ایسے یک فن

۳- نیکلیس

۲- حالس چھ روئل

۲- کاوی ویوہنم

۳- ننه پوش

۲- چاے چھے چاے

### 5. Kashmiri Literature (Skill Enhancement Course)

Semester	Skill Course	Course Title	Credit
IV	SEC	Tarjama Kari ترجمہ کاری	Theory: 04; Tutorial: 02 Total: 06

#### Course Specific Outcomes:

Some of the Course learning outcomes that students of this course are required to demonstrate run thus:

- Critically appreciate the process of translation
- Engage with various theoretical positions on Translation
- Asses ,compare and review translations
- Translate literary and non –literary texts

#### TARJAMA KARI

#### THEORY

(CREDITS: 04)

یونٹ ۱ :

۳.ترجمکی قسم

۲.ترجمچ اہمیت

۱. ترجمہ کاری ہند فن :اکھ تعارف

یونٹ ۲ :

۳. کاشرس منز ترجم روایت

۲. شاعری ہند ترجمہ

۱. نژک ترجمہ

دویم حصہ . ٹیٹوریل

یونٹ ۱ :

۲. اردو / انگریزی نژی اقتباسن ہند کاشر ترجمہ

۱. اردو شعری اقتباسن ہند کاشر ترجمہ

یونٹ ۲ :

۲. انگریزی / اردو اطلائی نژی اقتباسن ہند کاشر ترجمہ

۱. انگریزی / اردو محاورن / جملن ہند کاشر ترجمہ

## 6. Kashmiri Literature (Discipline Specific Elective-Optional I)

Semester	Discipline Specific Course	Course Title	Credit
IV	DSE	Kashmiri Literature كشمیری لٹریچر	Theory: 04; Tutorial: 02 Total: 06

### Course Specific outcomes:

This paper has two options and we have opted for the option I.

- The expected course outcome from students of this course is to develop critical thinking among students.
- They may be able to think critically on various issues and subject matters and relate the same with real life situations.
- Develop ability to read critically the prescribed texts and understand its broader implications.
- Students understand the nature and the difference between the fiction and non-fiction.
- By reading the prescribed poems students are able to understand the thought and imagination contained in the poems.
- Students get recognised to the rhythms, metrics and other musical aspects of poems

### KASHMIRI LITERATURE

#### THEORY

(CREDITS: 04)

یونٹ ۱: تنقیدی نثر

۱. حقیقت، ادب تہ قاری

۳. کلچر تہ زبان

۵. یوسف شاہ چک : اکھ سٹیج ڈرامہ

یونٹ ۲: جدید کاشمیری افسانہ

۱. سوال چھ کُلک

یونٹ ۳: کاشمیری نظم

۱. زُ مصرعے

۲. ژھین

۲. سون گام ۳. کتھ

۳. ہوایی حادثہ

۴. بہ نہ ژھاے نہ عکس

- ۵۔ گوڈنچ پوزا (ترجمہ)  
یونٹ ۴: کاشر غزل  
۱۔ کار دوگن دوردان  
۴۔ راتھ اس گٹ تہ  
۲۔ رنگ با لی ڈولم  
۳۔ چا نہ انہار میون شعر وئن

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## 7. Zabaen Hund Tarseeli Vartaw (Skill Enhancement Course)

Semester	Skill Course	Course Title	Credit
V	SEC	Zabaen Hund Tarseeli Vartaw زبا ئى بىند ترسىلى ورتاۋ	Theory: 04; Tutorial: 02 Total: 06

### Course Specific Outcomes:

- Develop a comprehensive understandings of some specific skills like essay writing and letter writings.
- Students will be able to gain conceptual and theoretical knowledge of Journalism and Mass Communication and learn to think critically about issues and topics of the subject.
- Students will be able to use research-based knowledge and research methods including research design, survey analysis and interpretation of data, and synthesis of the information collected to provide valid and cogent conclusions.
- Students will learn about the modern and emerging trends of Journalism

### ZABAEN HUND TARSEELI VARTAW

#### THEORY

(CREDITS: 04)

يونٹ ۱ :

۱. مضمون نگارى بىند فن
۲. خط لىكهنك فن : رسمى ته غار رسمى

يونٹ ۲ :

۱. پىراگراف لىكهنك فن
۲. عبارت سهل زبا ن منز پهرنى
۳. ريڊيو ته تى وى خاطر لىكهنك ( كالم ته خبر )

دويم حصه . ئتو ريل

يونٹ ۱ :

۱. دنه آمتين / آمتس مو ضوعس پيئھ مضمون لىكهنك
۲. خط لىكهنك ( رسمى ته غار رسمى )

یونٹ ۲ :

۱۔ پیراگراف لیکھن

۲۔ ریڈیو تہ ٹی وی خاطر لیکھن

۳۔ اخبار خاطر کالم لیکھن

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**8. Kaeshri Adbuk Taruf -I (General Elective Course)**

Semester	Elective Course	Course Title	Credit
V	GEC	Kaeshri Adbuk Taruf-I کاشر ادبک تعارف I	Theory: 04; Tutorial: 02 Total: 06

**Course Specific Outcomes:**

- The classical genres of Kashmiri Poetry aim to acquaint students with this rich heritage.
- Students will come to know about the poetry and discourse of two Legends of Kashmiri poetry viz LAL DED & SHIEKH UL ALAM
- The genres help to understand us the rich culture, whether it may be represented in language and literature or language and literature represented it.
- It helps students to understand the artistic treatment of words and classical utilization of language
- Students come to know about the main genres of poetry like Vaakh, Vatsun, Shruk, Gazal and Masnavi.

**KAESHRI ADBUK TARUF-I****THEORY****(CREDITS: 04)**

یونٹ ۱:

۱. واکھ تہ شُرک : اکھ تعارف

۲. وژن : اکھ تعارف

۳. کاشر غزل : اکھ تعارف

۳. کاشر مثنوی : اکھ تعارف

### 9. Ilmi Te Gair Afsanvi Adab (Discipline Specific Elective)

Semester	Elective Course	Course Title	Credit
VI	DSE	Ilmi Te Gair Afsanvi Adab	Theory: 04; Tutorial: 02 Total: 06

#### Course specific outcomes:

This paper has two options and we have opted for the option 1.

- The expected course outcome from students of this course is to develop critical thinking among students .
- They may be able to think critically on various issues and subject matters and relate the same with real life situations.
- Develop ability to read critically the prescribed texts and understand its broader implications.
- Non – fictional prose of Kashmiri aims to give a thorough understanding of these genres.
- It will help the students to understand the nature and the difference between the fiction and non fiction

#### ILMI TE GAIR AFSANVI ADAB

#### THEORY

(CREDITS: 04)

یونٹ : ۱ علمی تہ غار افسانوی نثر

۱۔ قرآنیاتک لال بہا : نسخہ فتح اللہ کشمیری

۲۔ فراسنک سفر

۳۔ بتل چہ تتان

۳۔ ناگن بنز ژہار

یونٹ ۲ : جدید کاشتر افسانہ

۱۔ علی داغہ

۲۔ تاپہ

۳۔ ڈاکٹر ہائیڈ گر سُنڈ تجربہ (ترجمہ) باتھارن

یونٹ ۳ : نعتیہ شاعری

۱۔ نعتک تعریف

۲۔ پیر عزیز اللہ حقانی

۳۔ عبدالاحد نادم

یونٹ : ۳ کاشتر نظم

۳. بند زوس منز

۲. کرناو تارکھ اپور

۱. تمثیل آدم

۵. انجام

۳. مذاحیہ وژن: مدن وارو لگے پاری

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**10. Zaban Te Bawath (Skill Enhancement Course)**

Semester	Skill Course	Course Title	Credit
VI	SEC	Zaban Te Bawath زبان تہ باوتھ	Theory: 04; Tutorial: 02 Total: 06

**Course Specific Outcomes:**

- This paper focuses on the basics of language, its origin and different theories.
- Students came to know about the importance of Kashmiri language and Kashmiri script.
- After learning this course students will be able to :
- solve exercises on vocabularies
- Evaluate listening exercises with task which help in developing listening skills.
- understand informative reading texts with exercises which help in developing reading skills
- solve grammatical exercises
- Develop useful techniques in writing by effective writing .
- Build communicative skills in students.

**ZABAN TE BAWATH****THEORY****(CREDITS: 04)**

یونٹ ۱ :

۱۔ زبان : اکھ تعارف

۲۔ زبان تہ اتھ متعلق مختلف نظریہ

یونٹ ۲ :

۱۔ کاشر زبانی ہنز اہمیت

۲۔ کاشرس منز تحریرچ اہمیت

دویم حصہ - ٹٹو ریل

یونٹ ۱

۱۔ کاشرین مصوتن ہنز زان

۲۔ کاشرین مصمتن ہنز زان

یونٹ ۲

۱. کأشرین ساد جملن بندی قسم ته ورتاو

۲. کأشرین مرکب جملن بندی قسم ته ورتاو

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**11. Kaeshri Adbuk Taruf -II (General Elective Course)**

Semester	Elective Course	Course Title	Credit
V	GEC	Kaeshri Adbuk Taruf-II کاشر ادبک تعارف ۲	Theory: 04; Tutorial: 02 Total: 06

**Course Specific outcomes:**

- Students in this paper will come to know about origin and development of Kashmiri language.
- Fiction writings of Kashmiri aim to provide the basic introduction of the three genres of prose i.e Afsana, Drama and Novel.
- The paper will discuss their development and timely changes.
- Students after studying will come to know about their unique features.
- Students will be able to examine the process of characterization, thematic significance, and techniques employed by the authors.

**KAESHRI ADBUK TARUF-I****THEORY****(CREDITS: 04)**

یونٹ ۱ : کاشر زبان : اکھ تعارف

یونٹ ۲ : کاشر افسانہ: اکھ تعارف

یونٹ ۳ : کاشر ڈراما: اکھ تعارف

یونٹ ۴ : کاشر ناول: اکھ تعارف

**RECOMMENDED BOOKS FOR ALL SEMESTERS**

امدادی کتاب:

۳. کاشر ادبک تواریخ ۱. انہار (ترجمک فن نمبر) ۲. ترجمہ کاری کا فن (قمر رایس)

۳. علم تہ ادب (جلد اکھ، ز، تریہ) ۵. تقابلی ادب، انہار (۲۰۰۳) ۶. زبان تہ ادب (جلد اکھ، ز، تریہ)

۷. کاشر گرایمر (پروفیسر شفیع شوق) ۸. کہوٹ (رحمان رابی) ۹. ادبی اصطلاح (غلام نبی فراق)

۱۰. افسانک فن، خاص شمار، ۲۰۰۲ ۱۱. انہار (محمود گامی نمبر) (پروفیسر مرغوب بانہالی)

۱۲. کاشر انسایکلو پیڈیا (جلد ۳) ۱۳. کاشر زبانی منز تخلیق تہ تنقید

۱۴. کلیات رسول میر شاہ آبادی (پروفیسر غلام محمد شاد، ۲۰۰۳) ۱۵. کاشر نثرچ کتاب، محی الدین حاجی، ۱۹۶۱

۱۷. شار شناسی، رحمان رابی، ۲۰۰۳

۱۶. کاشُر افسانہ، از تہ پیگاہ (رتن لال شانٹ ۲۰۰۰

۱۸. تلاش، محمد یوسف ٹینگ (۱۹۸۸)

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### Course Structure and distribution of different courses with their credits for B.A.

#### Persian

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Basic persian grammar and literature	Core Course	6 credits 4(T)+2(T)
2.	II	Classical persian literature & essay writing	Core Course	6 credits 4(T)+2(T)
3.	III	Classical Persian literature & letter writing	Core Course	6 credits 4(T)+2(T)
4.	III	Reading & Writing Persian	MIL Course	6 credits 4(T)+2(T)
5.	IV	Persian literature, Persian Grammar Prose and unseen translation	Core Course	6 credits 4(T)+2(T)
6.	IV	Reading & Writing Persian	MIL Course	6 credits 4(T)+2(T)
7.	V	Persian classical and modern Persian poetry	Core Course	6 credits 4(T)+2(T)
8.	V	Reading and writing Persian-I	General Elective	6 credits 4(T)+2(T)
9.	VI	Classical and modern Persian prose	General Elective	6 credits 4(T)+2(T)
10.	VI	Reading and writing Persian-II	General Elective	6 credits 4(T)+2(T)
11.	VI	Translation Prescribed Text	Skill Enhancement Course	6 credits 4(T)+2(T)

#### Course Outcomes

B.A in Persian studies furnishes candidates with a strong background in literary, linguistic and cultural aspects of Persian language. This degree course helps the candidates to go for various Persian language related employments, as it being used in business in Persian



communities. Students having B.A degree in Persian can go for teaching in schools and colleges. The candidates can act as members of the international delegations for different political, economic and other strategic purposes. Such postgraduates are hired in capacities such as linguistic, cryptologic language instructor, foreign language analyst, language instructional developer, teacher content writer etc. Most pass out students of Persian department are getting recruited in the different departments.

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**1. Basic Persian grammar and literature (Core Course-I):**

Semester	Core Course	Course Title	Credits
1st	PRC120C	Basic Persian grammar and literature	Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific Outcomes**

- Students to get acquainted with basic alphabet of Persian language.
- Students to get to know the various parts of speech in Persian language.
- Students to learn about the tenses in Persian language.
- Students to acquire the skills of effective conversation in Persian language.
- Students to learn some moral poems in Persian language.
- Enable students to acquire comprehensive knowledge about the basic and applied Persian Grammar

**BASIC PERSIAN GRAMMAR AND LITERATURE****THEORY****(CREDITS: 06)****یونٹ اول:**

- ۱- الفبای فارسی
- ۲- دستور زبان : اسم، فعل، حرف، ضمیر و اقسام ضمیر، مصدر، مضارع، ترکیبات.
- ۳- اقسام سناک (گذشته، حال، استقبال)
- ۴- اقسام فعل گذشته
- (گذشته ساده، گذشته نقلی، گذشته دور، گذشته استمراری، گذشته التزامی، گذشته شرطیه)

**یونٹ دوئم**

- ۱- اقسام فعل گذشته مجهول، حال مجهول، استقبال مجهول.
- ۲- فعل امر، فعل نہی.
- ۳- فعل ناتمام یا فعل ملموس.

**یونٹ سوئم**

- ۱- در مورد اقسام فعل گذشته، حال و استقبال معروف و مجهول جملہ هایی مثبت، منفی و شوالی.

**یونٹ چہارم**

Translation of following four lessons into English or Urdu form the Book •

۱- فارسی دبستان اول از لیلی ایمن- •

Tutorial - 1st. •

۱- الف) معرفی کامل خود به زبان فارسی- •

ب) امروز شما •

Tutorial - 2nd •

۱- تمرین زبان در لبراتور زبان فارسی در گروه زبان و ادبیات فارسی دانشگاه کشمیر- •

(مدت: یک هفته •

### SUGGESTED BOOKS

۱- دستور زبان فارسی از پرویز نائل فانلری- •

۲- دستور زبان از ایس- ایل گومر- •

۳- دبستان اول از لیلی ایمن- •

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**2. Classical Persian literature & Essay writing (Core Course-II):**

Semester	Core Course	Course Title	Credits
2 <sup>nd</sup>	PRC220C	Classical Persian literature & essay writing	Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific Outcomes**

- Students to learn about famous epic writings in Persian literature.
- Students to learn about some cultural stories in Persian literature.
- Students to learn some poems by Kashmiri Persian poets.
- Students to learn about essay writing in Persian literature.
- Students to learn about Persian literature during Samanid Period.
- To enable the students to understand the trends in Classical Persian Literature and enhance their writing skills.

**CLASSICAL PERSIAN LITERATURE & ESSAY WRITING****THEORY****(CREDITS: 06)****یونٹ اول:**

انتخاب از کتاب درس فارسی (جلد اول) از پروفیسور شمس الدین احمد:

۱- کود کی سہراب (اول) (صفحہ ۳۳)

۲- کود کی سہراب (دوم) (صفحہ ۶۳)

۳- کودکی سہراب (سوم) (صفحہ ۸۳)

**یونٹ دوئم**

انتخاب از کتاب درس فارسی (جلد اول) از پروفیسور شمس الدین احمد:

۱- نوروز (۱) (صفحہ ۰۳)

۲- نوروز (۲) (صفحہ ۲۳)

۳- حکایت (صفحہ ۱۷)

**یونٹ سوئم**

انتخاب از کتاب درس فارسی (جلد اول) از پروفیسور شمس الدین احمد:

- ۱- غزل شماره - ۴ از شیخ یعقوب صرفی
- ۲- غزل شماره - ۳ از ملا محسن فانی کشمیری

### یونٹ چہارم

انتخاب از کتاب درس فارسی (جلد اول) از پروفیسور شمس الدین احمد:

- ۱- جوان نافرمان و مادر (سعدی)
- ۲- توانا بود هر که دانا بود (فردوسی)

### (Tutorials: 02 Credits)

- ۱- انشاءنویسی در فارسی (دانشکده، استاد من، شهر من، خانہ من، رود خانہ های کشمیر)
- ۲- مطالعه ادبیات دورہ سامانی (نظم و نثر)

### SUGGESTED READINGS

- ۱- کتاب درس فارسی اول از دکتر شمس الدین احمد
- ۲- تاریخ ادبیات ایران از دکتر رضا زاده شفق
- ۳- تاریخ ادبیات فارسی از دکتر ذبیح اللہ صفا
- ۴- فارسی ادب کی مختصر ترین تاریخ از دکتر ریاض اور دکتر صدیق شبلی
- ۵- ایران ادب از دکتر ظہور الدین احمد
- ۶- کشمیر میں فارسی ادب کی تاریخ از پروفیسر عبدالقادر سروری
- ۷- شیخ یعقوب صرفی شخصیت اور فن از دکتر غلام رسول جان

**3. Classical Persian literature & Essay writing (Core Course-II):**

Semester	Core Course	Course Title	Credits
3 <sup>rd</sup>	PRC320C	Classical Persian literature & letter writing	Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific Outcomes**

- Students to learn moral lessons by famous Persian poets like Rudaki, Rumi and Saadi.
- Students to learn about lessons on humanity and brotherhood in Persian literature.
- Students to learn moral lessons written in prose in Persian literature.
- Students to learn letter writing in Persian language.
- Students to learn about proverbs and idioms in Persian language.
- To develop the Persian writing skills in students

**CLASSICAL PERSIAN LITERATURE & LETTER WRITING****THEORY****(CREDITS: 06)****یونٹ اول:**

انتخاب از کتاب درس فارسی (جلد دوّم) از پروفیسور شمس الدین احمد:

- ۱- دانش (رودکی)
- ۲- موسی و شبان (مولانا رومی)
- ۳- ہمدردی (سعدی)

**یونٹ دوئم**

انتخاب از کتاب درس فارسی (جلد دوّم) از پروفیسور شمس الدین احمد:

- ۱- شب فراق (سعدی)
- ۲- کاروان (سعدی)

**یونٹ سوئم**

انتخاب از کتاب درس فارسی (جلد دوّم) از پروفیسور شمس الدین احمد:

- ۱- وزنہ برداران
- ۲- داستان خیر و شر

## یونٹ چہارم

انتخاب از کتاب درس فارسی (جلد دوم) از پروفیسور شمس الدین احمد:

۱- محمد بن زکریای رازی کاشف الکل

۲- بانوی فانوس بدست۔

(Tutorials: 02 Credits)

۱- نامہ نویسی فارسی

۲- بیست تا ضرب المثلهای عامیانه فارسی۔

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#### 4. MIL Compulsory for B.A/B.com:

Semester	MIL Course	Course Title	Credits
3 <sup>rd</sup>	PRM320	Reading & Writing Persian	Theory: 04 ; Tutorial: 02 Total: 06

#### Course Specific outcomes:

- MIL Modern Indian Languages is a policy designed by the UGC to promote the regional languages.
- Aim of this course is facilitate the students, subject and place of their choice.

### READING AND WRITING PERSIAN

#### THEORY

(CREDITS: 06)

یونٹ اول:

Persian Alphabets: Long and Short vowels. 1.

Basic Persian Grammar. 2.

یونٹ دوئم

Infinitives and their Meaning. 1.

مصادر و معنای آ:

آمدن - آوردن - آموختن - انداختن - بانیستن - برداشتن - بُردن - بریدن - پختن - پریدن - پُرسیدن - پیوستن - ترسیدن - توانستن - جستن - چکیدن - خاستن - خواستن - خواندن - خوردن - خفتن - خریدن - دیدن - داشتن - دویدن - رفتن - رسیدن - زیستن - ساختن - سرودن - شنیدن - شدن - شناختن - فرستادن - فرمودن - کردن - کندن - گشتن - گشتن - مُردن - نمودن - نالیدن - وزیدن - ورزیدن - هستن -

Aorist 2.

مضارع

Pronouns: 3.

ضمایر

First Person, Second Person, Third Person 4.

سوم شخص، دوم شخص، اول شخص (مفرد و جمع)

یونٹ سوئم



Past tense and its kinds. 1.

زمانه گذشته و اقسام آن

Present tense 2.

زمانه حال

زمانه آینده

یونٹ چہارم

1. Frequently used day to day vocabulary of the following. (150 words):  
House, Kitchen, Washroom, Bazar, College, Classroom, Vegetables,  
Fruits and Flowers.
2. Numbers in Persian (1 – 100)

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### 5. Persian literature, Persian Grammar Prose and unseen translation (Core course)

Semester	Core Course	Course Title	Credits
4 <sup>th</sup>	PRL416 C	Persian literature, Persian Grammar Prose and unseen translation	Theory: 04 ; Tutorial: 02 Total: 06

#### Course Specific Outcomes

- Students to learn about Rudaki as founder of classical Persian poetry.
- Students to learn didactic prose lessons in Persian literature.
- Students to learn five Rubayaat by famous Persian poet Omar Khayyam.
- Students to learn about Persian poetry during Gaznavid Period.
- Students to learn about Persian prose written during Gaznavid Period.

#### PERSIAN LITERATURE, PERSIAN GRAMMAR PROSE AND UNSEEN TRANSLATION

##### THEORY

(CREDITS: 06)

##### Credit - 1st

۱- مصدر، معنی، مضارها از صرف ص ت ای

##### Credit – 2<sup>nd</sup>

معنی و کاربرد ضرب المثل های نوین فارسی-

##### Credit - 3<sup>rd</sup>

انتخاب از کتاب درسی فارسی (جلد دوم) از پروفسور شمس الدین احمد

ترجمه داستان کوتاه زیر به زبان انگلیسی یا اردو

۱- انتخاب از آثار سید نفیسی- آشیان خراب-

##### Credit – 4th

Translation of unseen English or Urdu sentences into Persian:

##### Credit – 5<sup>th</sup>

انتخاب از کتاب درس فارسی (جلد دوم)

ترجمه داستان کوتاه زیر به زبان انگلیسی یا اردو

۱. انتخاب۔ از آثار محمد حجازی۔ شیرین کلد۔

**Credit - 6th**

Translation of unseen Persian sentences into English or Urdu

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**6. MIL Compulsory for B.A/B.com:**

Semester	MIL Course	Course Title	Credits
4 <sup>th</sup>			Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific outcomes:**

- The second part, i.e. 4th sem. will move further keeping in view the first level gained by the student.
- Students, in this paper will come to know about origin and development of the language.

**Syllabi and Suggested Books**

**Yet to be uploaded by the department**

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### 7. Persian literature, Persian Grammar Prose and unseen translation (Core course-Optional I)

Semester	Core Course	Course Title	Credits
5 <sup>th</sup>	PRL516 D	Persian classical and modern Persian poetry	Theory: 04 ; Tutorial: 02 Total: 06

#### Course Specific Outcomes

- Students to learn translating passages from Persian to English or Urdu language.
- Students to get introduced to different genres in Persian literature.
- Student to get introduced to Classical and Modern Persian Poetry.
- Students to learn about Persian poets of Seljok Period.
- Students to learn about various literary forms in Persian literature.

#### PERSIAN CLASSICAL AND MODERN PERSIAN POETRY

##### THEORY

(CREDITS: 06)

##### Credit - 1st

- ۱- رستم ..... از ف:دوسی (صفحه ۱۷۲ - ۲۷۲)
- ۲- بادنوروزی ..... از عنصری ( ۸۸۲)

##### Credit – 2<sup>nd</sup>

- ۱- انتخاب از غزلیات خواجر کرمانی.... غزل - ۱، و غزل - ۳ (صفحه ۰۳۳ - ۱۳۳)
- ۲- انتخاب از غزلیات حافظ شیرازی ... غزل - دامگاه حادثه ... (صفحه ۷۲۳)

##### Credit – 3<sup>rd</sup>

- ۱- انتخاب از شعر فروغ فرخزاد.... (۱) دوبرابر خدا. (صفحه ۲۵۳)
- ۲- انتخاب از شعر نادر نادر پور.... (۱) شبیه شاموش - (صفحه ۶۴۳)

##### Credit – 4<sup>th</sup>

Study of literary history of Seljok period with special reference to eminent ۰

Persian Poets like:

سنائی - عطار - انوری - نظام گنجوی - عمر خیام - ابوسید ابوالخیر-

**8. Reading and writing Persian-I (General elective)**

Semester	Core Course	Course Title	Credits
5 <sup>th</sup>	PR516 G	Reading and writing Persian-I	Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific Outcomes**

- Students to learn about writings in Persian literature.
- Students to learn about reading cultural stories in Persian literature.
- Students to learn about essay writing in Persian literature.
- To enable the students to understand the trends in reading & writing Persian Literature and enhance their writing skills.

**READING AND WRITING PERSIAN-I****THEORY****(CREDITS: 06)****UNIT - 1st**

- ۱- الفبای فارسی، اسم، ضمیر، مصدر، مضارع، فعل، حرف، صفت، موصوف.
- ۲- مضارع، گذشته، حال و استقبال، ترکیب، توصیفی، ترکیب اضافی.

**UNIT - 2nd**

- انتخاب از آموزش زبان فارسی (آزفا) ازید الله ثمره.
- ۱- درس اول
  - ۲- درس دوم

**UNIT - 3rd**

- انتخاب از آموزش زبان فارسی (آزفا) ازید الله ثمره
- ۱- درس سوم
  - ۲- درس چهارم

**UNIT - 4th**

- انتخاب از آموزش زبان فارسی (آزفا) ازید الله ثمره
- ۱- درس پنجم

**(Tutorials: 02 Credits)**

- ۱- گفتگو در زبان فارسی  
نامه نویسی در زبان فارسی
- ۲- جمله سازی در زبان فارسی  
مضمون نویسی در زبان فارسی-

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### 9. Classical and modern Persian prose (General Elective)

Semester	Core Course	Course Title	Credits
6 <sup>th</sup>	PR616 G	Classical and modern Persian prose	Theory: 04 ; Tutorial: 02 Total: 06

#### Course Specific Outcomes

- Student to learn selected works from Classical Persian prose.
- Students to learn about Persian Maktubat of Mir Syed Ali Hamadani.
- Students to learn about Persian prose writers of Seljok period.
- Students to learn about Contrast and Rhyming used in Persian poetry.
- Students to learn about various figures of speech like Metaphor, Simile, Pun, etc.

#### CLASSICAL AND MODERN PERSIAN PROSE

##### THEORY

(CREDITS: 06)

##### Credit - 1st

۱- کشف امریکا..... (صفحه ۹۲-۲۲)

۲- نفت ..... (صفحه ۹۴ - ۵۴)

##### Credit – 2<sup>nd</sup>

۱- از این دریا از آن در ..... (صفحه ۹۹۱-۹۸۱)

۲- کهن ونو ..... (صفحه ۲۰۱ - ۴۹)

##### Credit – 3<sup>rd</sup>

۱- انتخاب از سیر الملوک (سیاست نامه فصل سوم و چهارم).....

(صفحه ۳۳۲-۲۳۲) (صفحه ۲۴۲-۱۴۲)

۲- انتخاب از مکتوبات حضرت امیر کبیر میر سید علی ہمدانی

(مکتوب اول و دوم) (صفحه ۶۵۲-۳۵۲)

##### Credit – 4<sup>th</sup>

Study of literary history of Seljok period with special reference to eminent Persian

Prose writers like:



عطار - امام غزالی - نظام عروضی سمرقندی - نظام الملک طوسی - ابوالفضل بیہقی -

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**10. Reading and writing Persian II (General elective)**

Semester	Core Course	Course Title	Credits
6 <sup>th</sup>	PR616 G	Reading and writing Persian-II	Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific Outcomes**

- Students to learn about writings in Persian literature.
- Students to learn about reading cultural stories in Persian literature.
- Students to learn about essay writing in Persian literature.
- To enable the students to understand the trends in reading & writing Persian Literature and enhance their writing skills.

**READING AND WRITING PERSIAN-II****THEORY****(CREDITS: 06)****UNIT - 1st**

انتخاب از آموزش زبان فارسی (آزفا) از ید الله ثمره جلد اول

-۱ درس ششم

**UNIT - 2<sup>nd</sup>**

انتخاب از آموزش درس فارسی (آزفا) از ید الله ثمره جلد اول

-۱ درس هفتم

**UNIT - 3<sup>rd</sup>**

انتخاب از آموزش زبان فارسی (آزفا) از یدالله ثمره جلد اول

-۱ درس هشتم

**UNIT - 4<sup>th</sup>**

انتخاب از کتاب درس فارسی جلد اول از شمس الدین احمد

-۱ نام خدا

-۲ فردوسی

-۳ غزل شماره ۳ از ملا محسن فانی

## (Tutorials: 02 Credits)

- ۱- معرف، دربار باصناف زیر-  
غزل، رباعی، مثنوی، قصیده، مرثیه
- ۲- معرف، عناوین زیو-  
رومان نویسی، داستان کوتاه نویسی، نامه نویسی، نمایشنامه نویسی-

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**11. Translation Prescribed Text (Skill Enhancement Course):**

Semester	Core Course	Course Title	Credits
6 <sup>th</sup>	PR617 S	Translation Prescribed Text	Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific outcomes:**

- After the thorough study of this course, it is expected from the students that they may identify the genres of Gazal and Nazm, fable, novel, short story etc. and could comprehend the basic concepts regarding the Persian literature.

**TRANSLATION PRESCRIBED TEXT****THEORY****(CREDITS: 06)****UNIT - 1<sup>st</sup>**

Translation of prescribed text into English or Urdu and exercises:

درس پنجم : از آموزش زبان فارسی، دور بمقدماتی (کتاب اول) از دکتر یدالله چمره:

۱- پسوندبای (بودن) استعمال ضمائر شخصی با پسوندبای (بودن) ضمیر بای ملکی پیوسته، اضافه.

۲- درس ششم صفت برترین- مصدر- ستاک گذشته.

**UNIT - 2<sup>nd</sup>**

درس ششم: از آموزش زبان فارسی ، دوره بمقدماتی (کتاب اول) از دکتر یدالله ثمره.

۱- حال اخباری، استعمال حال برای آینده. بمخوانهای میانجی.

۲- بستن، بودن، گوشنو دتلفنی- مفاعل صریح و مفعول غیر صریح- اسم ضمیر.

**(Tutorial)****UNIT - 1<sup>st</sup>**

- Basic information about the computer knowledge especially Persian typing, browsing of useful Persian websites regarding Persian Language and Literature.
- To watch useful Persian movies dubbed in English or Urdu and *viz a viz*.

**UNIT - 2<sup>nd</sup>**

Translation of unseen English and Urdu passages into Persian.

**Course Structure and distribution of different courses with their credits for**

**B.A. Political Science**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Key Concepts in Political Theory	Core Course	6 credits 4(T)+2(T)
2.	II	Western Political Thought	Core Course	6 credits 4(T)+2(T)
3.	III	International Relations	Core Course	6 credits 4(T)+2(T)
4.	IV	Comparative Government and Politics	Core Course	6 credits 4(T)+2(T)
5.	V	Indian Political System	Discipline Specific Elective-I	6 credits 4(T)+2(T)
6.	VI	Government and Politics of Jammu & Kashmir	Discipline Specific Elective-II	6 credits 4(T)+2(T)

**Course outcomes**

The main objective of the course is to provide a comprehensive understanding of the discipline of political science to the students who join the BA at the undergraduate level in the affiliated colleges' of Kashmir University. The students who join these courses are not necessarily trained in fundamentals of the discipline, as they come from the diverse disciplinary background.

The course aims at making them understand the fundamental concepts, theories, perspectives, and ideological discourses in Political Science. This will enable them to explain and evaluate the functioning of political systems and governments of diverse kinds with their institutions, structures, and ideologies. Building a better society to live in has been a perennial question which all the disciplines of knowledge have pondered over and worked on, including Political Science. Aim of the course is to expose the students to the diverse political philosophies, from the ancient to modern times, and how have they envisioned of and engaged with the issues of rights, liberty, equality, justice, citizenship, constitution, and constitutionalism, etc.

The objective is also to train the students in understanding the public administrative system and public policy science. The course also exposes the students to the interdisciplinary

modules to demonstrate the interconnectedness of the discipline with other subjects and areas which don't form the core of Political Science, yet very much conjoining its boundaries. The objective is also to understand the national interests of India in comprehensive terms and Indian endeavours and response to emerging challenges and issues in a fluid and dynamic global scenario.

The course has been designed in such a way that every student is equipped with certain practical skills which can be used for seeking gainful employment if one exits after completing the graduation. The aim is also to train the students in research design and application of tools and techniques for empirical and normative research.

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**1. Key Concepts in Political Theory (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Key Concepts in Political Theory	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To understand history of political science as discipline and the rationale behind the subject matter.
- Get acquainted with diverse research methodologies in political science.
- Grasp and understand the different perspectives and essentiality of the state.
- Have an understanding of vast political concepts and vast political vocabulary.

**KEY CONCEPTS IN POLITICAL THEORY****THEORY & TUTORIAL****(CREDITS 6)****Unit 1**

1.1 Political Science: Nature and Scope

1.2 What is Politics?

- Politics as Art of Government
- Politics as Public Affair
- Politics as Power

1.3 Approaches to the study of Politics

- Philosophical Tradition
- Empirical Tradition
- Scientific/Behavioural Tradition

**Unit 2**

2.1 State: Evolution and Elements; Difference between State, Civil Society and Nation.

2.2 Perspectives of State: Liberal, Marxist and Anarchist

2.3 Role of State: Minimal State and Social-Democratic State

**Unit 3**

3.1 Liberty: Evolution, Significance and Classification

3.2 Equality: Liberal, Libertarian and Socialist perspective of Equality.

3.3 Justice: Procedural, Distributive, and Gender Justice

**Unit 4**

- 4.1 Democracy: Meaning and Forms—Procedural and Substantive.
- 4.2 Rights: Meaning and Theories of Rights—Natural, Human and Political rights
- 4.3 Power: Meaning and Conceptions:
  - a. Power as Authority
  - b. Power as Exploitation
  - c. Power and Patriarchy

**SUGGESTED READINGS**

- Gauba, O.P; *An Introduction to Political Theory (3rd edition)*, Macmillan, New Delhi, 2009.
- Goodin. Robert E & Hans. Dieter Klingemann(eds); *A New Handbook of Political Science*. London; Oxford University Press, 1996
- H. Laski; *The Grammar of Politics*, London; G. Allen and Unwin Ltd, 1950.
- Heywood, Andrew; *Key Concepts in Politics*, Palgrave—Macmillan, London, 2000.
- Heywood, Andrew; *Politics*, Palgrave—Macmillan, London, 2002.
- Ponton, Geoggrey and Peter Gill; *Introduction to Politics (2nd edition)*, UK: Blackwell,1988

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**2. Western Political Thought (Core Course-II)**

Semester	Core Course	Course Title	Credit
II	CC-II	Western Political Thought	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- Read about the chronology of political philosophers from Socrates to Jhon rawls.
- Have an understanding of different themes under the discussion of western political thinkers.
- Know the significance of historical approach in political theory.
- Know about classics in western political philosophy.

**WESTERN POLITICAL THOUGHT****THEORY & TUTORIAL****(CREDITS 6)****Unit 1**

## A) Introduction

1.1 Political Thought: Meaning and Significance

1.2 Difference between Political Thought and Political Theory

1.3 Salient Features of Western Political Thought

## B) Plato

1.4 Ideal State: Concept and Features

1.5 Theory of Justice

1.6 Idea of Philosopher King

**Unit 2**

## A) Aristotle

2.1 Concept on Revolution

2.2 Views on Slavery

2.3 Classification of Government

## B) Machiavelli

2.4 Views on State Craft

2.5 Machiavelli's Secularism

**Unit 3**

## A) Thomas Hobbes

3.1 State of Nature and Social Contract

## 3.2 Theory of Sovereignty

## B) John Locke

## 3.3 Social Contract

## 3.4 Concept of Natural Rights

## 3.5 Concept of Constitutional Government

## C) J. J. Rousseau

## 3.6 Views on State of Nature

## 3.7 Concept of General Will

**Unit 4**

## A) Jeremy Bentham

## 4.1 Bentham as Utilitarian

## B) John Stuart Mill

## 4.2 Concept of Liberty

## 4.3 Representative Government

## C) Karl Marx

## 4.4 Concept of Class and State

## 4.5 Concept of Historical Materialism

**SUGGESTED READINGS**

- Barker, Ernest; *Greek Political Theory—Plato and his Predecessors*, B.I. Publications, New Delhi, 1964.
- Boucher, David and Paul Kelly (eds); *Political Thinkers: From Socrates to the Present*, London, Oxford, 2003
- Maxey, Chester; *Political Philosophies*, Macmillan, New York, 1948
- Mukherjee, Subrata & S. Ramaswamy; *A History of Political Thought—From Plato to Marx*, PHI, New Delhi, 2004.
- Nelson, Brain; *Western Political Thought*, Pearson, London, 2008.
- Jha, Shefali; *Western Political Thought*, Pearson Publications, New Delhi.
- Popper, Karl; *Open Society and its Enemies (2 Vols)*, 1954
- Sabine, George; *A History of Political Theory*
- Wayper, C.L; *Political Thought*

### 3. Interational Relations (Core Course-III)

Semester	Core Course	Course Title	Credit
III	CC-III	International Relations	Theory: 04 ; Tutorial: 02 Total: 06

#### Course specific outcomes

- To know about the working of international political structures.
- To have an understanding of divergent theoretical perspectives on international relations.
- Know about history of interstate relations.
- Know about foreign policy and the factors that influence its formulation.

### INTERNATIONAL RELATIONS

#### THEORY & TUTORIAL

(CREDITS 6)

#### Unit 1

- 1.1 Nature and Scope of International Relations.
- 1.2 Approaches to the Study of International Relations:
  - a) Liberalism
  - b) Realism
  - c) System Approach

#### Unit 2

- 2.1 National Power: Concept and Elements
- 2.2 National Interest: Meaning and Nature: National Interest and Foreign Policy —
- 2.3. Theory of Imperialism

#### Unit 3

- 3.1 Cold War, Détente and New Cold War
- 3.2. End of Cold War and Aftermath
- 3.3. Non-Alignment Movement: Development, Role and Contemporary
- 3.4 North-South Divide and South-South Co-Operation

#### Unit 4

- 4.1 UNO—Structure, Functions and Reforms
- 4.2 Regional Cooperation: European Union and SAARC.
- 4.3 Globalization
- 4.4 Human Security, Human Rights, Terrorism and Environment

**SUGGESTED READINGS**

- John Bayles, Steve Smith, Patricia Owen; The Globalization of World Politics; An Introduction to international Relations, (Oxford University Press), Fourth Edition, 2008.
- Joseph S. Nye, Jr.; Understanding International Conflicts: An Introduction to Theory and History, (Pearson, Education), Sixth Edition-2008.
- Joshua S. Gold Stein; International Relations, Prentice Hall of India, Private Limited, New Delhi, 2002.
- Paul R. Viltti, Mark. V. Kauppi: International Relations and World Politics; (Security, Economy, Identity, (Pearson, Education), Third Edition-2007.
- Peu Ghosh; international Relations, PHI, New Delhi, 2009.
- Robert Jackson & George Sorensen; /introduction to International Relations; (Theories and Approaches) (Oxford University Press) Third Edition 2008.

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#### 4. Comparative Government and Politics (Core Course-IV)

Semester	Core Course	Course Title	Credit
IV	CC-IV	Comparative Government and Politics	Theory: 04; Tutorial: 02 Total: 06

#### Course specific outcomes

- To understand the diverse perspectives of politics.
- To know about the different types of regimes and governments.
- To have an understanding of electoral politics and different types of electoral systems.
- Understand the different dimensions of security.

### COMPARATIVE GOVERNMENT AND POLITICS

#### THEORY & TUTORIAL

(CREDITS 6)

#### Unit 1 Introduction and Approaches

- 1.1 Comparative Politics: Meaning, Nature and Scope
- 1.2 Political System: Meaning and Approaches—System's Theory and Structural-Functional Approach.
- 1.3 Constitutionalism.
- 1.4 Behaviouralism and its Post-Behavioural Critique

#### Unit 2 Key Concepts and Processes

- 2.1 Political Socialization: Meaning and Agencies
- 2.2 Political Culture: Meaning and Types
- 2.3 Political Participation: Meanings and Determinants of Political Participation, Political Development and Political Modernization

#### Unit 3 Political Institutions and Actors

- 3.1 Electoral Systems- —first-past-the Post system, Proportional representation.
- 3.2 Party System: Classification: and Party Systems of China. US and India.
- 3.3 Interest Groups; Meaning, Classification and Functions,
- 3.4 Social Movements: Meaning and Nature: Chipko and Narmada Bachaw Andolan

#### Unit 4 Government Systems

- 4.1 Federalism with special reference to its working in USA and India.
- 4.2 Presidential form of Government; Features and Working with reference to USA,
- 4.3 Parliamentary System of Government; Features and Working with reference to India.

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#### 4.4 Totalitarian Government: Features and Working with reference to China.

##### **SUGGESTED READINGS**

- Almond & Others: (Comparative Politics Today—A World View, Pearson New Delhi
- Almond, G. A & S. Verba; the Civic Culture: Political Attitudes and Democracy in Five Nations, Princeton NJ, Princeton University Press, 1963.
- Bara, Judith and Mauk Pennington; Comparative Politics, Sage. New Delhi-2009.
- Goodin, Robert E & Hans. Dieter Klingemann (eds); A New Handbook of Political Science, London; Oxford University Press, 1996.
- Green, Decenber & Laura Luehramnn; Comparative Politics of the Third World Linking Concepts and Cases, Viva Books, New Delhi, 2004.
- Haynes, Jeffrey: Comparative Politics in a Globalizing World, UK. Polity Press, 2005.
- Heywood. Andrew: Politics, Palgrave—Macmillan, London, 2002.
- R. Hague and M. Harrop; Comparative Government and Politics: An Introduction. Palgrave, New York, 2001.
- Ray S. N: Comparative Politics, Prentice Hall of India, New Delhi.

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### 5. Indian Political System (Discipline Specific Elective-I)

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Indian Political System	Theory: 04; Tutorial: 02 Total: 06

#### Course specific outcomes

- Learn about diverse perspectives of Indian state.
- Get acquainted with freedom Movement of India and historical background of making of the Indian constitution.
- Have an understanding of structure of government of India at all the three tiers: Centre-State-Local.
- Know about the diverse social movements that were launched in India over the period of time.
- Have an understanding of economic policies that were taken in the post-colonial India.

### INDIAN POLITICAL SYSTEM

#### THEORY & TUTORIAL

(CREDITS 6)

#### Unit 1 An Introduction to Indian Government

- 1.1 Constituent Assembly: An Overview
- 1.2 Features of India's Constitution.
- 1.3 Ideological basis of Indian Constitution: Democracy and Secularism.
- 1.4 Preamble, Fundamental Rights and Directive principles of state Policy.

#### Unit 2 Union Government

- 2.1 Union Legislature: Parliament: Composition and Powers.
- 2.2 Union Executive:
  - a) President—Election, Position and Powers.
  - b) Prime Minister and Council of Ministers—Position and Role within Parliamentary System.
- 2.3 Supreme Court: Composition and Jurisdiction.
- 2.4 Election Commission of India: Functions and Role.

#### Unit 3 Federalism

- 3.1 Indian Federalism: Nature and Emerging Issues.
- 3.2 Centre-State Relations: Legislative, Financial and Administrative,

3.3 Decentralization and Institutions of Local Self Government with special reference to 73 and 74" Amendment Acts.

#### **Unit 4 Political Processes and Issues**

4.1 Changing Nature of Party System in India: Congress System to Competitive Party System.

4.2 Coalition Politics: Emergence and Challenges.

4.3 Political Polarization: Caste and Communalism.

#### **SUGGESTED READINGS**

- Bidyut Chakrabarty & R. K. Pandey: Indian Government and Politics, Sage, New Delhi, 2010.
- D.D. Basu; An Introduction to the Constitution of India, Prentice Hall, New Delhi, 1994.
- G. Austin: The Indian Constitution: Corner Stone of a Nation, Oxford University Press, 1996.
- Manoranjan. Mohanty (ed.); Caste, Class and Gender, Sage, New Delhi, 2000.
- N.G. Jayal (ed.); Democracy in India, Oxford University Press, Delhi, 2000.
- Partha, Chatterjee (ed); State and Politics in India, Oxford University Press, Delhi, 1998.
- Paul Brass, Politics of India Since Independence, Orient Longman, Hyderabad, 1990.
- Rajeev Bhargava (ed); Secularism and Its Critics, Oxford University Press, Delhi, 1999.
- Rajini Kothari: Politics in India, Orient Longman, New Delhi, 1970



**6. Government and Politics of Jammu & Kashmir (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Government and Politics of Jammu & Kashmir	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To learn about the history of formation of J&K.
- To have an understanding of the conditions leading to the accession of J&K with Union of India.
- To learn about the features of J&K constitution.
- To know about the significance of Article 370 in Jammu & Kashmir's special status with in Indian Union.

**GOVERNMENT AND POLITICS OF JAMMU & KASHMIR****THEORY & TUTORIAL****(CREDITS 6)****Unit 1**

- 1.1 Historical Background of State
- 1.2 Political Awakening in Kashmir and 1931 uprising
- 1.3 Formation and Ideology of Muslim Conference
- 1.4 Emergence and Ideology of National Conference

**Unit 2**

- 2.1 Naya Kashmir Manifesto of 1944 and its Politico-ideological Dimensions.
- 2.2 Independence Act, Partition and the Stand Still Agreement.
- 2.4 Interim Government: Formation and Role
- 2.5 Land Reforms (1948-51)

**Unit 3**

- 3.1. Special Status for J&K under Article 370 of Indian Constitution.
- 3.2. Delhi Agreement (1952) and its significance
- 3.4 Formation of Jammu and Kashmir Constitution and its Special Features.
- 3.5. Erosion of Special Status.

**Unit 4**

- 4.1. Governor—Powers and Position
- 4.2. Chief Minister—Powers and Position

4.3 State Legislature—Composition and Powers

4.4. Party System in J&K: Dynamics and Changing Nature: Emergence of Coalition Governments.

### SUGGESTED READINGS

- A S Anand; The Constitution of Jammu and Kashmir (5<sup>th</sup> edition) 2006.
- Balbir Singh, State Politics in India, Macmillan, New Delhi, 1984.
- Balraj Puri; Jammu Kashmir—Triumph and Tragedy of Indian Federalism.
- Balraj Puri; Simmering Volcano.
- G. M. Wani; Kashmir: Identity, Autonomy and Self Rule, Apple Books, Srinagar, 2011.
- Ravinderjit Kour; Political Awakening in Kashmir; Ashish Publication corporation New Delhi 1996.
- G. H. Khan; Freedom Movement in Kashmir, Gulshan Books, Srinagar, 2010.
- M. K. Tengh; Kashmir Article 370, Anmol, New Delhi, 1990.
- M. Y. Ganaie; Struggle for Freedom in Kashmir (1931-1939)
- M. Y. Saraf; Kashmiris Fight for Freedom (2 vols) Feroze Publications: Lahore.
- Mridu Rai; Hindu Ruler, Muslim Subject, Orient Longman, 2004
- Narender Singh; Political Awakening in Kashmir.
- P. N. Bazaz; History of Freedom Struggle in Kashmir, Gulshan Books, Srinagar, 2005.
- P.S. Verma; Jammu and Kashmir at the Political Crossroads, Vikas, New Delhi, 1994.
- Prof. Asifa Jan. Naya Kashmir; An Appraisal, Zeba Publications. Srinagar, 2004.
- Sumatra Bose; Challenge in Kashmir, Sage, New Delhi, 1997.
- Sumatra Bose; Kashmir; Roots of Conflict, Paths to Peace, Vistar Publications, New Delhi 2003.

### Course Structure and distribution of different courses with their credits for B.A

#### Sociology

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Introduction to Sociology	Core Course	6 credits 4(T)+2(T)
2.	II	Sociological Thought	Core Course	6 credits 4(T)+2(T)
3.	III	Indian Society: Structure and Change	Core Course	6 credits 4(T)+2(T)
4.	III	Techniques in Social Research	Skill Enhancement Course	4 credits 4(T)
5.	IV	Methodology of Social Research	Core Course	6 credits 4(T)+2(T)
6.	IV	Gender Sensitization	Skill Enhancement Course	4 credits 4(T)
7.	V	Marriage Family Descent and Kinship	Discipline Specific Elective-I	6 credits 4(T)+2(T)
8.	V	Sociology: Social Movements	Discipline Specific Elective-II	6 credits 4(T)+2(T)
9.	V	Sociology of Development	Skill Enhancement Course	4 credits 2(T)+2(T)
10.	VI	Social Stratification	Discipline Specific Elective-I	6 credits 4(T)+2(T)
11.	VI	Sociology: Religion and Society	Discipline Specific Elective-I	6 credits 4(T)+2(T)
12.	VI	Sociology of Crime	Skill Enhancement Course	4 credits 2(T)+2(T)

#### Course outcomes

The course is meant to introduce the learners to the discipline of sociology. Besides acquainting the students with the evolution of the discipline, it also intends to familiarize the learners with the fundamental concepts and concerns of sociology.

The course is designed to introduce the readers to the classical sociological thinkers whose contributions have laid the foundation of Sociology.

The course focuses on the evolution and composition of the Indian society, basic institutions, interpretation of caste and class in the Indian context, change in continuity besides the contemporary issues and challenges.

The course seeks to introduce the students to methodology of social research. Besides acquainting the students with fundamentals of Research, the course also intends to unravel the various complexities and philosophical underpinnings of research.

The course is intended to familiarize the students with the basic institutions of Marriage, Family and kinship in society. The course is fundamentally designed to help the students understand the importance and dynamics of the aforementioned basic institutions.

The course is designed to acquaint the learners with the concept and nature of social movements. The course seeks to familiarize the learners with major and historic social movements in India.

The course is designed to help the students to conceptualize the idea of social stratification and social mobility. The course also intends to familiarize the students with the major sociological perspectives of social movements.

The course seeks to develop among the students a fundamental understanding of the concept and evolution religion besides its impact on social behaviour. In terms of its content, the course focuses upon the primitive theories of religion and theoretical approaches in order to substantiate the student learning.

The course is designed to acquaint the learners with the concept, theories and changing scenario of crime in society in the wake of changing social order.

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**1. Introduction to Sociology (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Introduction to Sociology	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- Acquaint the students with the evolution of the subject.
- Develop among the learners fundamental clarity about the subject.
- Unravel the fundamental concerns of the discipline.
- The learners are expected to be well versed with the emergence and domain of the sociology.
- The learners are also expected to carry a very good understanding of the fundamental concepts and schools of thought in sociology.

**INTRODUCTION TO SOCIOLOGY****THEORY****(CREDITS 4)****Unit 1**

Nature of Sociology; a. Nature and Subject matter; b. Emergence and Development of Sociology: Enlightenment, French Revolution and Industrial Revolution c. Relationship of Sociology with other Social Sciences: Philosophy and Anthropology

**Unit 2**

Schools of Thought; a. Formalistic School; b. Synthetic School; c. Comparison of two schools

**Unit 3**

Basic Concepts; a. Society, Community, Association and Institution; b. Social Groups: Primary, Secondary and Reference Group; c. Role and Status; Norms and Values, Folkways and Mores

**Unit 4**

Social Processes; a. Social Change; b. Socialization; c. Social Control

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

1. a) Enlightenment; b) Industrial Revolution; c) Social Change in Kashmir Society

2. a) Society; b) French Revolution; c) Pattern of Socialization of children in Kashmir Society

### **SUGGESTED READINGS**

- Giddens, A., 2006 (5<sup>th</sup> ed.), Sociology, London: Oxford University Press.
- Bierstedt, R., 1974, The Social Order, New York: McGraw Hill.
- Horton, P.B. and C.L. Hunt, 1985, Sociology, New York: McGraw Hill.
- Bottomore, T. B. 1972. Sociology: A guide to problems and literature. Bombay: George Allen and Unwin (India).
- Harlambos, M. 1998. Sociology: Themes and perspectives. New Delhi: Oxford University Press.
- Inkeles, Alex. 1987. What is Sociology? New Delhi: Prentice-Hall of India.
- Johnson, Harry M. 1995. Sociology: A systematic introduction. New Delhi: Allied Publishers.

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**2. Sociological Thought (Core Course-II)**

Semester	Core Course	Course Title	Credit
II	CC-II	Sociological Thought	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To acquaint the learners with the classical social thinkers/founding fathers of sociology.
- To lay bare the contributions of the classical sociologists.
- To develop among the learners a solid theoretical foundation.
- The learners shall possess a sound theoretical base.
- The learners are also expected to identify the contributions of the major classical thinkers of sociology and their relevance in understanding the social behaviour.

**SOCIOLOGICAL THOUGHT****THEORY****(CREDITS 4)****Unit 1**

August Comte: a. Law of Three Stages; b. Positivism; c. Social Statics and Dynamics

**Unit 2**

Emile Durkheim: a. Social Fact; b. Suicide; c. Division of Labour

**Unit 3**

Karl Marx: a. Historical Materialism; b. Alienation; c. Class Struggle

**Unit 4**

Max Weber: a. Social Action; b. Bureaucracy; c. Protestant Ethic and the Spirit of Capitalism

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

1. a) Pattern of Suicides in Kashmir; b) Historical Materialism; c) Positivism
2. a) Religion and Economy in Kashmir b) Alienation c) Protestant Ethic and the Spirit of Capitalism

**SUGGESTED READINGS**

- Marx, K. and Friedrich Engels. 2002. The Communist Manifesto. Harmondsworth: Penguin.
- Calhoun, J. Craig, 2007. Classical Sociological Theory. 2<sup>nd</sup> Edition Blackwell.
- Jayapalan, N. 2001. Sociological Theories. Atlantic Publisher.
- Durkheim, E. 1958. The Rules of Sociological Method. Glencoe: Free Press.
- Jones R.A. 1986, Emile Durkheim: An Introduction to Four Major Works. London: Sage.
- Calhoun, J. Craig, 2007. Classical Sociological Theory 2<sup>nd</sup> Edition. Blackwell.
- Jayapalan, N. 2001. Sociological Theories. Atlantic Publisher.
- Abraham, Francis. 2011. Sociological Thought. New Delhi: Macmillan Publishers
- Aron, Raymond. 1967 (1982 reprint). Main currents in sociological thought (2 volumes). Harmondsworth, Middlesex: Penguin Books.
- Coser, Lewis A. 1979. Masters of sociological thought. New York: Harcourt Brace Jovanovich.

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**3. Indian Society: Structure and Change (Core Course-III)**

Semester	Core Course	Course Title	Credit
III	CC-III	Indian Society: Structure and Change	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To facilitate a deeper understanding of the Indian social structure among the learners.
- To familiarize the learners with the tradition of change in continuity in India.
- To provide the necessary knowledge to the learners about the various contemporary issues and challenges faced by the Indian Society.
- The learners shall be able to carry a fundamental understanding of the structure of Indian society.
- The students are particularly expected to understand the dynamics of the basic social institutions in India and the impact of various Internal and external factors in governing the change in Indian traditional structure.

**INDIAN SOCIETY: STRUCTURE AND CHANGE****THEORY****(CREDITS 4)****Unit 1**

Conceptualizing Indian Society: a. Evolution of Indian Society; b. Composition of Indian Society: Linguistic and Religious; c. Unity in Diversity

**Unit 2**

Indian Social Institutions: a. Family; b. Marriage and Kinship; c. Caste and Class

**Unit 3**

Social change in India: a. Westernization; b. Modernization; c. Sanskritization

**Unit 4**

Contemporary issues and challenges in Indian Society: a. Communalism; b. Corruption; c. Poverty

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

1. a. Pattern of Modernization in Indian Society; b. Convergence of Caste and Class in Indian Society; c. Diversity in Indian Society
2. a. Corruption as an issue in Indian Society; b. Pattern of Westernization in Indian Society; c. Poverty as a challenge in Indian Society

### SUGGESTED READINGS

- Singer, M. and Cohen, B.S. (eds.) (1968). Structure and Change in Indian Society, Chicago: Aldine Pub. Co.
- Sharma, K.L. (2011). Indian Social Structure and Change, New Delhi: Rawat Publications.
- Pathak, Bindeshwar (eds.) (1998). Continuity and Change in Indian Society, New Delhi: Concept Publishing Company.
- Das, Veena. (2004). Handbook of Indian Sociology, New Delhi: OUP.
- Singh, Yogendra. (2012). Culture Change in India, New Delhi: Rawat Publications
- Singh, Yogendra. (2009). Social Change in India: Crisis and Resilience, New Delhi: Har-Anand Publications.
- Srinivas, M.N. (2009). Social Change in Modern India, New Delhi: Orient Black Swan.
- Vanaik, A. and Bhargava, R. (2010). Understanding Contemporary India: Critical Perspectives, New Delhi: Orient BlackSwan.
- Baviskar, B.S. and Patel, T. (2010). Understanding Indian Society: Past and Present, New Delhi: Orient BlackSwan.
- Hasnain, N. (2004). Indian Society and Culture: Continuity and Change, New Delhi: Jawahar Publishers and Distributors.
- Singh, K.S. (1992). The People of India: An Introduction, Calcutta: Seagull Books.
- Majumdar and Madan. (1966). An Introduction to Social Anthropology, Bombay: Sia Publishing House.
- Mandelbaum, D.G. (1972). Society in India, Bombay: Popular Prakashan.

**4. Techniques in Social Research (Skill Enhancement Course -I)**

Semester	Core Course	Course Title	Credit
III	SEC-I	Techniques in Social Research	Theory: 04 Total: 04

**Course specific outcomes**

- This course aims to enhance the skills of students to understand and use techniques employed by Social scientists to investigate social phenomena.
- With emphasis on formulating research design, methods of data collection, and data analysis, it will provide students with some elementary knowledge on how to conduct both, quantitative and qualitative research.
- The focus is on understanding through suggested exercises.

**TECHNIQUES IN SOCIAL RESEARCH****THEORY****(CREDITS 4)****Unit 1 Questionnaire as a research technique**

- Concept and Types
- Formulation of Questionnaire
- Administration of Questionnaire
- Advantage and Disadvantages of Questionnaire

**Unit 2 Interview as a research Technique**

- Concept and Types
- Interview schedule
- Interview Guide
- Advantages and Disadvantages of Interview Tool

**Unit 3 Observation**

- Concept and Features
- Types of Observation
- Advantages and Disadvantages of Observation

**Unit 4 Case Study**

- Concept and Features
- Types of Case Study
- Advantages and Disadvantages

**SUGGESTED READINGS**

- Ahuja, Ram. 2001. Research Methods. New Delhi: Rawat Publications
- Bose, Pradip Kumar. 1995. Research Methodology. New Delhi: Indian Council of Social Science Research
- Bryman, Alan. 1988. Quality and Quantity in Social Research. London: Unwin Hyman
- Kothari, C.R. 1989. Research Methodology: Methods and Techniques, Bangalore, Wile

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### 5. Methodology of Social Research (Core Course-IV)

Semester	Core Course	Course Title	Credit
IV	CC-IV	Methodology of Social Research	Theory: 04 ; Tutorial: 02 Total: 06

#### Course specific outcomes

- To enable the students to develop fundamental familiarity with the research.
- To familiarize them with the various tools and techniques of research.
- To enable the students to understand the essence of the research.
- Upon completing the course, the students are expected to have a good command upon the fundamentals of research.
- The students are also expected to be able to make use of basic statistical tools in analysis of the research data.

### METHODOLOGY OF SOCIAL RESEARCH

#### THEORY

(CREDITS 4)

#### Unit 1

Introduction: a. Meaning of Social Research; b. Nature and Scope of Social Research; c. Types of Social Research

#### Unit 2

Research Design: a. Meaning; b. Types of Research Design: Descriptive, Explanatory and Exploratory; c. Significance of Research Design

#### Unit 3

Sampling: a. Meaning and Significance; b. Types of Sampling: Probability and Non-Probability Sampling; c. Advantages and Disadvantages of Sampling

#### Unit 4

Tools and Techniques of Social Research: a. Questionnaire; b. Interview; c. Observation

#### TUTORIAL

(CREDITS 2)

Project work/Presentation/Debates/Term paper

1. a. Nature and Significance of Social Science Research in Contemporary times; b. Significance of Research Design; c. Sampling as a technique in Social Research

2. a. Formulation and administration of Interview Schedule; b. Participant observation as a method in Social Research; c. Qualitative vs Quantitative Research

### **SUGGESTED READINGS**

- Ahuja, Ram. 2001. Research Methods. New Delhi: Rawat Publications
- Bose, Pradip Kumar. 1995. Research Methodology. New Delhi: Indian Council of Social Science Research
- Bryman, Alan. 1988. Quality and Quantity in Social Research. London: Unwin Hyman
- Kothari, C.R. 1989. Research Methodology: Methods and Techniques, Bangalore, Wiley Eastern.
- Young, P.V. 1988. Scientific Social Surveys and Research. New Delhi: Prentice Hall.

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**6. Gender Sensitization (Skill Enhancement Course -II)**

Semester	Core Course	Course Title	Credit
IV	SEC-II	Gender Sensitization	Theory: 04 Total: 04

**Course specific outcomes**

- This course will sensitize students to issues related to gender and related concepts.
- It will provide them with the tools and skills to develop and integrate a gendered perspective in work and life.

**GENDER SENSITIZATION****THEORY****(CREDITS 4)****Unit 1 Introducing Sex and Gender**

- Concept of Sex and gender
- Social construction of gender

**Unit 2 Basic concepts**

- Gender Socialization
- Gender role
- Gender Inequality

**Unit 3 Gender in Social Institution**

- Family
- Caste
- Class

**Unit 4 Violence against women**

- Sexual Harassment
- Domestic Violence
- Right to property in Indian Constitution

**SUGGESTED READINGS**

- Abbott, et.al. 2005. Introduction to Sociology: A Feminist Perspective, Routledge: London
- Holmes, M. 2007. What is Gender? Sociological Approaches, Sage Publication: New Delhi
- Wharton, A.S. 2005 The Sociology of Gender: An Introduction to Theory and Research, Blackwell Publications: Oxford

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- Philcher, J and Whelehan, I. 2004. Fifty Key Concepts in Gender Studies, Sage Publications: New Delhi
  - Jones, E.A. and Olson, G.A. 1991. The Gender Reader, Allyn and Bacon: USA
  - Ardener, E. 1975. “Belief and the Problem of Women” and “The Problem Revisited”, in S. Ardener (ed.), Perceiving Women, London: Malaby Press.
  - Barrett, M. 1980. Women’s Oppression Today, London: Verso. (Chapters 1 to 4, and 6).
  - Boserup, E. 1974. Women’s Role in Economic Development, New York: St. Martin’s Press.
  - Douglas. M. 1970. Purity and Danger, Harmondsworth: Penguin.
  - Engels, F.1972. The Origin of the Family, Private Property and, the State, London:
  - Lawrence and Wishart. Hershman, P. 1977. “Virgin and Mother” in I.M. Lewis (ed.). Symbols and Sentiments: Cross-Culture Studies in Symbolism, London: Academic Press.
  - Hirschon, R. 1984 “Introduction: Property, Power and Gender Relations” in R. Hirschon (ed.). Women and Property. Women as Property, Beckenham: Croom Helm.
  - Jaggar, A. 1983. Feminist Politics and Human Nature, Brighton: The Harvester Press.

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**7. Marriage Family Descent and Kinship (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Marriage Family Descent and Kinship	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To conceptualize the basic institutions of Marriage, Family and Kinship.
- To understand the relevance of these institutions in society.
- To understand the underlying dynamics (structural/functional changes) of these institutions in society.
- The students are expected to possess a fundamental knowledge about the structure and functioning of the basic institutions of the Marriage, Family and Kinship.
- The students are also expected to be well acquainted with the all-round changes that have taken place in the structure and functioning of these institutions over a period of time.

**MARRIAGE FAMILY DESCENT AND KINSHIP****THEORY****(CREDITS 4)****Unit 1**

Basic Concepts

Descent and Lineage

Phratry, Moiety and Kindred

Clan and Tribe

**Unit 2**

Family

Meaning and Significance

Types of Family

Changes in the institution of Family

**Unit 3**

Marriage

Meaning and Significance

Types of Marriage

Changes in the institution of Marriage

**Unit 4**

Kinship  
Types of Kin's  
Kinship Usages  
Kinship Terminology: Classificatory and Descriptive

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

1. a. Changing patterns of Family in Kashmir Society; b. Classificatory System of Kinship; c. Empty Nest Syndrome
2. a. Rising rate of Divorce; b. Kinship Usages in Kashmir Society; c. Late Marriage in Kashmir

**SUGGESTED READINGS**

- Ahuja, Ram 2011, Society in India: Concepts, Theories, and Recent Trends. Jaipur: Ruwat Publications
- BushanVidhya and Sachdev, D. R. 2012. Fundamental of sociology. New Delhi: Pearson
- Fox, Robin, 1967. Kinship and Marriage: An Anthropological Perspective. Harmondsworth: Penguin.
- Harlambos, M. 1998, Sociology: Themes and perspectives. New Delhi: Oxford University Press.
- Shah A. M. 1998 The Family in India: Critical Essay New Delhi: Orient Longman.

**8. Sociology: Social Movements (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-II	Sociology: Social Movements	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- Understand the sociology of social movements.
- Develop an Understanding of the major theoretical perspectives of the social movements.
- Understand the nature and impact of social movements in India.
- Acquaint themselves with the new and emerging social in the wake of all-round social changes in India.
- The learners shall be able to understand the meaning and nature of social movements.

**SOCIOLOGY: SOCIAL MOVEMENTS****THEORY****(CREDITS 4)****Unit 1 Introduction**

Social Movement: Definition and Characteristics  
Types of Social Movements  
Stages of Social Movement

**Unit 2 Theories of Social Movements**

Relative Deprivation Theory  
Conflict Theory  
Structural-Strain Theory

**Unit 3 Social Movements in India**

Tribal Movements: Santhals and Gonds  
Peasant Movements: Telangana Movement and Naxalbari Movement  
Social Reform Movement: Aligarh Movement and Arya Samaj

**Unit 4 New Social Movements**

Dalit Movements  
Chipko Movement  
Feminist Movement

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

1. a. Dynamics of Social Movements; b. Structural Strain Theory; c. Feminist Movement
2. a. Relative Deprivation Theory; b. Santhal Insurrection; c. Dalit Movement

**SUGGESTED READINGS**

- Robin Cohen & Shirin M. Rat, (2000). Global Social Movements, London, NY: Athlone Press.
- MS A. Rao (1979), Social Movements in India. New Delhi: Manohar Publications
- Paul Wilkinsons (1971). Social Movements, London: Pall Mali.
- Rudolf Heberle and Jaseph, Gusfield (1968). Social Movements. International Encyclopedia of Social Science. Vol. 14 New York
- Oommen, T. K. (1972). Charisma, Stability and Change: An Analysis of Bhoodan Gramdan Movement in India. New Delhi Thompson Press.
- Oommen, T. K (1977). Sociological issues in the analysis of Social Movements in Independent India: Sociological Bulletin 26(1): 14-37.
- P. N. Mukherjee. Social Movements and Social Change: Towards a Conceptual Clarification and Theoretical Frame Work. Sociological Bulletin. 26(1): 38-59.
- Ghansvam Shah (2004), Social Movement in India: A review of literature. New Delhi: Sage Publishers
- A.K. Mukhopadhaya (1977). Political Sociology. Calcutta: K. P. Bagchi and Company

**9. Sociology of Development (Skill Enhancement Course -III)**

Semester	Core Course	Course Title	Credit
V	SEC-III	Sociology of Development	Theory: 02; Tutorial: 02 Total: 04

**Course specific outcomes**

- The course intends to acquaint the learners with the fundamental concepts and impact of development in India.
- The course focuses on major perspectives of development besides unravelling the major models of development in vogue at the national and global levels.
- To conceptualize the notion of development.
- To understand the changing contours of development.
- To acquaint themselves the major perspectives of development.
- To familiarize themselves with the national and international experience of development and developmental models in vogue.

**SOCIOLOGY OF DEVELOPMENT****THEORY****(CREDITS 2)****Unit 1 Introduction**

- Concept of Development
- Changing conception of Development: Social Development, Human Development and Sustainable Development

**Unit 2 Models of Development**

- Capitalist
- Socialist
- Gandhian

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

- Participatory Research
- Report Writing

**SUGGESTED READINGS**

- Appadurai, Arjun 1997, Modernity at Large: Cultural Dimensions of Globalization, New Delhi: GUP.
- Amin, Samir 1979. Unequal Development. New Delhi: OUP
- Drèze, Jean and Amartya Sen 1996. India: Economic Development and Social Opportunity. New Delhi: OUP.
- Harrison, D. 1989. The Sociology of Modernization and Development. New Delhi: Sage.
- Haq, Mahbub ul.199T Reflections on Human Development. New Delhi: OUP.
- UNDP. 1997. Human Development Report. New York: OUP

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**10. Social Stratification (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-I	Social Stratification	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To understand the fundamental aspects of social stratification and social mobility.
- To understand the determinants of social stratification and social mobility in India.
- To understand the impact of the social stratification and social mobility on the overall functioning of the society.
- Upon completing the course, the students are expected to be well familiar with the concept, types and impact of social stratification and social mobility.
- The students shall be particularly expected to have a deep understanding of the factors leading to and also Impeding the social mobility in India.

**SOCIAL STRATIFICATION****THEORY****(CREDITS 4)****Unit 1 Social Stratification**

Concept and Nature

Forms of Stratification

Ajlafization and Ashrafization

**Unit 2 Perspectives on Social Stratification**

Functionalist Perspective

Conflict Perspective

Weberian Perspective

**Unit 3 Social Stratification and Issues**

Social Stratification and Social Change

Caste and Class Stratification

Caste and Politics

**Unit 4 Social Mobility in Indian Society**

Modernization

Sanskritization

Islamization

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

1. a. Social Stratification in Kashmir Society; b. Social Stratification and Social Change; c. Social Mobility
2. a. Islamization in India; b. Caste System in Kashmir; c. Davis-Moore Thesis of Social Stratification

**SUGGESTED READINGS**

- Bataille, A. Inequality among Men. Delhi, Oxford University Press, 1977.
- Bataille, A. Sociology Inequality Penguin Books, 1969.
- Bataille, A. Caste Old and New Essay in Social Structure.
- Bataille, A. the Antimonies of Society Delhi: Oxford University Press, 2002.
- Bataille, A. Structure and Social Stratification. Oxford University Press, 1983.
- Bataille, A., Studies in Agrarian Social Structure. Oxford University Press, 1983.
- Haralanihos, M., Sociology Themes and Perspective. Oxford University Press, 1992.
- Bendix, R. and Lipset S. M. Class Status and Power. 2<sup>nd</sup> (ed) London. Routledge, 1974.
- Tumin, M. Readings on Stratification Prentice Hall, 1978.
- Owen Carol; Social Stratification. Routledge and Kagan Paul Ltd. London.
- Singh Vogendra; Social Stratification and Change in India. New Delhi. Manohar Publication, 1977.
- Bottomore, T. B. Elite and Society, Penguin Books. Britain, 1968.
- Srinivas, M.N. Caste in Modern Indian & Other Essays, New Delhi. Asia Publishing House, 1964.
- Snnivas, M.N. Caste: Its Twentieth Century Avatar. New Delhi, Viking, 1996.
- Gupta Dipankas; Social Stratification New Delhi. Oxford University Press, 1991.
- Sharma, K. L.: Social Stratification in India. New Delhi. Manohar. 1986
- Lisenstadt, S. N. Social Differentiation and Stratification, London. Scott. Foresman and Co. 1971.



**11. Sociology: Religion and Society (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Sociology: Religion and Society	Theory: 04; Tutorial: 02 Total: 06

**Course specific outcomes**

- To enable the students to understand the social connotations of religion.
- To familiarize the students with the various origin theories of religion besides the major sociological approaches to the study of religion.
- To enable the students to analyze the impact of religion on the social behaviour.
- The students are expected to possess a very good conceptual clarity about the religion, its evolution and impact on social behaviour.
- The students are also expected to be well acquainted with the fundamental sociological approaches to the study of religion.

**SOCIOLOGY: RELIGION AND SOCIETY****THEORY****(CREDITS 4)****Unit 1 Introduction**

Nature, Significance and Evolution  
 Magic and Science  
 Sacred and Profane

**Unit 2 Forms of Religion**

Animism  
 Naturism  
 Totemism

**Unit 3 Approaches to the Study of Religion**

Emile Durkheim  
 Karl Marx  
 Bryan Wilson

**Unit 4 Religion and Emerging Issues**

Religious Diversity  
 Religion and Communalism  
 Secularism

**TUTORIAL****(CREDITS 2)**

Project work/Presentation/Debates/Term paper

1. a. Religious Diversity in India; b. Secularism; c. Religion is the opiate of the masses?
2. a. Religious Diversity and the tradition of tolerance in Kashmir; b. Changes in the institution of Religion; c. Secularization

**SUGGESTED READINGS**

- D'Souza. L. 2005. The Sociology of Religion: A Historical Review. New Delhi: Rawat Publications.
- Harlambos. M. Sociology: Themes and Perspectives. New Delhi: Oxford University Press
- Roberts, Keith. A. 1984. Religion in Sociological Perspective. New York: Dorsey Press
- Turner. Bryan S. 1991. (2<sup>nd</sup> edition). Religion and Social Theory. London: Sage.
- Turner, Bryan S. 2010. (ed). The New Blackwell Companion to "The Sociology of Religion." UK: Wiley-Blackwell.
- Hamilton. Malcolm. 2001. (2<sup>nd</sup> edition). The Sociology of Religion: Theoretical and Comparative Perspectives. London and New York: Routledge.
- Diiion. M. 2003. (2<sup>nd</sup> edition), Handbook of the Sociology of Religion. Cambridge. UK: Cambridge University Press.
- Furseth, I. And Resptad. P. 2006. An introduction to the Sociology of Religion: Classical and Contemporary Perspectives. England: Ashgate Publishing Company.
- Davie, G. 2007. The Sociology of Religion. New Delhi: Sage Publications,
- Baird, Robert. D. (Ed.). 1995 (3<sup>rd</sup> edition). Religion in Modern India. Delhi: Manohar
- Madam T.N. (Ed.). 1992, Religion in India. New Delhi: Oxford University Press.
- Olson, Carl. 2011. Religious Studies: The Key Concepts. London: Routledge.
- Robinson, Rawena. 2004. Sociology of Religion in Indio. Delhi; Oxford University Press

**12. Sociology of Development (Skill Enhancement Course -IV)**

Semester	Core Course	Course Title	Credit
VI	SEC-IV	Sociology of Crime	Theory: 02; Tutorial: 02 Total: 04

**Course specific outcomes**

- To acquaint them with the concept of crime and its changing profile.
- To acquaint them with the major theoretical perspectives in the sociology of crime.
- To familiarize the learners with the criminal justice system dealing with the punishment and rehabilitation of the criminals.
- To prepare the learners for pursuing high studies and career in law.
- The learners are expected to be well versed with the concept, sociology of crime.
- The learners are also expected to possess a deep understanding of the various theoretical perspectives on crime.

**SOCIOLOGY OF CRIME****THEORY****(CREDITS 2)****Unit 1 Introduction**

- Types of Crime
- Deviance and Society
- Nature and Concept of Crime

**Unit 2 Theoretical Perspectives**

- Biological
- Psychological
- Sociological

**TUTORIAL****(CREDITS 2)**

- Fieldwork: Emerging Issues
- Report Writing

**SUGGESTED READINGS**

- Teeters, Negley and Hary Elnar Barnes, (1959). New Horizons in Criminology. New Delhi, Prentice Hall of India.
- Sutherland, Edwin. H. and Donald R. Cressey (1968). Principles of Criminology'. Bombay:  
Times of India Press.
- Parsonage, William (1979). Perspectives on Criminology. London: Sage Publications.
- O. Brien M and Yar, M (2008). Criminology: the key concept. New York: Routledge.
- Ahuja, R. (2005). Criminology. Jaipur: Rawat Publications.
- Williams, K.S. (2001). Textbook on Criminology. New York: Oxford University Press.
- Walsh. A. and Ellis, L. (2007). Criminology: An Interdisciplinary Approach. New Delhi: Sage.
- Seigel L.J. (2010). Criminology: Theories, Patterns and Typologies (10<sup>th</sup> Ed.) USA: Cengage
- Merton, R.K. 1972. Social Theory and Social Structure. New Delhi: Emerind Publishing Co.

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## Course Structure and distribution of different courses with their credits for B.A. Urdu

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Urdu Nazm aur Ghazal اردو نظم اور غزل	Core Course	6 credits 4(T)+2(T)
2.	II	The Classical genres of Urdu poetry کلاسیکی اصنافِ شعر	Core Course	6 credits 4(T)+2(T)
3.	III	Urdu ki Afsanvi Nasr اردو کی افسانوی نثر	Core Course	6 credits 4(T)+2(T)
4.	III	Basics of Urdu Language اردو زبان کے بنیادی قواعد	MIL	6 credits 4(T)+2(T)
5.	IV	Urdu ki Gair Afsanvi Nasr: اردو کی غیر افسانوی نثر	Core Course	6 credits 4(T)+2(T)
6.	IV	Basics of Urdu Literature اردو ادب کی بنیادی اصناف	MIL	6 credits 4(T)+2(T)
7.	IV	Learning Skills of Afsana in Urdu اردو میں افسانہ نگاری کا فن	Skill Enhancement Course	6 credits 4(T)+2(T)
8.	V	Urdu literature: literary history and criticism ادبی تاریخ و تنقید	Discipline Specific Elective	6 credits 4(T)+2(T)
9.	V	Urdu language and literature in Jammu and Kashmir جموں و کشمیر میں اردو زبان و ادب	Core Course	6 credits 4(T)+2(T)
10	V	Study of Urdu classical Ghazal اردو کی کلاسیکی غزل	General Elective	6 credits 4(T)+2(T)
11.	V	Learning Skills of Drama in Urdu اردو میں ڈراما کا فن	Skill Enhancement Course	6 credits 4(T)+2(T)
12.	VI	Mirza Ghalib ka Khasoosi Mutalah مرزا غالب کا خصوصی مطالعہ	Core Course	6 credits 4(T)+2(T)
13.	VI	Allama Iqbal ka Khasoosi Mutalah علامہ اقبال کا خصوصی مطالعہ	Core Course	6 credits 4(T)+2(T)
14.	VI	Study of prose and poetic form in Urdu literature اردو کی نثری اور شعری ہیئتوں کا مطالعہ	Generic Elective	6 credits 4(T)+2(T)
15.	VI	Learning Skills of Media Writings in Urdu	Skill Enhancement Course	6 credits 4(T)+2(T)

		اردو زبان میں صحافتی تحریر لکھنے کا طریقہ کار		
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**Course Outcomes:**

Urdu language stands constitutionally an official language under Schedule 8 of constitution of Jammu & Kashmir since 1899. It is the medium of instruction and lingua franca of the state. Due to this official status, it has been taught from primary to university level throughout the state; it is the medium of electronic and print media in the state. Since department of Urdu emerges as the key department in the faculty of arts, a huge number of students prefer to opt Urdu subject as the core subject with the motivation that Urdu subject has better prospectus in terms of job & employment . Being the official language of the state most of the record in the offices like revenue, police, judiciary etc. is recorded in this language. Urdu has the vast scope of contents. Due to new UGC MIL Scheme Urdu subject has become most favored subject among students at UG Level.

Model Govt. Degree College Shoranur

**1. Urdu Nazm aur Ghazal (Core Course-I):**

Semester	Core Course	Course Title	Credits
1st	URL120c	Urdu Nazm aur Ghazal اردو نظم اور غزل	Theory: 04 ; Tutorial: 02 Total: 06

**Course Specific outcomes:**

- After the thorough study of this paper, it is expected from the students that they may identify the genres of Ghazal and Nazm and could comprehend the basic poetics.
- This specific paper provides the knowledge about the basic and cardinal genres of the Urdu literature.
- Gives the brief description about the Ghazal and Nazm.
- The paper designed for the basic introduction of the main poets.
- Below mentioned poets are focused in this paper.
- Walid of Deccan
- Mir Taqi Mir,
- Mirza Asad Allah Galib,
- Fiaz Ahmad Faiz
- Nasir Kazmi
- Sheharyar
- Hamdi Kashmiri
- ParveenShakir
- Nazir Akbar Aabadi
- Altaf Hussain Hali
- Josh MalihAabadi
- Hakim Manzoor

**URDU NAZM AUR GHAZAL****THEORY****(CREDITS: 06)****یونٹ اول:**

- غزل کی صنفی شناخت
- اردو غزل کا ارتقاء
- ولی دکنی کی غزل گوئی
- تدریس متن :
- 1- دل کون لگتی ہے دل ربا کی ادا

- 2-روح بخشی ہے کام تجھ لب کا  
○ میر تقی میر کی غزل گوئی  
○ تدریس متن:
- 1- ہمارے آگے ترا جب کسو نے نام لیا  
○ 2- پتا پتا بوٹا بوٹا حال ہمارا جانے ہے  
○ غالب کی غزل گوئی  
○ تدریس متن:
- 1-ذکر اس پری وش کا اور پھر بیان اپنا  
○ 2- نہ گلِ نغمہ ہوں نہ پردہ ساز  
○ حیدر علی آتش کی غزل گوئی  
○ تدریس متن:
- 1- حسنِ پری اک جلوہ مستانہ ہے اس کا  
○ 2- یہ آرزو تھی تجھے گل کے روبرو کرتے  
○ یونٹ دوئم :
- جدید اردو غزل کی خصوصیات  
○ فیض احمد فیض کی غزل گوئی  
○ تدریس متن:
- 1- جمے کی کیسے بساطِ یاراں کہ شیشہ و جام بچھ گئے ہیں  
○ 2- تم آئے ہو نہ شبِ انتظار گزری ہے  
○ ناصر کاظمی کی غزل گوئی  
○ تدریس متن:
- 1- کچھ یادگار شہر ستم گر ہی لے چلیں  
○ 2- سفر منزلِ شب یاد نہیں  
○ شہریار کی غزل گوئی  
○ تدریس متن:
- 1-ہجومِ درد ملا زندگی عذاب ہوئی  
○ 2- بڑھا دے مری وحشتیں مرا گریباں چاک کر دے  
○ حامدی کاشمیری کی غزل گوئی  
○ تدریس متن:
- 1- طوالتِ شب کی شاید کم بہت ہے  
○ 2- رت بہارِ جمال کی آئی



- پروین شاکر کی غزل گوئی
- تدریس متن:
- 1- کیسا ثبات ہے کہ روانی بھی ساتھ ہے
- 2- بادباں کھلنے سے پہلے کا اشارہ دیکھنا
- یونٹ سوئم
- نظم کی صنفی شناخت
- نظم کی مختلف جہتیں
- اردو نظم کا ارتقا
- نظیر اکبر آبادی کی نظم نگاری
- تدریس متن:
- شہر آشوب
- حالی کی نظم نگاری
- تدریس متن:
- نشاطِ امید
- یونٹ چہارم
- اقبال کی نظم نگاری
- تدریس متن:
- جبریل و ابلیس
- جوش ملیح آبادی کی نظم نگاری
- تدریس متن:
- بدلی کا چاند
- حکیم منظور کی نظم نگاری
- تدریس متن:
- بزدلی ایک عذاب ہے
- امدادی کتابیں:
- اقبال: کلیاتِ اقبال
- پروین شاکر: کلیاتِ پروین شاکر
- حالی: کلیاتِ حالی
- حامدی کاشمیری: نایافت
- حیدر علی آتش: کلیاتِ آتش
- شہریار: کلیاتِ شہریار
- ظ انصاری: اردو غزل کی تدریس

- فیض احمد فیض: نسخہ ہائے وفا
- مرزا اسد اللہ خان غالب: دیوان غالب
- مسعود سراج: تدریس اصنافِ ادب
- میر تقی میر: دیوان میر
- ناصر کاظمی: کلیاتِ ناصر
- نظر اکبر آبادی: کلیاتِ نظیر
- ولی دکنی: دیوان ولی

Model Govt. Degree College Shopian

## 2. The Classical genres of Urdu poetry (Core Course-II):

Semester	Core Course	Course Title	Credits
2 <sup>nd</sup>	DSE (Urdu literature)	The Classical genres of Urdu poetry کلاسیکی اصنافِ شعر	Theory: 04 Tutorial: 02 Total: 06

### Course Specific outcomes:

- The classical genres of Urdu poetry aim to acquaint students with this rich heritage.
- The genres help to understand us the rich culture, whether it may be represented in language and literature or language and literature represented it.
- It helps students to understand the artistic treatment of words and classical utilization of language.
- It gives us the know how about the main genres of Mathnavi, Qasida, Marthiya and Rubayi.
- The basic of poetics like, simile, metaphor, paradoxes are used in a fantastic way.
- It is expected from the paper students will discuss the different classical genres.

### THE CLASSICAL GENRES OF URDU POETRY

#### THEORY

(CREDITS: 06)

- یونٹ اول:
- مثنوی کی صنفی شناخت
- اردو مثنوی کا آغاز و ارتقا
- تدریس متن:
- میر حسن کی مثنوی 'سحرالبیان' (کا انتخاب)
- یونٹ دوئم:
- مرثیہ کی صنفی شناخت
- اردو مرثیہ کا آغاز و ارتقا
- تدریس متن:
- میر انیس کا مرثیہ 'فرزندِ پیمبر کا مدینے سے سفر ہے۔'
- یونٹ سوئم :
- قصیدہ کی صنفی شناخت
- اردو قصیدے کا آغاز و ارتقا
- تدریس متن:

- سودا کا قصیدہ ' اٹھ گیا بہمن وے دے کا چمنستان سے عمل'
- **یونٹ چہارم:**
- رباعی کی صنفی شناخت
- اردو میں رباعی گوئی کی روایت
- انیس کی رباعی گوئی
- تدریس متن: نصابی کتاب میں شامل سات رباعیاں
- حالی کی رباعی گوئی
- تدریس متن: نصابی کتاب میں شامل سات رباعیاں
- امجد کی رباعی گوئی
- تدریس متن: نصابی کتاب میں شامل سات رباعیاں
- **امدادی کتب :**
- ام ہانی اشرف : اردو میں قصیدہ نگاری
- امجد حیدر آبادی : کلیاتِ امجد
- حالی: کلیاتِ حالی
- علی جواد زیدی: رباعیات انیس
- مسیح الزمان : اردو مرثیے کا آغاز و ارتقا
- منصور احمد منصور، مشتاق حیدر : گلشن ادب (حصہ اول)

Model Govt. Degree College Sialkot

### 3. Urdu ki Afsanvi Nasr (Core Course-III):

Semester	Core Course	Course Title	Credits
3 <sup>rd</sup>	URL320C	Urdu ki Afsanvi Nasr اردو کی افسانوی نثر	Theory, 4 Tutorial: 2

#### Course Specific outcomes:

- Fiction writings of Urdu aim to provide the basic introduction of the four genres of Dastan, Novel, Afsana and Drama.
- The paper will discuss their development and timely changes.
- Student, after studying it will come to know about their unique features.
- In every part students would go through the text reading and applied part, with the specific contents.
- The thorough study would be specified to:
- Range Sayar by Aazad
- EkChadarMeli Si, by Rajindar Singh Bedi
- Kafan by PremChend
- KhanaJangi by M. Mujeeb

#### URDU KI AFSANVI NASR

##### THEORY

(CREDITS: 06)

- یونٹ اول:
- داستان کی صنفی شناخت
- اردو میں داستان کی اہمیت
- تدریس متن:
- 'رنگے سیار' انتخاب از 'افسانہ آزاد'
- یونٹ دوئم:
- ناول کی صنفی شناخت
- اردو میں ناول نگاری کا آغاز و ارتقا
- تدریس متن:
- ناول 'ایک چادری میلی سی' از راجندر سنگھ بیدی
- یونٹ سوئم :
- افسانے کی صنفی شناخت

- اردو افسانے کا آغاز و ارتقا
- تدریس متن:
- افسانہ 'کفن' از پریم چند، 'کالو بہنگی' از کرشن چندر
- **یونٹ چہارم:**
- ڈراما کی صنفی شناخت
- ڈراما کی قسمیں
- اردو ڈرامے کا آغاز و ارتقا
- تدریس متن:
- ڈراما 'خانہ جنگی' از محمد مجیب
- **امدادی کتب:**
- اطہر پرویز: کرشن چندر اور ان کے افسانے
- پریم چند: کلیات پریم چند
- راجندر سنگھ بیدی: ایک چادر میلی سی
- رجب علی بیگ سرور: افسانہ آزاد
- عبداللہ امتیاز احمد: دلیل
- گیان چند جین: اردو کی نثری داستانیں
- یوسف سرمست: بیسویں صدی میں اردو ناول

Model Govt. Degree College Shopian

#### 4. Basics of Urdu Language (MIL/ Compulsory for B. A B. com)

Semester	MIL/ Compulsory for B. A B. com	Course Title	Credits
3 <sup>rd</sup>	URM216	Basics of Urdu Language اردو زبان کے بنیادی قواعد	Theory,6 ;Tutorial 0 Total: 6

#### Course Specific outcomes:

- MIL Modern Indian Languages is a policy designed by the UGC to promote the regional languages.
- Aim of this course is facilitate the students, subject and place of their choice.
- The language was almost considered a first obstacle to visiting a place. To curb this obstacle this scheme was introduce.
- Urdu being a modern language and official language of Jammu and Kashmir is considered the favorite subject in MIL combination.
- The paper hence is focused on the basics of language.
- 1<sup>st</sup> part i.e. 3<sup>rd</sup> sem. will solely focused on grammar.
- Urdu script, alphabet, rules for sentence making, punctuation marks, singular, plural, masculine, feminine will be deliberated in detail.
- Some samples will be produced in the form of essay writing.

#### BASICS OF URDU LANGUAGE

#### THEORY

(CREDITS: 06)

- اردو رسم الخط
- جملہ
- رموز اوقاف
- اقسام جنس (تذکیر و تانیث)
- تعداد (واحد اور جمع بنانے کے قاعدے)
- خطوط نویسی
- مضمون نگاری
- ان دیکھے اقتباسات

➤ کتابیں :

➤ مولوی عبد الحق اردو صرف و نحو:

- رشید حسن خان اردو املا :
- عارفہ بشری ، مشتاق حیدر ، شاہ فیصل ایم آئی ایل اردو ، برائے بی اے ، بی کام
- محمد امتیاز احمد ، زاہد ظفر مطالعہ اردو: مؤلفین

Model Govt. Degree College Shopian



### 5. Urdu ki Gair Afsanvi Nasr (Core Course):

Semester	Core Course	Course Title	Credits
4 <sup>th</sup>	URL120c:	Urdu ki Gair Afsanvi Nasr: اردو کی غیر افسانوی نثر	Theory,6 Tutorial, 2 Total: 6

#### Course Specific outcomes:

- Non-fictional prose of Urdu aim to give a thorough understanding of these genres.
- It will help the students to understand the nature and the difference between the fiction and nonfiction.
- The paper will deliberate upon the basic genres of non-fiction in a manner, they can identify them separately.
- The main contents will deal to Essay, Light Essay, Sketches, Satire and humor.
- Applied part will cover:
- Gulshan-e-UmeedkiBahar by M. H. Azad
- Qaht-ar-Rijal by Mukhtar Masood
- Jhanager by K H Nizami
- Umeed Ki Khushi, S S A Khan
- Sketch of Chriag Hasan Hasrat by A. Hashar
- Sketch of SajadZaheer by Mujtaba Hussain
- Galib JadeedShourakiMajlis main by Kanayalal Kapoor
- Mureed pork a Peer by P. Bukhari

### URDU KI GAIR AFSANVI NASR

#### THEORY

(CREDITS: 06)

- یونٹ اول:
- مضمون نگاری کا فن
- اردو میں مضمون نگاری کی روایت
- تدریس متن:
- 'گلشن امید کی بہار' محمد حسین آزاد
- 'قحط الرجال' مختار مسعود
- یونٹ دوم:
- انشائیہ کا فن
- اردو میں انشائیہ نگاری

- تدریس متن:
- 'جھینگڑ' خواجہ حسن نظامی
- 'امید کی خوشی' سرسید
- **یونٹ سوئم :**
- خاکہ نگاری کا فن
- اردو میں خاکہ نگاری کی روایت
- تدریس متن:
- 'چراغ حسن حسرت' از آغا حشر
- 'سجادظہیر' از مجتبیٰ حسین
- **یونٹ چہارم:**
- طنز و مزاح نگاری
- اردو میں طنز و مزاح نگاری کی روایت
- **تدریس متن:**
- 'غالب جدید شعرا کی مجلس میں' کنہیا لال کپور
- 'مرید پور کا پیر' پطرس بخاری
- **امدادی کتب :**
- پطرس بخاری: مضامین پطرس
- خواجہ حسن نظامی: مجموعہ مضامین
- رشید احمد صدیقی: مضامین رشید
- سرسید احمد خان: مضامین سرسید
- مالک رام: رشید احمد صدیقی
- محمد حسنین: انشائیہ اور انشائیے
- محمد حسین آزاد: نیرنگ خیال
- وزیر آغا: انشائیہ کیا ہے؟
- وزیر آغا: انشائیے کے خدو خال

### 6. Basics of Urdu Literature (MIL/ Compulsory for B. A B. com):

Semester	MIL/ Compulsory for B. A B. com	Course Title	Credits
4 <sup>th</sup>	URM218	Basics of Urdu Literature اردو ادب کی بنیادی اصناف	Theory, 6Tutorial: 0 Total: 6

#### Course Specific outcomes:

- The second part, i.e. 4<sup>th</sup> sem. will move further keeping in view the first level gained by the student.
- Students, in this paper will come to know about origin and development of the language.
- They will be acquainted with the basic genres of Urdu.
- Different schools of language and literature will be on focus as well.

#### BASICS OF URDU LITERATURE

##### THEORY

(CREDITS: 06)

- یونٹ اول:
- اردو زبان کا آغاز و ارتقاء - چند اہم نظریات
- جموں و کشمیر میں اردو کا آغاز و ارتقاء
- یونٹ دوئم:
- اردو کی چند اہم نثری اصناف کا تعارف
- داستان
- ناول
- افسانہ
- ڈراما
- انشائیہ
- یونٹ سوئم:
- اردو کی چند اہم شعری اصناف کا تعارف
- غزل
- نظم
- مرثیہ
- مثنوی
- قصیدہ
- یونٹ چہارم:

- اردو ادب کے دو اہم دبستان
- دبستان دہلی - ایک تعارف
- دبستان لکھنؤ - ایک تعارف
- **امدادی کتب :**
- شمیم احمد: اصنافِ ادب اور شعری ہیتیں
- عبداللہ امتیاز احمد / زاہد ظفر: مطالعہ اردو
- عبد القادر سروری: کشمیر میں اردو
- فرمان فتح پوری: اردو شاعری کا فنی ارتقا
- فرمان فتح پوری: اردو نثر کا فنی ارتقا
- مسعود سراج / اومکار کول: تدریس اصنافِ ادب

Model Govt. Degree College Srinagar

### 7. Learning Skills of Translation in Urdu (Skill Enhancement Course)

Semester	Core Course	Course Title	Credits
4 <sup>th</sup>	URL120c	Learning Skills of Afsana in Urdu اردو میں افسانہ نگاری کا فن	Theory:04; Tutorial:02 2 Total:06

#### Course Specific outcomes:

- Non-fictional prose of Urdu aim to give a thorough understanding of these genres.
- It will help the students to understand the nature and the difference between the fiction and nonfiction.
- The paper will deliberate upon the basic genres of non-fiction in a manner, they can identify them separately.
- The main contents will deal to Essay, Light Essay, Sketches, Satire and humor.
- Applied part will cover:
- Gulshan-e-Umeed ki Bahar by M H Azad
- Qaht-ar-Rijal by Mukhtar Masood
- Jhanager by K H Nizami
- Umeed Ki Khushi, S S A Khan
- Sketch of Chriag Hasan Hasrat by A. Hashar
- Sketch of Sajad Zaheer by Mujtaba Hussain
- Galib Jadeed Shouraki Majlis main by Kanayalal Kapoor
- Mureed pork a Peer by P. Bukhari

#### LEARNING SKILLS OF AFSANA IN URDU

##### THEORY

(CREDITS: 06)

- یونٹ اول:
- افسانے کا فن اجزائے ترکیبی
- یونٹ دوئم:
- اردو میں افسانہ نگاری کی رویت
- عملی کام (Practical Work)
- یونٹ سوئم :
- پریم چند اور بیدی کے حالاتِ زندگی پر سوانحی افسانہ لکھیے
- یونٹ چہارم:
- دیے گئے اشاروں کی مدد سے ایک افسانہ ترتیب دیجیے

- **امدادی کتب :**
- بیدی : کلیات
- پریم چند: کلیات
- فرمان فتح پوری: اردو نثر کا فنی ارتقا
- گوپی چند نارنگ: اردو افسانہ روایت اور مسائل
- وقار عظیم: فن افسانہ نگاری
- وقار عظیم: نیا افسانہ

Model Govt. Degree College Shopian

**8. Urdu language and literature in Jammu and Kashmir (Optional II):**

Semester	Core Course	Course Title	Credits
5 <sup>th</sup>	UR520DA	Urdu language and literature in Jammu and Kashmir جموں و کشمیر میں اردو زبان و ادب	Theory:04 ; Tutorial: 02 Total: 06

**Course Specific outcomes:**

- This paper has two options and we have opted for the II option.
- Urdu language and literature in J&K
- This paper aims to provide the development of Urdu as a language in J&K
- It will discuss the timely development of literature as well.
- It will deliberate upon the different genres of Urdu.
- Urdu journalism and Mass Media has a vibrant chapter of this language. Hence, it will discuss its unique features.
- It will focus on the issue of Urdu as an official language.
- It will show the regional features and characteristics of the language, which is called *Kashmiri Urdu*.
- Assigned Work:
- Students are asked to write a paper on the current position and status of Urdu.
- The text reading of any of short stories.
- A debate on any of the Novels.
- To write a character sketch and poetic characters of any of poets from J&K.

**URDU LANGUAGE AND LITERATURE IN JAMMU AND KASHMIR****THEORY****(CREDITS: 06)**

- **یونٹ اول:**
- ریاست جموں و کشمیر میں اردو زبان کا آغاز و ارتقا
- ریاست جموں و کشمیر میں اردو کی سرکاری حیثیت
- تدریس متن:
- **یونٹ دوئم:**
- ریاست جموں و کشمیر میں اردو ناول اور افسانہ
- ریاست جموں و کشمیر میں اردو غیر افسانوی نثر
- تدریس متن:

- **یونٹ سوئم :**
- ریاست جموں و کشمیر میں اردو صحافت
- فوق، شمیم احمد شمیم اور خواجہ ثنا اللہ بحیثیت صحافی
- **یونٹ چہارم:**
- ریاست جموں و کشمیر میں اردو شاعری
- میر غلام رسول نازکی، رسا جاودانی، حامدی کاشمیری، حکیم منظور اور فرید پربتئی
- مفوضہ کام
- اردو کی موجودہ صورتِ حال سے متعلق اپنے خیالات پر مبنی مضمون لکھیے۔
- کسی اہم ناول یا افسانے کو پڑھ کر اس پر رائے دیں اور اس کی قرات کریں۔
- جموں و کشمیر سے متعلق کسی ایک شاعر کے سوانحی کوائف اور شعری امتیازات پر مضمون لکھیے۔
- **امدادی کتب :**
- برج پریمی : کشمیر میں اردو
- حامدی کاشمیری : جموں و کشمیر
- حکیم منظور: کلیات
- رسا جاودانی: کلیات
- عبد القادر سروری: کشمیر میں اردو
- فرید پربتئی: ہجوم آئینہ (کلیات)
- منشی محمد فوق: تاریخ اقوام کشمیر
- نازکی : کلیات



### 9. Study of Urdu classical Ghazal (Generic Elective):

Semester	Core Course	Course Title	Credits
5 <sup>th</sup>	URL516	Study of Urdu classical Ghazal اردو کی کلاسیکی غزل	Theory: 04; Tutorial: 2 Total: 6

#### Course Specific outcomes:

- Generic Elective is an open choice for the all students who are interested to study their subject of choice other than the core subjects.
- It is therefore, the paper opted for this course is of every ones interest i.e. Gazal.
- It will mainly focus on the classical Poets, and the sample of two Gazals.
- Wali
- Mir
- Galib
- Momin
- Dag
- Students would be asked for text reading.

#### STUDY OF URDU CLASSICAL GHAZAL

##### THEORY

(CREDITS: 06)

- یونٹ اول:
- غزل کا فن
- اردو میں غزل کا ارتقاء
- یونٹ دوئم:
- ولی دکنی کی شاعری کی خصوصیات
- تدریس متن :
- 1-شغل بہتر ہے عشق بازی کا
- 2-جسے عشق کا تیر کاری لگے
- میر تقی میر کی غزل کے بنیادی عناصر
- تدریس متن:
- 1- ہمارے آگے ترا جب کسو نے نام لیا
- 2- پتا پتا بوٹا بوٹا حال ہمارا جانے ہے
- یونٹ سوئم:
- خواجہ میر درد کی غزل گوئی کی خصوصیات:

- 1- تہمت چند اپنے ذمے دھر چلے
- 2- ہم تجھ سے کس ہوس کی فلک جستجو کریں
- **غالب کی غزل گوئی کے امتیازات**
- تدریس متن:
- 1- مدت ہوئی ہے یار کو مہماں کئے ہوئے
- 2- کسی کو دے کے دل کوئی نوا سنج فغاں
- **یونٹ چہارم:**
- **مومن کی غزل گوئی کی خصوصیات**
- تدریس متن:
- 1- ٹھانی تھی دل میں اب نہ ملیں گے
- 2- ناوک انداز جدھر دیدہ جاناں
- **یونٹ دوئم :**
- **داغ دہلوی کی غزل گوئی کی خصوصیات**
- **تدریس متن:**
- 1- غضب کیا ترے وعدے پہ اعتبار کیا
- 2- سبق ایسا پڑھا دیا تونے
- **معاون کتابیں :**
- اختر انصاری: غزل کی سرگزشت
- جمیل جالبی: تاریخ ادبِ اردو
- عبادت بریلوی: غزل اور مطالعہ غزل
- یوسف حسین خان: اردو غزل

### 10. Learning Skills of Drama in Urdu (Skill Enhancement Course)

Semester	Core Course	Course Title	Credits
5 <sup>th</sup>	UR517S	Learning Skills of Drama in Urdu اردو میں ڈرامے کا فن	Theory:02; Tutorial: 2 Total: 04

#### Course Specific outcomes:

- 'Learning skills of Drama in Urdu' is a skill paper about the techniques and presentation of filming a drama in different platforms.
- They may be Radio, TV, Stage or other relevant.
- The paper aims to acquaint students about these platforms and the use of techniques.
- First, they would come to know about the various parts of drama, which were used since the earlier times of and Aristotle described them in his *poetics*.
- They will be familiar with the development of drama also.
- In its application they will be asked to prepare a screen play from any of the dramas below:
- AmanatLakhnawi
- Imtiyaz Ali Taj
- AagaHashar Kashmiri
- M. Mujeeb.
- And further they have to stage a drama in any of the social issues.

#### LEARNING SKILLS OF DRAMA IN URDU

##### THEORY

(CREDITS: 06)

- یونٹ اول:
- ڈرامے کے اجزائے ترکیبی
- یونٹ دوئم:
- عملی کام (Practical Work)
- یونٹ سوئم:
- درج ذیل ڈرامہ نگاروں کے کسی ایک ڈرامے کے ایک ایکٹ کا اسکرین پلے بنائے
- (امانت لکھنوی، امتیاز علی تاج، آغا حشر کاشمیری، پروفیسر مجیب)
- یونٹ چہارم:
- کسی خاص سماجی موضوع پر ایک مختصر ڈراما لکھیے

- **امدادی کتب :**
- اسلم قریشی: ڈراما نگاری کا فن
- بادشاہ حسین : اردو میں ڈراما نگاری
- عشرت رحمانی: اردو ڈراما کی تاریخ و تنقید
- عطیہ نشاط: اردو ڈراما – روایت اور تجربہ
- محمد شاہد حسین: ڈراما کا فن
- محی الدین زور کشمیری : اردو میں ڈراما نگاری

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### 11. Allama Iqbal ka Khasoosi Mutalah (Core Course)

Semester	Core Course	Course Title	Credits
6 <sup>th</sup>	URL620DB	Allama Iqbal ka Khasoosi Mutalah علامہ اقبال کا خصوصی مطالعہ	Theory, 4 Tutorial: 2 Total: 6

#### Course Specific outcomes:

- ‘Special study of Iqbal’ is a DSE course and specially designed for the students to understand the great thinker and poet of the East Iqbal.
- Notably Iqbal is an iconic figure and his influence is of much degree than any other thinker on the Muslim thought.
- He has dealt with the subjects of all sort. And clarified them in a miraculous way.
- He was no doubt a genius and genuinely addressed the issues.
- He was master in poetry and applied most of the techniques used in different languages in his own poetry.
- This paper will give a sufficient details of Iqbal, whether may be about his life, his education, impact upon him and his upon others and most importantly about his poetry.
- For poetry, particularly they will go through Gazl, Nazm.
- For Nazm they will have to study the full text of “Gabriel aur Iblees, Saqi Nama, FarishtayJanat se Aadamkorukhsatkarte hue. Ruh-e-arzi Aadam ka istiqbal karti hai, Bazm-e-anjum.
- Furthermore, they will study the concept of Khudi/self, and Momin/Believer in minutia.
- **Assigned Work:** collect the material regarding the life of Iqbal, taking help from internet, and present that before the teacher.
- **Coordinate a symposium on the Iqabalian influence.**
- **Text reading of ‘Gabriel aur Iblees’ in a conversation way.**

#### ALLAMA IQBAL KA KHASOOSI MUTALAH

#### THEORY

(CREDITS: 06)

- یونٹ اول:
- اقبال کی حیات اور شخصیت
- اقبال کی ابتدائی شاعری
- یونٹ دوئم:
- اقبال کی غزل گوئی

- اقبال کی نظم نگاری
- **یونٹ سوئم :**
- اقبال کا تصور خودی
- اقبال کا تصور مردِ مومن
- **یونٹ چہارم:**
- اقبال کی درج ذیل نظموں کا سیر حاصل مطالعہ
- جبریل و ابلیس
- ساقی نامہ
- فرشتے جنت سے آدم کو رخصت کرتے ہوئے
- روح ارضی آدم کا استقبال کرتی ہے
- بزمِ انجم
- **مفوضہ کام**
- اقبال کے سوانحی کوائف اور شعری امتیازات سے متعلق انٹرنیٹ کی مدد سے معلومات جمع کر کے استاد کے سامنے پیش کریں
- کمرہ جماعت میں اقبال کے فکر و فلسفہ سے متعلق بحث و مباحثے کا اہتمام کیا جائے۔
- نظم ' جبریل و ابلیس' کے مکالماتی انداز کو منثور شکل میں دو طالب علموں کی وساطت سے کمرہ جماعت میں دکھانا۔
- **امدادی کتب :**
- اسلوب احمد انصاری : اقبال کی تیرہ نظمیں
- اقبال : کلیاتِ اقبال اردو
- اقبال : کلیاتِ اقبال فارسی
- جاوید اقبال: زندہ رود
- خلیفہ عبدالحکیم : فکرِ اقبال
- عبد المجید سالک : ذکرِ اقبال
- عرفان عالم : اقبال معروضی تجزیے اور سائنسی مباحث
- نذیر نیازی : دانائے راز

**12. Study of Prose and Poetic form in Urdu literature (Generic Elective):**

Semester	Core Course	Course Title	Credits
6 <sup>th</sup>	URL616G	Study of prose and poetic form in Urdu literature اردو کی نثری اور شعری ہیئتوں کا مطالعہ	Theory: 04; Tutorial: 02 Total: 06

**Course Specific outcomes:**

- Study of prose and poetic form in Urdu' is a generic Elective Course designed for those students of other disciplines, who are interested to the main genres of Urdu.
- The paper is divided into four parts, comprising different topics, related to genres.
- First unit deals with Novel, Afsana/ short story and their significance.
- Second unit gives the introduction about Drama, and letter writing, with the details of development.
- Third unit is related to Gazal and Nazm, reasons of their popularity, definition and development.
- Forth unit will brief about Mathnavi and Marthiya, and their history.

**STUDY OF PROSE AND POETIC FORM IN URDU LITERATURE****THEORY****(CREDITS: 06)**

- یونٹ اول:
- ناول کے اجزائے ترکیبی اور مختصر تاریخ
- افسانہ : تعریف، اجزائے ترکیبی اور مختصر تاریخ
- یونٹ دوئم:
- ڈراما اجزائے ترکیبی اور ارتقا
- مکتوب نگاری اور اس کی مختصر تاریخ
- یونٹ سوئم :
- غزل ، تعریف ، ارتقا اور مقبولیت کے اسباب
- نظم ، تعریف اور ارتقا
- یونٹ چہارم:
- مثنوی، تعریف ، اجزائے ترکیبی اور مختصر تاریخ
- مرثیہ، تعریف، اجزائے اور مختصر تاریخ
- امدادی کتب :
- آل احمد سرور: اردو فکشن
- خلیق انجم، قمر رئیس: اصناف ادب
- عبداللہ امتیاز احمد : دلیل

- عشرت رحمانی : اردو ڈراما
- نگار : اصنافِ داب نمبر
- وقار عظیم: فن افسانہ نگاری

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### 13. Learning Skills of Media Writings in Urdu (Skill Enhancement Course)

Semester	Core Course	Course Title	Credits
6 <sup>th</sup>	URL0617S0X	Learning Skills of Media Writings in Urdu اردو زبان میں صحافتی تحریر لکھنے کا طریقہ کار	Theory, 2 Tutorial: 2 Total: 4

#### Course Specific outcomes:

- ‘Learning skills of Media writing in Urdu’ is a popular skill course among students and opted by most of the students among skill courses.
- The paper gives the introduction about Media.
- It provides knowledge of different techniques used for media.
- Weather that may be related to writing a script, for any of the course.
- It focuses on how to write a creative piece.
- Feature, Talk, Radio Drama, Advertisement are of main concern to practice in the course.
- Assigned Work:
- They students are to write a script for any of the topic/
- Present a documentary  
Give an ad... for their own choice.

#### LEARNING SKILLS OF MEDIA WRITINGS IN URDU

##### THEORY

(CREDITS: 06)

- یونٹ اول:
- میڈیا تحریر
- اردو میں میڈیا تحریر کی روایت
- یونٹ دوئم:
- ریڈیو کے لئے تخلیقی نثر
- (فیچر ، ٹاک، ریڈیائی ڈراما، اشتہار)
- عملی کام (Practical Work)
- یونٹ سوئم :
- دیے گئے موضوع پر ٹی وی کے لئے (اسکرپٹ، ڈاکیومنٹری ، اشتہار) کا نمونہ پیش کیجیے۔
- یونٹ چہارم:
- دیے گئے موضوع پر ریڈیو کے لئے ایک ریڈیو فیچر یا اشتہار ترتیب دیجیے۔

- **امدادی کتب :**
- امتیاز علی تاج : ریڈیو ، ٹیلی ویژن
- انجم عثمانی : ٹیلی ویژن نشریات
- شاہد حسین: عوامی روایت اور اردو ڈراما
- فضل الحق: اردو ماس میڈیا
- کمال احمد صدیقی : ریڈیو، ٹی وی میں ترسیل و ابلاغ کی زبان

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**B.Sc. Program Outcomes**

The college offers B.Sc. program for six different subjects, viz., Botany, Chemistry, Horticulture, Mathematics, Physics and Zoology.

- B.Sc. students will know technological literacy, critical thinking and problem-solving through science education and acquire lifelong skills that allow them to generate ideas, weigh decisions intelligently and even understand the evidence behind public policymaking.
- B.Sc. students will learn the scientific method enabling them how to think, learn, solve problems and make informed decisions.
- B.Sc. students will appreciate the contributions of science in generating solutions for everyday life and answers it offers to the great mysteries of the universe.
- B.Sc. students will understand role of science, technology and innovation in equitable, sustainable and nation development.
- B.Sc. students will be equipped with valuable industrial skills to start and run small businesses.

**Course Structure and distribution of different courses with their credits for  
B.Sc. Botany**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Biodiversity (Microbes, Algae, Fungi and Archegoniate)	Core Course	6 credits 4(T)+2(P)
2.	II	Plant Ecology and Taxonomy	Core Course	6 credits 4(T)+2(P)
3.	III	Plant Anatomy and Embryology	Core Course	6 credits 4(T)+2(P)
4.	III	Medicinal Botany	Skill Enhancement Course	4 credits 2(T)+2(P)
5.	IV	Plant Physiology and Metabolism	Core Course	6 credits 4(T)+2(P)
6.	V	Cell and Molecular Biology	Discipline Specific Elective	6 credits 4(T)+2(P)
7.	VI	Economic Botany and Biotechnology	Discipline Specific Elective	6 credits 4(T)+2(P)

### **Course Outcomes**

This course provides students with an in-depth knowledge of the Plant diversity in form, structure and habits.

Students will acquire systematic and comprehensive understanding of the fundamental concepts and principles in Taxonomy. Students will be able to learn in-depth knowledge and understanding about the various processes occurring in nature at ecosystem level.

This course provides students with the basic knowledge in plant growth and development from both functional and evolutionary points of view. It will also introduce students to the different strategies made by the plants in-order to survive in different climatic conditions.

An understanding of how Plants work is provided in this course to the students. The rules and laws that govern the processes in plants are taught which give a strong understanding to the students for understanding the physiology, Biochemistry and other Biological processes.

This course provides students with the basic knowledge related to the cell, the various organelles and their functioning. It will also introduce students to the molecular and cellular mechanisms going on in the body of an organism.

This course will introduce students to the plants that are to be used in day to day life. The students are supposed to get the information of various parts of the plants that are medicinally very important. Medicinal plants and their role is to be learnt in detail.

**1. Biodiversity (Microbes, Algae, Fungi and Archegoniate) (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Biodiversity (Microbes, Algae, Fungi and Archegoniate)	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Knowledge about the lower plants like algae, bryophytes and pteridophytes is provided wherein the students are made aware of various degrees of structural complexities among the different groups of lower plants ranging from simplest unicellular or multicellular thalloid body organization to highly advanced and complex forms.

**BIODIVERSITY (MICROBES, ALGAE, FUNGI AND ARCHEGONIATE)****THEORY****(CREDITS 4)****Unit 1****Microbes and Fungi**

Viruses: Discovery, general structure, replication, DNA virus (T-phage); lytic and lysogenic cycle, RNA virus (TMV).

Bacteria: General characteristics and cell structure; reproduction – vegetative, asexual and recombination (conjugation, transformation and transduction); economic importance.

Fungi: General characteristics, classification (Alexopolous, Mims & Blackwell), cell wall composition, nutrition and reproduction; life cycle of Rhizopus (Zygomycota), Venturia (Ascomycota), Agaricus (Basidiomycota).

Symbiotic Associations: Lichens and Mycorrhiza - general account and significance.

**Unit 2****Algae**

General characteristics, classification of algae (Round 1965), criteria for algal classification; range of thallus organization; morphology, reproduction and life cycle of Nostoc, Chlamydomonas, Oedogonium, Vaucheria, Ectocarpus, Batrachospermum; economic importance of algae.

**Unit 3****Bryophytes**

**Archegoniate** – General characteristics, adaptations to land habit.

**Bryophytes** - General characteristics, Proskauer's classification (upto family); morphology, anatomy and reproduction (excluding developmental details) of *Marchantia* and *Funaria*; Evolution of sporophyte; apogamy and apospory; alternation of generation; economic importance of bryophytes.

**Unit 4****Pteridophytes and Gymnosperms**

Pteridophytes - General characteristics; classification of pteridophytes (Sporne 1965); Early land plants (*Rhynia*); morphology, anatomy and reproduction (excluding developmental details) of *Equisetum* and *Dryopteris*; heterospory and origin of seed habit; evolution of stellar systems in pteridophytes.

Gymnosperms - General characteristics, classification – Christenhusz et al. 2011 (upto family); morphology, anatomy and reproduction (excluding developmental details) of *Cycas* and *Pinus*; economic importance of gymnosperms.

**PRACTICAL****(CREDITS 2)**

1. Models / photographs of viruses – T-Phage and TMV, drawing / photograph of lytic and lysogenic Cycle.
2. Types of bacteria from temporary/permanent slides/photographs; Gram staining.
3. Study of vegetative and reproductive structures of Nostoc, Chlamydomonas, Oedogonium, Vaucheria, Ectocarpus and Batrachospermum through temporary preparations and permanent slides.
4. *Rhizopus* and *Venturia*: Asexual stages from temporary mounts and sexual structures through permanent slides.
5. *Agaricus*: Specimens of button stage and full grown mushroom; sectioning of gills of *Agaricus*.
6. Study of growth forms of lichens (crustose, foliose and fruticose).
7. *Marchantia*- morphology of thallus, w.m. rhizoids and scales, v.s. thallus through gemma cup, w.m. gemmae (all temporary slides), v.s. antheridiophore, archegoniophore, l.s sporophyte (all permanent slides).

8. *Funaria*- morphology, w.m. leaf, rhizoids, operculum, peristome, annulus, spores (temporary slides); permanent slides showing antheridial and archegonial heads, l.s. capsule and protonema.
9. *Selaginella*- morphology, w.m. leaf with ligule, t.s. stem, w.m. strobilus, w.m. microsporophyll and megasporophyll (temporary slides), l.s. strobilus (permanent slide).
10. *Equisetum*- morphology, t.s. internode, l.s. strobilus, t.s. strobilus, w.m. sporangiophore, w.m. spores (wet and dry - temporary slides); t.s rhizome (permanent slide).
11. *Dryopteris*- morphology, t.s. rachis, v.s. sporophyll, w.m. sporangium, w.m. spores (temporary slides), t.s. rhizome, w.m. prothallus with sex organs and young sporophyte (permanent slide).
12. *Cycas*- morphology (coralloid roots, bulbil, leaf), t.s. coralloid root, t.s. rachis, v.s. leaflet, v.s microsporophyll, w.m. spores (temporary slides), l.s. ovule, t.s. root (permanent slide).
13. *Pinus*- morphology (long and dwarf shoots, w.m. dwarf shoot, male and female), w.m dwarf shoot, t.s. needle, t.s. stem, l.s./t.s. male cone, w.m. microsporophyll, w.m. microspores (temporary slides), l.s. female cone, t.l.s. & r.l.s. stem (permanent slide).

### SUGGESTED READINGS

- Alexopoulos, C.J. and Mims, C.W. 2002. Introductory Mycology. 5th edition. John Wiley and Sons, New York.
- Alexopoulos, C.J., Mims, C.W., Blackwell, M. (1996). Introductory Mycology, John Wiley and Sons(Asia), Singapore. 4th edition.
- Bhatnagar, S.P. and Moitra, A. (1996). Gymnosperms. New Age International (P) Ltd Publishers, New Delhi, India.
- Kumar, H.D. (1999). Introductory Phycology. Affiliated East-West. Press Pvt. Ltd. Delhi. 2<sup>nd</sup> edition.
- Kumar, H.D. 1999. Introductory Phycology. East-west Press Ltd., New Delhi.
- Parihar, N.S. (1991). An introduction to Embryophyta. Vol. I. Bryophyta. Central Book Depot, Allahabad.
- Raven, P.H., Johnson, G.B., Losos, J.B., Singer, S.R., (2005). Biology. Tata McGraw Hill, Delhi, India.
- Sethi, I.K. and Walia, S.K. (2011). Text book of Fungi & Their Allies, MacMillan Publishers Pvt. Ltd., Delhi.

- 
- Singh, R.S. 1990. Principles of Plant Pathology. Oxford and IBH Publishers, New Delhi.
  - Singh, V., Pande, P. C. and Jain, D. K. 2010. Diversity of Microbes and Cryptogams. Rastogi Publications, Meerut, India.
  - Tortora, G.J., Funke, B.R., Case, C.L. (2010). Microbiology: An Introduction, Pearson Benjamin Cummings, U.S.A. 10th edition.
  - Vashishta, B.R., Sinha, A.K. and Singh, V.P. 2008. Botany for Degree Students-Algae. S. Chand and Company Pvt. Ltd., New Delhi.
  - Vashishta, P.C., Sinha, A.K., Kumar, A., (2010). Pteridophyta, S. Chand. Delhi, India.

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**9. Plant Ecology and Taxonomy (Core Course-II)**

Semester	Core Course	Course Title	Credit
II	CC-II	Plant Ecology and Taxonomy	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students can name and recognize different types of plants growing around in various habitats.
- They will be familiar to flora of the region and the seasonal know-how of these plants. Information is also provided about the description and classification of these plants.
- Plants in relation to their environment are studied.
- Various eco-edaphic factors of a region, their effects on distribution of flora, productivity and efficiency on different ecosystems are taught to students.
- The qualitative and quantitative analysis of vegetation of a particular area is also taught.

**PLANT ECOLOGY AND TAXONOMY****THEORY****(CREDITS 4)****Unit 1****Ecology, ecological factors and plant communities**

Introduction to ecology; soil-origin, formation and composition, soil profile; water-states of water in the environment, precipitation types; light and temperature as ecological factors; adaptation of hydrophytes and xerophytes.

Plant communities - characteristics; ecotone and edge effect; succession processes and types.

**Unit 2****Ecosystem and Phytogeography**

Structure; energy flow; trophic organization: food chains and food webs; ecological pyramids, primary productivity: biogeochemical cycling of carbon, nitrogen and Phosphorous.

Phytogeography - biogeographical zones of India, concept of endemism.

**Unit 3****Plant Taxonomy and classification**

Introduction to plant taxonomy; types of classification - artificial, natural and evolutionary.

Classification systems - Bentham and Hooker (upto series), Angiosperm Phylogeny Group (AGP) (up-to order level).

Numerical taxonomy-OTUS, character weighing and coding, cluster analysis, Phenograms and Cladograms (definitions and differences).

Roles of herbarium and botanical garden, important herbaria and botanical gardens of the world and India.

#### Unit 4

##### Identification and nomenclature

Flora, identification Keys: single-access and multi-access; taxonomic evidences from cytology, phytochemistry and molecular data; taxonomic hierarchy - ranks, categories and taxonomic groups. Botanical nomenclature principles of ICN; binominal system of nomenclature, typification, author citation, valid publication, principle of priority.

#### PRACTICAL

(CREDITS 2)

1. To determine minimum number of quadrats required for reliable estimate of density in a grassland.
2. To study frequency and importance value index of species in a grassland.
3. To estimate bulk density and porosity of grassland and forest soils.
4. To determine moisture content and water holding capacity of grassland and forest soil.
5. Determination of pH, and analysis of two soil samples for carbonates, chlorides, nitrates, sulphates, organic matter and base deficiency by rapid field test.
6. To estimate transparency, pH and temperature of different water bodies. Preparation of identification keys from the available specimens.
7. Taxonomic description of the following families: Malvaceae (*Malva/Althea*), Fabaceae (*Trifolium/Lathyrus*), Rosaceae (*Rosa/ Potentilla*), Asteraceae (*Helianthus / Taraxacum*), Solanaceae (*Solanum / Datura*), Apiaceae (*Daucus / Scandix*), Lamiaceae (*Mentha / Nepeta / Salvia*) and Liliaceae (*Hemerocallis / Tulipa*), Poaceae (*Avena / Poa*).
8. Mounting of a properly dried and pressed specimen of any wild plant with herbarium label (to be submitted in the record book).

#### SUGGESTED READINGS

- Chapman, J.L. and Reiss, M.J. 1997. Ecology: principles and Applications. Cambridge University Press, London.
- Colinvaux, P. 1993. Ecology. John Wiley, New York.
- Dash, M.C. 1993. Fundamental of Ecology. 1993. Tata McGraw Hill Publishing Company,

Ltd.

- Judd, S., Walter et al. 2008. *Plant Systematics: A Phylogenetic Approach*. Sinauer Associates, Inc. Sunderland, USA.
- Molies, M.C. Jr. 1999. *Ecology: Concepts and Applications*. WCB/McGraw-Hill Company, London.
- Odum, E.P. and Barrett, G.W. 2004. *Fundamentals of Ecology*. Brooks, Cole.
- Pooja, S. N. 2010. *Economic Botany*. Discovery Publishing House, New Delhi.
- Simpson, Michael G. 2006. *Plant Systematics*. Elsevier, California, USA.
- Singh, Gurcharan 2012. *Plant Systematics: Theory and Practice*. Oxford and IBH Publishers, New Delhi
- Singh, V., Pande, P. C. and Jain, D.K. 2010. *Diversity and Systematics of Seed Plants*. Rastogi Publications, Meerut, India.
- Stiling, P. 2001. *Ecology: Theories and Applications*. Printice-Hall Inc.
- Wikens, G. E 2004. *Economic Botany- Principles and Practices*. Kluwer Publishers, Netherlands.
- Sharma, P.D. (2010) *Ecology and Environment*. Rastogi Publications, Meerut, India. 8<sup>th</sup> edition.
- Singh, G. (2012). *Plant Systematics: Theory and Practice*. Oxford & IBH Pvt. Ltd., New Delhi. 3<sup>rd</sup> edition.
- J.S. Singh, S. R. Gupta & S P Singh. *Ecology, Environmental Science and Conservation*. S. ChandPublishing Company.

**10. Plant Anatomy and Embryology (Core Course-III)**

Semester	Core Course	Course Title	Credit
III	CC-III	Plant Anatomy and Embryology	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- The anatomical structures of different plant organs are taught to the students.
- Moreover, they are trained for cutting sections of the parts for use in anatomical studies.
- The students are also made aware of the occurrence of different tissue systems in plants.
- Students also gain knowledge about fundamental steps in plant reproduction and will be able to explicate the methodologies specifically used to study the process of embryonic development in plants.

**PLANT ANATOMY AND EMBRYOLOGY****THEORY****(CREDITS 4)****Unit 1****Plant tissues and Organs**

Meristematic and permanent tissues: Simple and Complex tissue (Types and Functions); Organization of root and shoot apical meristem- Histogen theory; Tunica and corpus theory. Plant organs: Structure of a typical dicot and monocot root, stem and leaf.

**Unit 2****Secondary Growth and Adaptations**

Secondary growth: Cambium- types, structure and function; Secondary growth in typical dicot root and stem (Helianthus, Sunflower); General account of wood structure (Heart wood and Sap wood).

Adaptations: General structure and function of cuticle, epidermis and stomata; General account of adaptations in xerophytes and hydrophytes.

**Unit 3****Flower and Pollination**

Embryo and Endosperm: Endosperm development, structure and functions; Structure and development of dicot and monocot embryo (Capsella-bursa pectoris; maize).

Apomixis and Embryogeny: Definition, types and practical applications of apomixis and polyembryony.

**Unit 4****Embryo and Endosperm**

Embryo and Endosperm: Endosperm development, structure and functions; Structure and development of dicot and monocot embryo (*Capsella-bursa pectoris*; maize).

Apomixis and Embryogeny: Definition, types and practical applications of apomixis and polyembryony.

**PRACTICAL****(CREDITS 2)**

1. Study of meristems through permanent slides/bio-visual aids.
2. Tissues (Parenchyma, Collenchymas and Sclerenchyma) through permanent slides and photographs.
3. Adaptive anatomy: Xerophytes (*Nerium* leaf); Hydrophyte (*Hydrilla* stem).
4. Structure of anther (young and mature), Tapetum -amoeboid and secretory (through permanent slides/materials/ bio-visual aids).
5. Types of Ovules; anatropous, orthotropous, circinotropous, amphitropous, campylotropous (through permanent slides/materials/ bio-visual aids).
6. Female gametophyte; *Polygonum* (monosporic) type of embryo sac development (through permanent slides and photographs).
7. Ultrastructure of mature egg apparatus cells through electron micrograph.
8. Pollination types and seed dispersal mechanisms (including appendages, aril, caruncle) through photograph and specimens.
9. Root: Monocot: *Zea mays*; Dicot: *Helianthus* (preparation of temporary mount and permanent slides) Secondary: *Helianthus* (Permanent slides only).
10. Stem: Monocot: *Zea mays*; Dicot: *Helianthus* (preparation of temporary mount and permanent slides) Secondary *Helianthus* (Permanent slides only).
11. Leaf: Dicot and monocot leaf (preparation of temporary mount and permanent slides).
12. Dissection of embryo/endosperm from developing seeds.
13. Calculation of percentage of germinated pollen in a given medium.

**SUGGESTED READINGS**

- Bhojwani, S.S. & Bhatnagar, S.P. (2011). Embryology of angiosperms. Vikas Publication House Pvt. Ltd. New Delhi. 5<sup>th</sup> Edition.
- Singh, V., Pande, P. C. and Jain, D.K. 2010. Structure, Development and Reproduction in Angiosperms. Rastogi Publications, Meerut, India.
- Maheshwari, P. 1950. An Introduction to the Embryology of Angiosperms. McGrawHill, New York.
- Pandey, A.K. 1997. Introduction to Embryology of Angiosperms. CBS Publishers and Distributors, New Delhi.
- Pandey, S.N. and Chadha. 1996. Embryology. Vikas Publishing house, New Delhi.
- Cutler, D.F., Botha, T. and Stevenson, D.W. 2008. Plant anatomy: An applied approach. Wiley-Blackwell Publishers.
- Evert, R.F. and Esau, K. 2006. Esau's Plant Anatomy. John Wiley and Sons.
- Pandey, B.P. (2001). Plant Anatomy. S. Chand and Company, New Delhi.
- Mauseth, J.D. (1988). Plant Anatomy. The Benjamin/ Cummings Publisher, USA
- Pandey, B.P. (2010). Modern practical botany volume II. S. Chand & Company Ltd. New Delhi.
- Bendre, A. and Kumar, A. (2012). A text book of practical botany volume II. Rastogi publications Meerut.

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**11. Medicinal Botany (Skill Enhancement Course-I)**

Semester	Skill Enhancement Course	Course Title	Credit
III	SEC-I	Medicinal Botany	Theory: 02; Practical: 02 Total: 04

**Course specific outcomes**

- This course is designed to provide students with an understanding of the conservation strategies of different medicinal plants.
- Students will be able to understand the concept, methods of different methods related to conservation of those medicinal plants that are facing extinction due to multiple reasons.
- Students will be able to understand the different types of chemicals that the plants possess which will make them suitable for industry to make their own small business.

**MEDICINAL BOTANY****THEORY****(CREDITS 4)****Unit 1****Introduction and Scope**

Introduction to medicinal plants; status & scope of medicinal Botany.

Indian contribution to medicinal botany; brief account of traditional medicinal systems Ayurvedha, Unani, & Homeopathy.

Some common herbal practices used to cure - fever, worms, diarrhea, cough & cold, Arthritis & rheumatism, stone in urinary tract, eczema or fungal infections.

**Unit 2****Cultivation technologies**

Agro & Cultivation technology (nursery raising, cultivation, inter-culture and fertilizers, pests & Diseases, harvesting & profits) for some economically important medicinal plants *Withania somnifera*, *Aloe vera*, *Rauwolfia serpentine*, *Podophyllum hexandrum*, *Arnebia benthamii* & *Lavendula*.

Green House technology - principles, methodology & applications.

Propagation of medicinal plants through cuttings, rhizomes, bulbs & seeds.

**Unit 3****Medicinal plant constituents**

Plant secondary metabolites of medicinal importance- Alkaloids, glycosides, mucilages & sterols (Brief account).

Sources and uses of Morphine, Reserpine, Atropine, Codeine & Ephedrine in modern medicine.

Chemical constituents & Traditional uses of some medicinal plants of Kashmir Himalaya.

*Aconitum heterophyllum*, *Artemisia absinthium*, *Fritillaria roylei*, *Thymus serpyllum* & *Crocus sativus*.

**Unit 4****Conservation of medicinal plants**

Concept of IUCN, Red List criteria, threat categories; concept of endemism, threatened and endemic medicinal plants.

Conservation, In-situ conservation strategies (National Parks, Sanctuaries, Biosphere reserves & sacred grooves), Ex-situ conservation (Botanical Gardens, Ethno-medicinal herbal gardens & Seed banks).

Conservation through tissue culture and cryopreservation; Brief account of wild life protection Act 1972.

**PRACTICAL****(CREDITS 2)**

1. Study the botanical features of some medicinally important plants *Artemisia absinthium*, *Lavandula* & *Datura stramonium*.
2. Microscopically study the mucilage from the seeds of *Ocimum* and *Cydonia*.
3. Detection of alkaloids through Alkaloid colour reagent alkaloid precipitants from some common plants.
4. Detection of glycosoids, tannins, saponins, steroids through the colour reagents.
5. Detection and extraction of oils from some plants through colour reagent or any other method.
6. Preparation and compilation of medicinal plant inventory (with photographs) of some local medicinal plants by each student.
7. Study the distribution of oils using Sudan IV stain in the seeds of *Brassica campestris*, *Sesamum indicum* & *Prunus amygdalis*.
8. Visit to IIM institutes to make students aware about the extraction processes.



**SUGGESTED READINGS**

- Economic Botany, Rashtra Vardhna, Sarup Book Publishers, New Delhi.
- Indigenous Herbal Medicines, tribal formulations and traditional herbal practices: Deepakaharya and Anshu Srivastava; Avishkar publication, India.
- Glossary of Indian medicinal plants, R.N., Chopra, S.L. Nayar, and L. C. Chopra, 1956. CSIR. New Delhi.
- Medicinal plants: Ethnobotanical approach, Trivedi PC. 2006 Agrobios, India.
- Medicinal plant cultivation: A scientific approach 2 ed. Parshit and Vyas, 2008 Agrobios, India.

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**12. Plant Physiology and Metabolism (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	<b>Plant Physiology and Metabolism</b>	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- The understanding of the physiological and biochemical aspects of the metabolic reactions occurring in the plant systems is provided to the students.
- They come to know about the various biochemical processes, their regulation and the biochemical pathways governing the synthesis of many biomolecules.
- Moreover, the students are acquainted to the structure, composition and significance of important biomolecules like sugars, amino acids, proteins, nucleic acids and lipids etc.

**PLANT PHYSIOLOGY AND METABOLISM****THEORY****(CREDITS 4)****Unit 1****Plant-Water Relations and Transport**

1. Plant Water Relations: water potential and its components; Transpiration and its significance; Factors affecting transpiration; Ascent of Sap, Pressure flow model; Phloem loading and unloading.
2. Mineral nutrition: Essential elements, macro and micronutrients; Criteria of essentiality of elements; Role of essential elements; Transport of ions across cell membrane, active and passive transport.

**Unit 2****Photosynthesis and Respiration**

1. Photosynthesis: Photosynthetic Pigments (Chl-a, Chl-b, xanthophylls, carotene); light harvest complexes, Photosystem I and II, Electron transport and mechanism of ATP synthesis; C<sub>3</sub>, C<sub>4</sub> and CAM pathways of carbon fixation; Photorespiration.
2. Respiration: Glycolysis, anaerobic respiration, TCA cycle; Electron Transport system and Oxidative phosphorylation.

**Unit 3****Enzymes and Nitrogen metabolism**

1. Enzymes: Structure, Classification and properties; Mechanism of enzyme action and enzyme inhibition.
2. Nitrogen metabolism: concept of symbiotic and asymbiotic associations, Biological nitrogen fixation; Nitrate and ammonia assimilation.

**Unit 4****Plant Growth and Response**

1. Plant growth regulators: Discovery and physiological roles of auxins, gibberellins, cytokinins, ABA and ethylene.
2. Plant response to light and temperature: Photoperiodism (SDPs, LDPs, Day neutral plants); Phytochrome (discovery and structure), red and far red light responses on photomorphogenesis; Vernalization.

**PRACTICAL****(CREDITS 2)**

1. Determination of osmotic potential of plant cell sap by plasmolytic method.
2. To study the effect of two environmental factors (light and wind) on transpiration by excised twig.
3. Calculation of stomatal index and stomatal frequency of a mesophyte and a xerophyte.
4. Demonstration of Hill reaction.
5. Demonstration of catalase activity and study the effect of pH and enzyme concentration.
6. Demonstrate the activity of Peroxidase and study the effect of pH and enzyme concentration.
7. To study the effect of light intensity and bicarbonate concentration on Oxygen evolution in photosynthesis.
8. Comparison of the rate of respiration in any two parts of a plant.
9. Separation of photosynthetic pigments by paper chromatography.
10. Separation of photosynthetic pigments by Thin Layer Chromatography (TLC).

**Demonstration experiments (any four)**

1. Bolting.
2. Effect of auxins on rooting.

3. Suction due to transpiration.
4. To determine the value of R.Q. of different respiratory substrates.
5. Respiration in roots.

### SUGGESTED READINGS

- Taiz, L., Zeiger, E., (2010). Plant Physiology. Sinauer Associates Inc., U.S.A. 5<sup>th</sup> Edition.
- Hopkins, W.G., Huner, N.P., (2009). Introduction to Plant Physiology. John Wiley & Sons, U.S.A. 4<sup>th</sup> Edition.
- Bajracharya, D., (1999). Experiments in Plant Physiology- A Laboratory Manual. Narosa Publishing House, New Delhi.
- Dennis, D.T., Turpin, D.H., Lefebvre, D.D. and Layzell (eds.). 1997: Plant Metabolism (2nd Edition), Longman, Essex, England.
- Galston, A.W. 1989: Life Processes in Plants, Scientific American Library, Springer-Verlag, New York, USA.
- Hopkins, W.G., 1995: Introduction to Plant Physiology, John Wiley & Sons, Inc., New York, USA.
- Mohr, H. and Schopfer, P. 1995: Plant Physiology. Springer-Verlag, Berlin Germany.
- Salisbury, F.B. and Ross, C.W. 1992. Plant Physiology. 4<sup>th</sup> Edition. Wadsworth Publishing Company, Inc. California, USA.
- Sharma, O.P and Dixit Shivani. 2008. Practical Botany –III. Pragati Prakashan, Meerut, India.

**13. Cell and Molecular Biology (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Cell and Molecular Biology	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- The subject deals with the basic unit of living organisms (Cell) and the students are acquainted with the structure, types and functions of a cell.
- The studies related to the cell organelles, cell division (Mitosis and Meiosis) and chromosome studies (Number, structure, ploidy level and karyotype) are taught.

**CELL AND MOLECULAR BIOLOGY****THEORY****(CREDITS 4)****Unit 1****Cell as a unit of Life, Cell wall and Plasma membranes**

The cell theory; prokaryotic and eukaryotic cells; properties of cell; eukaryotic cell components. Bio-membranes; structure and function, fluid mosaic concept, fluidity of bio-membranes; membrane proteins and their functions; carbohydrates in the plasma membrane; Faces of the membranes. Cell wall-structure and functions.

**Unit 2****Cell Organelles**

Non-membranous organelles: Structure and functions of ribosomes, centrioles and basal bodies

Single membrane bound organelles: endoplasmic reticulum, golgi bodies and lysosomes, peroxisomes and glyoxisomes.

Double membrane bound organelles: Mitochondria; structure and functions, semi-autonomous nature; endosymbiont hypothesis; mitochondrial DNA. Chloroplast; structure and functions; semiautonomous nature, chloroplast DNA. Nucleus: Nuclear Envelope-structure of interphase nucleus; chromatin material, euchromatin and heterochromatin, nucleolus.

**Unit 3****Cell Cycle & Genetic Material**

Overview of Cell cycle, mitosis and meiosis. DNA- Watson and Crick's model, Griffith's and Avery's transformation experiments. Hershey-Chase bacteriophage experiment, DNA-structure, types, replication (Prokaryotes and eukaryotes).

**Unit 4****Gene Expression & Gene Regulation**

Types of RNA (mRNA, tRNA, rRNA), RNA polymerase- various types; Transcription and translation in prokaryotes, genetic code. Gene regulation in Prokaryotes: Lac operon and Tryptophan operon.

**PRACTICAL****(CREDITS 2)**

1. To study prokaryotic cells (bacteria), viruses, eukaryotic cells with the help of light and electronmicrographs.
2. Study of the photomicrographs of cell organelles.
3. To study the structure of plant cell through temporary mounts.
4. Study of mitosis and meiosis (temporary mounts and permanent slides).
5. Study the effect of temperature, organic solvent on semi permeable membrane.
6. Study of plasmolysis and deplasmolysis in onion peelings.
7. Study the structure of nuclear pore complex by photograph.
8. Study of special chromosomes (polytene & lampbrush) either by slides or photographs.
9. Preparation of the karyotype and ideogram from given photograph of somatic metaphase chromosome.

**SUGGESTED READINGS**

- Karp, G. 2010. Cell and Molecular Biology: Concepts and Experiments. 6<sup>th</sup> Edition. John Wiley & Sons. Inc.
- De Robertis, E.D.P. and De Robertis, E.M.F. 2006. Cell and Molecular Biology. 8<sup>th</sup> edition. LippincottWilliams and Wilkins, Philadelphia.
- Cooper, G.M. and Hausman, R.E. 2009. The Cell: A Molecular Approach. 5<sup>th</sup>

edition. ASM Press & Sunderland, Washington, D.C.; Sinauer Associates, MA.

- Becker, W.M., Kleinsmith, L.J., Hardin, J. and Bertoni, G. P. 2009. The World of the Cell. 7<sup>th</sup> edition. Pearson Benjamin Cummings Publishing, San Francisco.
- Bruce Alberts, James Watson, Dennis Bray, J. Lewis. Molecular Biology of Cell. Garland Science Publishers.
- Bruce Alberts & Lewis. Essential Cell Biology. Garland Science.
- Watson J.D. Molecular Biology of the Gene. 7<sup>th</sup> Edition. Melno Park Calif, Benjamin/Cummings.
- Lodish et al. Molecular Cell Biology. W. H. Freeman and Co.
- David E. Sadava. Cell Biology: Organ.
- David Freifelder. Molecular Biology.

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**14. Economic Botany and Biotechnology (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-II	Economic Botany and Biotechnology	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Information regarding the use of plants in human welfare is provided to the students. They get acquainted to different classes of economically important plants like cereals, pulses, oil crops, fruits, vegetables, ornamentals, fiber yielding plants, wood plants, medicinal plants etc.
- Use of different medicinal plants is to be read in detail.
- Students are supposed to acquire the basic knowledge of Biotechnology.

**ECONOMIC BOTANY AND BIOTECHNOLOGY****THEORY****(CREDITS 4)****Unit 1****Origin of cultivated plants**

Concept of centres of origin, their importance with reference to Vavilov's work; crop domestication and loss of genetic diversity; importance of germplasm diversity.

Cereals: Origin, morphology and uses of Wheat, Rice and Maize. Brief account of millets and pseudo-cereals.

**Unit 2****Legumes, Spices and Sugars**

Legumes: Introduction, importance to man and ecosystem with special reference to Gram, Soyabean and Kidney Bean.

Spices and condiments: Introduction; systematic position, morphological features and uses of *Crocus sativus*; *Curcuma domestica*; *Syzygium aromaticum*; *Piper nigrum*; *Elettaria cardamomum* & *Bunium persicum*.

General account of Starch and Sugars with special reference to Potato & Sugar cane.



### Unit 3

#### Beverages, Oils, fibres & Medicinal plants

Beverages: Introduction; processing and uses of Tea.

General account of Oils and Fats; extraction methods of essential oils; Systematic position and uses of *Brassica*, Coconut, Lavender.

Fibres: Classification of fibres (Based on origin); morphology, extraction & uses of Cotton.

Medicinal & Narcotic Plants: Systematic position, chemical constituents and uses of *Saussurea costus*, *Arnebia benthamii* & *Papaver somniferum*.

### Unit 4

#### Biotechnology & Biotechnological techniques

Introduction & importance of Biotechnology; brief account of plant tissue culture, concept of somaclonal variation; germplasm storage (cryopreservation). Concept of restriction enzymes.

Cloning Vectors for recombinant DNA: Plasmids (Ti & Ri plasmids of *Agrobacterium*), Transposons (Ac & Ds of Maize).

Biotechnological techniques: Gene transfer techniques in plants, transgenic plants with special reference to Bt- Cotton & Golden rice; Blotting techniques (Northern, Southern and Western), DNA finger printing; Molecular DNA Markers (RAPD, RFLP & SNPs). Principle and applications of Polymerase Chain Reaction (PCR); Hybridoma & monoclonal antibodies.

#### PRACTICAL

(CREDITS 2)

1. Study of economically important plants: Maize, Rice & Potato – (Habit sketch, starch grains and micro-chemical tests).
2. Study the distribution of oil bodies in some oil yielding seeds – Almond, Walnut, Ground nut, Sarson.
3. Study the surface fibres (Cotton) and Bast fibres (Hemp).
4. Study the different types of spices & condiments – Saffron, Piper, Curcuma, Clove, Cardamom, Black Caraway.
5. Preparation of basic standard culture media from dry powdered media.
6. Study through photographs the 4-step and 3-step micro-propagation of plant material.

7. Study through photographs the process of DNA finger printing.
8. Study through photographs the procedures of AFLP, RFLP and SNPs.

### SUGGESTED READINGS

- Bhojwani, S. S. & Razdan, M. K. (1996). Plant tissue culture: Theory and Practice. Elsevier Science Amsterdam. The Netherlands.
- Chrispeels, M. J. & Sadava (2003). Plants, Genes and Agriculture. Jones and Bartlett Publishers.
- Glick, B. R., Pasternak, J. J. (2003). Molecular Biotechnology- Principles & applications of recombinant DNA. ASM Press, Washington.
- Kochhar, S. L. (2011). Economic Botany in the Tropics, MacMillan Publishers India Ltd., New Delhi. 4<sup>th</sup> edition.
- Panday, B. P. (1999) Economic Botany. S. Chand and Company Ltd.
- Sambamurthy A.V.S.S. & Sambamurthy (2000). Economic Botany of Crop Plants. Asiatech Publishers Inc.
- Simmonds N. W. (1984). Evolution of crop plants (edited by Norman Willison Simmonds). Longman Inc., New York.
- Wickens, G. E. (2001). Economic Botany- Principles & Practices. Kulwer Academic Publishers. The Netherlands.

**Course Structure and distribution of different courses with their credits for**

**B.Sc. Chemistry**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Inorganic and Organic Chemistry	Core Course	6 credits 4(T)+2(P)
2.	II	Organic and Physical Chemistry	Core Course	6 credits 4(T)+2(P)
3.	III	Inorganic and Physical Chemistry	Core Course	6 credits 4(T)+2(P)
4.	IV	Inorganic and Physical Chemistry	Core Course	6 credits 4(T)+2(P)
5.	V	Polymer Chemistry	Discipline Specific Elective	6 credits 4(T)+2(P)
6.	VI	Instrumental Methods of Chemical Analysis	Discipline Specific Elective	6 credits 4(T)+2(P)

**Course outcomes**

Acquire systematic and comprehensive understanding of the fundamental concepts and principles in Organic, Inorganic, Physical, Analytical and other fields of Chemistry (ii)

Gather knowledge about basic principles of instruments and their use for characterisation of materials

Acquire skill in problem solving, critical thinking and analytical reasoning applicable to scientific problems

Demonstrate experimental techniques and methods for synthesis, isolation and characterisation of simple compounds

Exposure to skill enhancement courses to improve job opportunities in industry, scientific projects and other allied sectors.

**1. Inorganic and Organic Chemistry (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Inorganic and Organic Chemistry	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Understand the nature and strength of forces between chemical constituents.
- Understand the applications of different theories of chemical bonding.
- Gain knowledge about the chemical reactivity of S-Block elements.
- Understand stereochemical aspects of organic molecules.
- Acquire knowledge of aromaticity and reaction intermediates.
- Gain knowledge about the chemical properties of unsaturated hydrocarbons.

**INORGANIC AND ORGANIC CHEMISTRY****THEORY****(CREDITS 4)****Unit 1****Chemical Bonding and Molecular Structure****Chemical Bonding-I**

**Ionic Bond:** Lattice energy and Born Haber Cycle. Factors affecting the structure of ionic solids; Radius ratio effect; Coordination number and limitations of radius ratio rule. Fajan's rules and its applications. Solvation energy and solubility of ionic solids. Factors affecting the solubility of ionic solids.

**Metallic bond:** Characteristics, comparison with ionic and covalent bonds. Theories (Free electron, VB and MO).

**Chemical Bonding-II**

**Valence bond theory:** Directional characteristics of covalent bond and types of hybridizations. Limitations of VB theory. Percent ionic character from dipole moment and electronegativity difference.

**VSEPR theory:** Assumptions; Shapes of some molecules ( $\text{BF}_3$ ,  $\text{NH}_3$ ,  $\text{H}_2\text{O}$ ,  $\text{SF}_4$ ,  $\text{ClF}_3$  and  $\text{XeF}_2$ )

**Molecular Orbital Theory:** Energy level diagrams, Bond order and its significance.

Magnetic properties of homo & hetero nuclear diatomic molecules ( $N_2$ ,  $O_2$ ,  $F_2$ , HCl, CO & NO).

Multicentre bonding in electron deficient molecules.

## Unit 2

### S Block Elements

Chemical Reactivity towards Water, Oxygen, Hydrogen, Nitrogen and Halogens. Anomalous behaviour and diagonal relationships (Lithium, Beryllium, Magnesium and Aluminium). Chemical characteristics of the compounds of alkali and alkaline earth metals (Oxides and Hydroxides).

Hydrides: Classification and general properties.

Some commercially important compounds: Sodium carbonate, Calcium carbonate and Calcium sulphate (Preparation, properties and Uses).

Effective nuclear charge and its calculation by Slater rules. Electronegativity and Electron Affinity: Trends, Methods of determination; Applications in predicting and explaining the chemical behaviour of elements.

## Unit 3

### Aromaticity and Methods of determination of Reaction Mechanism

**Aromaticity:** Requirements of aromaticity. Huckel's rule and its significance. Explanation using molecular orbital diagram of benzene. Aromaticity of non-benzenoid compounds like pyrrole, thiophene, furan and aromatic ions (3, 5 and 7-membered rings).

**Reactive intermediates:** Structure, generation and stability of Carbocations, Carbanions, Free radicals, Carbenes, Benzynes and Nitrenes.

**Methods of determination of Reaction Mechanism:** Identification of Products, Isotope labelling, Stereochemical and Kinetic evidences.

**Stereochemistry:** Conformations with respect to ethane, butane and cyclohexane. Interconversion of Wedge Formula, Newman, Sawhorse and Fischer representations. Concept of chirality (upto two carbon atoms). Configuration: Geometrical and Optical isomerism; Enantiomerism, Diastereomerism and Meso compounds). Threo and erythro; D and L; *cis-trans* nomenclature; CIP Rules: R/ S (for upto 2 chiral carbon atoms) and E / Z Nomenclature (upto two C=C systems).

## Unit 4

### Structure, Synthesis and Reactions of Alkenes, Dienes, Alkynes and Alkyl halides

**Alkenes:** Preparation of alkenes from alcohols and alkyl halides through elimination reaction. Hoffman

and Saytzev's rules. Mechanism and Stereochemical implications. Mechanistic details including regioselectivity and stereochemical implications of halogenation, hydrohalogenation, hydroboration, epoxidation, hydroxylation and ozonolysis. Substitution at allylic and vinylic positions of alkenes.

**Dienes:** Structure of isolated, conjugated and cumulative dienes. 1,2 and 1,4-additions of 1,3-butadiene. Mechanism and Stereochemistry of Diels's-Alder reaction. Mechanism of Birch reduction.

**Alkynes:** Structure and acidic character of alkynes. Mechanisms of addition of halogens, hydrogen, halides, hydration, hydroboration and catalytic and metal-ammonia reductions of alkynes.

**Alkyl halides:** Classification, methods of preparation and reactions of alkyl halides. Mechanistic details of  $S_N1$  and  $S_N2$  E1 and E2 reactions. Effects of structure of alkyl halides, nature of nucleophiles, leaving groups, solvent and stereochemical implications of  $S_N$  reactions. Substitution versus Elimination.

## PRACTICAL

(CREDITS 2)

### Section A: Inorganic Chemistry - Volumetric Analysis

1. Estimation of sodium carbonate and sodium hydrogen carbonate present in a mixture.
2. Estimation of oxalic acid by titrating it with  $KMnO_4$ .
3. Estimation of water of crystallization in Mohr's salt by titrating with  $KMnO_4$ .
4. Estimation of Fe (II) ions by titrating it with  $K_2Cr_2O_7$  using internal indicator.
5. Estimation of Cu (II) ions iodometrically using  $Na_2S_2O_3$ .

### Section B: Organic Chemistry

1. Detection of extra elements (N, S, Cl, Br, I) in organic compounds (containing upto two extraelements)
2. Separation of mixtures by Chromatography: Measure the  $R_f$  value in each case (combination of two compounds to be given)
  - (a) Identify and separate the components of a given mixture of two amino acids (glycine, aspartic acid, glutamic acid, tyrosine or any other amino acid) by paper chromatography
  - (b) Identify and separate the sugars present in the given mixture by paper chromatography.

### SUGGESTED READINGS

- Basic Inorganic Chemistry; F. A. Cotton, G Wilkinson & P.L. Gaus; 3rd ed.; Wiley; 2002.
- Inorganic Chemistry; A. G. Sharpe; 3rd ed.; ELBS, 1992.
- Concise Inorganic Chemistry; J. D. Lee; 5th ed.; ELBS; 2003.
- Inorganic Chemistry . G. L. Miessler, T. A. Tarr; 3rd ed.; Prentice Hall; 2009

- Inorganic Chemistry; D. E. Shriver; P. W. Atkins & C. H. Langford; 4th ed.; Oxford; 2006
- Concepts and Models of Inorganic Chemistry; B. Douglas; D. Mc. Daniel & J. Alexander; 3rd ed.; Wiley; 2001.
- McMurry, J. E. Fundamentals of Organic Chemistry, 7th Ed. Cengage Learning India Edition, 2013.
- Sykes, P. A Guidebook to mechanism in organic chemistry, Orient Longman, New Delhi (1988).
- Eliel, E.L. Stereochemistry of Carbon Compounds, Tata McGraw Hill education, 2000.
- Finar, I. L. Organic Chemistry (Vol. I & II), E. L. B. S.
- Morrison, R.T. & Boyd, R.N. Organic Chemistry, Pearson, 2010.
- Bahl A. & Bahl B. S. Advanced Organic Chemistry, S. Chand, 201
- Svehla, G. Vogel's Qualitative Inorganic Analysis, Pearson Education, 2012.
- Mendham, J. Vogel's Quantitative Chemical Analysis, Pearson, 2009.
- Vogel, A.I., Tatchell, A. R., Furnis, B.S., Hannaford, A. J. & Smith, P.W.G., Textbook of Practical Organic Chemistry, Prentice-Hall, 5th edition, 1996.
- Mann, F.G. & Saunders, B. C Practical Organic Chemistry Orient-Longman, 1960

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## 2. Organic and Physical Chemistry (Core Course-II)

Semester	Core Course	Course Title	Credit
II	CC-II	Organic and Physical Chemistry	Theory: 04 Practical: 02 Total: 06

### Course specific outcomes

- Laws of thermodynamics and their application to chemical and phase equilibria.
- The electrochemistry of electrodes and cells.
- Aromatic electrophilic and nucleophilic substitution reactions.
- The preparation and chemical reactions of carbonyl compounds.

## ORGANIC AND PHYSICAL CHEMISTRY

### THEORY

(CREDITS 4)

#### Unit 1

#### Thermodynamics and Equilibrium

**Thermodynamic functions:** State and path functions and their differentials. Thermodynamic processes. Concept of heat and work. Heat capacity, heat capacities at constant volume and constant pressure and their relationship. Joule's law, Joule-Thomson coefficient and inversion temperature. Calculation of  $U$  &  $\Delta H$  for the expansion of ideal and non-ideal (van der Waals) gases under isothermal and adiabatic conditions. Temperature dependence of enthalpy, Kirchhoff's equation. Bond dissociation energy and its calculation from thermochemical data with applications.

**Second law of thermodynamics:** Need for the law, different statements of the law. Carnot cycle and its efficiency, Carnot theorem. Thermodynamic scale of temperature. Concept of entropy, entropy as a function of  $V$  &  $T$ , and as a function of  $P$  &  $T$ . Clausius inequality; entropy as criteria for spontaneity and equilibrium. Entropy change in physical processes, ideal gas expansion and entropy of mixing of ideal gases.

**Third law of thermodynamics:** Gibbs function ( $G$ ) and Helmholtz function ( $A$ ) as thermodynamic quantities, Nernst heat theorem, third law of thermodynamics, concept of residual entropy, evaluation of absolute entropy from heat capacity data.  $\Delta G$  &  $\Delta A$  as criteria for thermodynamic equilibrium and spontaneity. Their advantage over entropy change. Variation of  $G$  and  $A$  with  $P$ ,  $V$  and  $T$ , Gibbs- Helmholtz equation.



## Unit 2

### Electrochemistry

Migration of ions and Kohlrausch's law, Arrhenius theory of electrolyte dissociation and its limitations. Debye-Huckel-Onsager's equation for strong electrolytes (elementary treatment without derivation). Transport number, definition and determination by Hittorf's and moving boundary methods. Application of conductivity measurements: determination of degree of dissociation and dissociation constants of acids, solubility product of a sparingly soluble salt, conductometric titrations.

Types of reversible electrodes (half-cells): metal-metal ion, gas-metal-ion, metal-insoluble salt-anion and redox electrodes. Standard hydrogen electrode, glass electrode, reference electrodes (calomel, Ag/AgCl). Electrode reactions, Nernst equation and cell E.M.F. Electrochemical series and its significance.

Electrolytic and Galvanic cells. Measurement of EMF of a cell. Concentration cells, electrolyte concentration cell (with and without transport), electrode concentration cell. Application of standard potentials: determination of thermodynamic functions of cell reactions ( $\Delta G$ ,  $\Delta H$  and  $K$ ), pH and pKa, solubility product and activity coefficient; potentiometric titrations.

## Unit 3

### Aromatic Compounds and Oxygen Bearing Compounds-I

**Aromatic Electrophilic Substitution Reactions:** General mechanism of aromatic electrophilic substitution reactions. Formation of Sigma and pi-complexes with energy profile diagram. The second substitution-concept and role of activating and deactivating groups. *Ortho* and *para* ratio. Mechanisms of Fries and Claisen rearrangements and Gatterman, Huber-Hoesch, Veils-Meir-Haack and Riemer-Tieman reactions.

### Aromatic Nucleophilic Substitution Reactions

**Aryl halides:** Methods of preparation of aryl halides with mechanistic details of the reactions involved. Addition-Elimination and Elimination-Addition mechanisms of nucleophilic aromatic substitution reactions involving aryl halides. Mechanism of nucleophilic aromatic substitution reaction in nitroarenes.

### Oxygen bearing compounds-I

**Alcohols:** Classification. Methods of formation of monohydric alcohols through reduction of aldehydes, ketones, carboxylic acids and esters using different reducing agents including mechanistic details of the reactions involved. Reactions of alcohols including Pinacol-

Pinacolone rearrangement with mechanism. Methods of formation and the oxidative cleavage reactions of diols.

**Epoxides:** Methods of formation and mechanism of acid/base catalysed ring openings of epoxides. Reactions of Grignard and organolithium reagents with epoxides.

**Ethers:** Mechanisms involved in the synthetic procedures of ethers, their cleavage and auto-oxidation.

#### Unit 4

#### Oxygen Bearing Compounds-II

**Aldehydes and Ketones:** Structure and reactivity of carbonyl groups. Synthesis of aldehydes starting from acid chlorides and those of ketones from nitriles, carboxylic acids and 1, 3-dithianes. Stereochemistry and mechanism of nucleophilic additions to carbonyl groups. Cram's rule.

Mechanisms involved in Benzoin, Aldol/Cross Aldol, Perkin, Knoevenagel, Cannizzaro and Mannich condensations/reactions. Meerwein-Ponndorf-Verly, Clemensen and Wolf-Kishner reductions and Baeyer-Villiger & Oppenauer Oxidations. Mechanisms of acid and base catalysed halogenation in aldehydes and ketones.

**Carboxylic acids and their derivatives:** Structure of carboxylic group. Factors affecting strength of carboxylic acids. Mechanistic details of preparation of carboxylic acids using Grignard reagent and from hydrolysis of nitriles. Mechanisms involved in the HVZ reaction, conversion of acids to corresponding chlorides, esters, anhydrides and amides. Relative stabilities and interconversion of acid derivatives into one another. Reduction of carboxylic acids and their derivatives. Transesterification and hydrolysis of esters. Applications of Ethyl acetoacetate and Malonic ester in organic synthesis.

#### PRACTICAL

(CREDITS 2)

#### Section A: Physical Chemistry

##### Thermochemistry

1. Determination of heat capacity of calorimeter for different volumes.
2. Determination of enthalpy of neutralization of hydrochloric acid with sodium hydroxide.
3. Determination of enthalpy of ionization of acetic acid.
4. Determination of integral enthalpy of solution of salts ( $\text{KNO}_3$ ,  $\text{NH}_4\text{Cl}$ ).

5. Determination of enthalpy of hydration of copper sulphate.
6. Study of the solubility of benzoic acid in water and determination of  $\Delta H$ .

### Ionic equilibria

pH Measurements:

1. Measurement of pH of different solutions like aerated drinks, fruit juices, shampoos and soaps (usedilute solutions of soaps and shampoos to prevent damage to the glass electrode) using pH-meter.
2. Preparation of buffer solutions of the following compositions:
  - (a) Sodium acetate-acetic acid
  - (b) Ammonium chloride-ammonium hydroxide

Measurement of the pH of above buffer solutions and comparison of the values with theoretical values.

### Section B: Organic Chemistry

1. Purification of organic compounds by crystallization (from water and alcohol) and distillation.
2. Criteria of Purity: Determination of melting and boiling points.
3. Preparations: Mechanism of various reactions involved to be discussed.

Recrystallisation, determination of melting point and calculation of quantitative yields to be done.

- (a) Bromination of Phenol/Aniline
- (b) Benzoylation of amines/phenols
- (c) Oxime and 2,4-dinitrophenylhydrazone of aldehyde/ketone

### SUGGESTED READINGS

- Principles of Physical Chemistry; Puri, Sharma and pathania; S. Nagin Chand & Co; 2011
- The Elements of Physical Chemistry; P.W. Atkins; Oxford University Press;
- Physical Chemistry; G.M. Barrow; McGraw-Hill; 5<sup>th</sup> ed.; International Student edition; 1992.
- Physical Chemistry; R.A. Alberty; Wiley; Eastern Ltd.
- Physical Chemistry; Castellan, G.W. 4th ed. Narosa; 2004.

- Selected Experiments in Physical Chemistry, N. G. Mukherjee, J. N. Ghosh & Sons.
- Experiments in Physical Chemistry, R. C. Das and B. Behra (Tata McGraw Hill)
- Advanced Practical Physical Chemistry, J. B. Yadav; Goel Publishing House; 20<sup>th</sup> ed.; 2001.
- Advanced Experimental Chemistry; J. N. Gurtu and R. Kapoor; Vol. I; 1<sup>st</sup> ed.; S. Chand & Co; 2000.
- Practical Physical Chemistry; Khosla, B. D.; Garg, V. C. & Gulati, A. R. Chand & Co.; 2011.
- Textbook of Practical Organic Chemistry; Vogel, A. I.; Tatchell, A. R.; Furnis, B.S., Hannaford, A.J. & Smith, P. W. G; 5th ed.; Prentice-Hall; 1996.
- Practical Organic Chemistry; Mann, F. G. & Saunders, B. C.; Orient-Longman; 1960.
- Laboratory Manual in Organic Chemistry; R. K. Bansal; Wiley Eastern.
- Experimental Organic Chemistry; P. R. Singh, D. S. Gupta and K. S. Barpal; Vol I & II Tata McGraw Hill.
- Advanced Practical Organic Chemistry; N. K. Vishnoi; Vikas Publishing House Pvt Ltd; 1996.

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### 3. Inorganic and Physical Chemistry (Core Course-III)

Semester	Core Course	Course Title	Credit
III	CC-III	Inorganic and Physical Chemistry	Theory: 04 Practical: 02 Total: 06

#### Course specific outcomes

- Understand the structure, bonding, synthesis, properties and use of the various compounds of P-block elements.
- The trends in the chemical and physical properties of transition and inner transition elements along with their compounds.
- Application of thermodynamic principles to phase equilibria and solutions.
- Understand the rates of second, third order reactions, the dependence of reaction rate on temperature and comparative account of photochemical and thermal reactions.

## INORGANIC AND PHYSICAL CHEMISTRY

### THEORY

(CREDITS 4)

#### Unit 1

##### P-Block Elements

**Boranes:** Nomenclature, Classification, Preparation, Properties, Structure and Bonding with special reference to Diborane.

**Bonding in higher boranes:** Types of bonds, Introductory concept about carboranes and metallocarboranes.

**Carbides:** Classification, Preparation, Properties and Uses. Intercalation compounds of graphite.

**Nitrogen Compounds:** Preparation, properties and uses of Hydrazine, Hydroxylamine and Oxides and Oxoacids of nitrogen. Ammonia as a non-aqueous solvent.

**Oxygen:** Chemistry of different forms (atomic, molecular and ozone). Oxides, Fluorides and Oxyacids of Sulphur: Properties, Structure & Bonding. Hydrogen Peroxide: Preparation, Properties and Uses.

**Halogens:** Comparative chemical reactivity, Types, Properties, Structure & Bonding of hydrogen halides, Interhalogens and Polyhalides. Oxyacids of Chlorine: Structure and Bonding.

**Noble gases:** Isolation and importance of noble gases in theoretical chemistry.

Fluorides, oxides and oxyfluorides of Xenon: Structure and bonding (VB and MO treatment)

## Unit 2

### Transition and Inner-Transition Elements

**Transition Elements:** Variation in atomic and ionic sizes, Ionization enthalpies, Variable oxidation states. Standard electrode Potentials of  $M^{2+} / M$  and  $M^{3+} / M^{2+}$  systems. Ionic / Covalent and Acidic / Basic character of transition metal oxides in various oxidation states. Stabilization of unusual oxidation states. Spectral and Magnetic Properties; Calculation and Uses of magnetic moment value. Interstitial Hydrides, Carbides and Oxides of first transition series:- Preparation, Properties & Uses.

**Inner-Transition Elements:** Electronic Configuration, Oxidation States, Magnetic Properties and Complexing behaviour of inner transition elements. Cause and Consequences of Lanthanoid/ Actinoid Contraction.

**Separation of Lanthanoids:** Fractional Crystallization, Ion-exchange and Solvent extraction methods.

## Unit 3

### Equilibrium and Solution thermodynamics

**Equilibrium:** Equilibrium constant and free energy change. Thermodynamic derivation of law of mass action. Reaction isotherm and reaction isochore, Clapeyron equation and Clausius-Clapeyron equation, applications.

**Phase Equilibria:** Phase rule, Meaning of the terms: phase, component and degree of freedom, statement and derivation of Gibbs phase rule, phase diagrams of one component system – water and sulphur systems. Phase equilibria of two component system: solid-liquid equilibria, simple eutectic system (Pb-Ag), desilverisation of lead. Solid solutions-compound formation with congruent melting point (Mg-Zn) and incongruent melting point ( $FeCl_3-H_2O$  systems). Freezing mixtures, acetone- dry ice. Liquid-liquid mixtures: Ideal liquid mixtures, Raoul's and Henry's law. Non-ideal systems, azeotropes ( $HCl-H_2O$  and  $C_2H_5OH-H_2O$  systems.) Partially miscible liquids:

Lower and upper consolute temperatures, (examples of phenol-water, trimethylamine-water, nicotine-water systems).

**Nernst distribution law:** Statement and thermodynamic derivation, applications.

**Thermodynamics of Solutions:** Thermodynamics of elevation in boiling point and depression in freezing point. Activity and activity coefficient, determination of activity and activity coefficient with freezing point and EMF methods. Excess thermodynamic functions of non-ideal solutions.

## Unit 4

### Chemical kinetics & Photochemistry

Order of reaction; derivation of rate equations for second (two reactants) and third order reactions. Determination of order of reaction by differential rate, integration, half-life period and isolation methods. Temperature dependence of reaction rates:- Arrhenius equation, concept of activation energy.

**Theories of chemical kinetics:** Simple collision theory based on hard sphere model, evaluation of rate constants of atomic reactions, extension to molecular reactions, limitations. Brief idea of transition state theory (equilibrium hypothesis).

**Catalysis:** Characteristics of catalysed reactions, Acid-Base catalysis with examples.

**Photochemistry:** Interaction of radiation with matter, difference between thermal and photochemical processes. Laws of photochemistry. Grothus-Draper law, Stark-Einstein law, Jablonski diagram depicting various processes occurring in the excited state, qualitative description of fluorescence, phosphorescence, non-radiative processes (internal conversion, intersystem crossing) quantum yield, photosensitized reactions, energy transfer processes (simple examples).

Kinetics of photochemical reactions: Photochemical decomposition of hydrogen iodide. Hydrogen-chlorine and hydrogen-bromine reactions, Comparison with thermal decomposition reactions.

## PRACTICAL

(CREDITS 2)

### Section A: Inorganic Chemistry

(a) **Qualitative Analysis:** To identify the given Inorganic mixture containing three acidic and three basic radicals (excluding insoluble and interfering radicals) by Macro Scale Analysis (06 known and 06 unknown mixtures)

**(b) Paper Chromatography:** Separation and identification of metals from mixtures containing two cations (03 exercises)

## Section B: Physical Chemistry

### Phase equilibria

- Construction of the phase diagram of a binary system (simple eutectic) using cooling curves.
- Determination of the critical solution temperature and composition of the phenol water system and study the effect of impurities on it.
- Study of the variation of mutual solubility temperature with concentration for the phenol water system and determination of the critical solubility temperature.

### Chemical Kinetics

Study the kinetics of the following reactions.

- Initial rate method: Iodide-persulphate reaction
- Integrated rate method:
  - Acid hydrolysis of methyl acetate with hydrochloric acid.
  - Saponification of ethyl acetate.
  - Compare the strengths of HCl and H<sub>2</sub>SO<sub>4</sub> by studying kinetics of hydrolysis of methyl acetate.

### SUGGESTED READINGS

- Basic Inorganic Chemistry; F. A. Cotton; G. Wilkinson & P. L. Gaus; 3<sup>rd</sup> ed.; Wiley; 2002.
- Chemistry of Elements; Greenwood Earnshaw; 2<sup>nd</sup> ed.; Butterworth; 2000.
- Advanced Inorganic Chemistry; Prakash, S.; Tuli, G. D.; Basu, S. K. & Madan, R. D.; Vol. 1.; S. Chand & Co.
- Inorganic Chemistry; Miessler G. L. & Tarr, T. A.; 3<sup>rd</sup> ed.; Prentice Hall; 2009
- Inorganic Chemistry; Shriver, D. E.; Atkins, P. W. & Langford, C. H.; 4<sup>th</sup> ed.; Oxford; 2006.
- Concepts and Models of Inorganic Chemistry; Douglas, B.; Daniel, D. Mc. & Alexander, J.; 3<sup>rd</sup> ed.; Wiley; 2001.
- Advanced Inorganic Chemistry; Prakash, S.; Tuli, G. D.; Basu, S.K. & Madan, R. D.; Vol. 1.; S. Chand & Co.
- Principals of Physical Chemistry; Puri, Sharma and Pathania; S. Nagin Chand & Co;



2011.

- The Elements of Physical Chemistry; Atkins, P. W.; Oxford University Press.
- Physical Chemistry; Barrow, G. M.; 5<sup>th</sup>ed.; McGraw-Hill; International Student edition; 1992.
- Physical Chemistry; Alberty, R. A.; Wiley Eastern Ltd.
- Essentials of Physical Chemistry; Kapoor, K. L.; Vols. III & IV; 2<sup>nd</sup>ed.; Macmillan India Ltd; 2005.
- Physical Chemistry through Problems; Dogra, S. K.; Wiley Eastern Ltd; 1991. University General Chemistry; Rao, C. N. R.; MacMillan. Experimental Inorganic Chemistry; Palmer, W. G.; Cambridge.
- Analytical Chemistry; Christian, G. D.; 6<sup>th</sup> ed.; Wiley; 2008.\
- Practical Physical Chemistry; Khosla, B. D.; Garg, V. C. & Gulati, A.; R. Chand & Co.; 2011.
- Selected Experiments in Physical Chemistry; Mukherjee N. G. & Ghosh, J. N.; S. Chand & Sons.
- Experiments in Physical Chemistry; Das, R. C. and Behra, B.; Tata McGraw Hill.

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#### 4. Inorganic and Physical Chemistry (Core Course-IV)

Semester	Core Course	Course Title	Credit
IV	CC-IV	Inorganic and Physical Chemistry	Theory: 04 Practical: 02 Total: 06

#### Course specific outcomes

- Understand the structure, bonding, synthesis, properties and use of the various compounds of P-block elements.
- The trends in the chemical and physical properties of transition and inner transition elements along with their compounds.
- Application of thermodynamic principles to phase equilibria and solutions.
- Understand the rates of second, third order reactions, the dependence of reaction rate on temperature and comparative account of photochemical and thermal reactions.

### INORGANIC AND ORGANIC CHEMISTRY

#### THEORY

(CREDITS 4)

#### Unit 1

##### Coordination and Bioinorganic Chemistry

**Coordination Chemistry:** Experimental verification of Werner's theory. Effective Atomic number: Concept and its significance.

**Stereochemistry of Coordination compounds:** With coordination numbers 2-6; Optical and Geometrical isomers of  $MA_4B_2$ ,  $MA_3B_3$  and MABCD type Complexes.

**Bonding in Complexes:** Comparison of valence bond and Crystal field theories; CFT of tetrahedral, square planar and octahedral systems. Factors affecting magnitude of  $\Delta$ ; pairing energy and CFSE of weak and strong field ligands. Limitations of Crystal field theory. Applications of Coordination compounds. Jahn Teller Distortion.

**Bioinorganic Chemistry:** Biomolecules and their Metal coordination behaviour: Proteins, Nucleic acids and Lipids. Abundance of elements in living systems; Concept and Criteria for essentiality of elements in living systems.

**Distribution and biological role of essential elements in life:**  $Na^+$ ,  $K^+$ ,  $Ca^{2+}$ ,  $Mg^{2+}$ ,  $Fe^{2+}$  and halogens.

**Haemoglobin and Chlorophyll:** Structural and Biological role.

## Unit 2

### Amines and Nitrogen bearing Heterocyclic compounds

**Amines:** Classification and factors affecting basicity of amines. Mechanistic details (wherever applicable) of methods of formation of alkyl and arylamines through reduction of nitro compounds and nitriles. Gabriel-Phthalimide reaction and Hofmann rearrangement. Mechanisms involved in the formation and reactions of arenediazonium salts including Azo coupling.

**Heterocyclic compounds bearing one nitrogen atom:** Structural features of pyrrole, pyrrolidine, pyridine and piperidine and comparative account of their basic strength. Aromaticity and electrophilic substitution reactions of pyrrole and their comparison with those of furan and thiophene. Mechanisms involved in the preparations of Indole and quinoline using Fischer-Indole and Bischler-Napieralski syntheses.

## Unit 3

### States of Matter

**Gaseous State:** Deviation of gases from ideal behaviour, van der Waal's equation of state.

**Critical Phenomenon:** PV isotherms of real gases, continuity of states, the isotherms of van der Waal's equation. Relationship between critical constants and van der Waal's constants, the law of corresponding states, reduced equation of state.

**Molecular velocities:** Root mean square, average and most probable velocities; qualitative discussion of the Maxwell's distribution of molecular velocities. Collision number, mean free path and collision diameter.

**Liquid State:** Liquification of gases and adiabatic expansion. Intermolecular forces. Structure of liquids (a qualitative description), structural differences between solids, liquids and gases.

**Solid State:** Symmetry elements in crystals, Lattice planes and Miller indices. X-ray diffraction by crystals, derivation of Bragg's equation and its application. Interplanar distances in terms of miller indices. Determination of crystal structure by Laue's method and powder method. Systematic absence of diffraction lines in the X-ray pattern of cubic crystals with reference to NaCl, KCl & CsCl.

## Unit 4

### Spectroscopy

**Spectroscopy:** Electromagnetic radiation, regions of the spectrum, basic features of different spectrometers. Statement of Born-Oppenheimer approximation.

**Rotational spectrum:** Moment of inertia, classification of molecules on the basis of moment of

inertia. Energy of a rigid diatomic rotor, selection rules for rotational transition and associated spectrum, relative population of rotational levels and spectral intensity, determination of bond length.

**Vibrational Spectrum:** Classical and quantum mechanical (qualitative) treatment of simple harmonic oscillator, selection rules for vibrational transition, pure vibrational spectrum of a diatomic molecule, determination of force constant, relation of force constant with bond length and bond energy, vibrational degrees of freedom, idea of vibrational frequencies of different functional groups. The infrared region, Molecular vibrations, significance of Hook's law and selection rules. The infrared spectrum. Fingerprint region and its significance. Effect of resonance, inductive effect and H-bonding on infrared absorptions. Characteristic absorptions of Alkanes, alkenes, alkynes, alcohols, ethers, carbonyl compounds, amines and carboxylic acids and their derivatives.

**Ultraviolet Spectroscopy:** The electromagnetic spectrum. Beer-Lambert law, molar absorptivity, presentation and analysis of electronic spectra. Types of electronic excitations. Effects of conjugation and solvents on absorption. Chromophores and Auxochromes. Bathochromic and hypochromic shifts. Ultraviolet spectra of enes and enones. Prediction of maxima of enes and enones using Woodward's rules.

**Nuclear Magnetic Resonance Spectroscopy:** Basic principles of NMR spectroscopy. Shielding and deshielding of protons. The chemical shift. Equivalent and non-equivalent protons. Spin-spin splitting, coupling constants for vicinal, germinal and long-range couplings. Characteristic functional group NMR absorptions. The NMR spectra of ethyl bromide, ethanol, acetaldehyde, ethyl acetate, methyl propionate, toluene and acetophenone.

## PRACTICAL

(CREDITS 2)

### Section A: Inorganic Chemistry

#### A. Gravimetry

1. Estimation of Copper as  $\text{CuSCN}$ .
2. Estimation of Nickel as  $[\text{Ni}(\text{dmg})_2]$ .
3. Estimation of Silver as  $\text{AgCl}$ .
4. Estimation of Barium as  $\text{BaSO}_4$

#### B. Titrimetry

1. Calibration of fractional weights and Analytical Lab wares (Pipette, Burette, Volumetric Flask)
2. Preparation of Standard Solution (Oxalic-acid, Sodium Hydroxide, Potassium permanganate and Potassium dichromate)
3. Dilution of a Standard Solution (0.1M-0.001M).

4. Determination of Acetic acid concentrations in commercial Vinegar using NaOH.
5. Determination of alkali content in antacid tablets using HCl.
6. Determination of Calcium Content in chalk as Calcium Oxalate by Titrimetry.
7. Determination of Ferrous and Ferric ions by Dichromate method.
8. Estimation of hardness of water by EDTA.
9. Estimation of Copper using thiosulphate.

**C. Spectrophotometry**

1. Spectrophotometric determination of Fe (II), using 1, 10-Phenanthroline
2. Spectrophotometric determination of Fe (III) with EDTA.

**Section B: Organic Chemistry**

**A. Separation and Identification of binary mixtures of Organic Compounds:**

Qualitative analysis of Organic mixture containing two solid components using  $\text{H}_2\text{O}$ ,  $\text{NaHCO}_3$  or NaOH for separation.

**B. Synthesis of Organic Compounds (Any two of the following single stage preparations).**

- a) Acetylation of Salicylic acid
- b) Preparation of Iodoform from acetone.
- c) Preparation of m-dinitrobenzene from benzene.
- d) Preparation of p-bromo acetanilide from acetanilide.

**Section C: Physical Chemistry**

**A. Surface tension measurement (use of organic solvents excluded).**

1. Determination of the surface tension of a liquid or a dilute solution using a stalagmometer.
2. Study of the variation of surface tension of a detergent solution with concentration.

**B. Viscosity measurement (use of organic solvents excluded).**

1. Determination of the relative and absolute viscosity of a liquid or dilute solution using an Ostwald's viscometer.
2. Study of the variation of viscosity of an aqueous solution with concentration of solute.

**C. Polarimetry:**

1. To determine the angle of rotation and hence specific rotation of an optically active compound.
2. To study the kinetics of inversion of cane sugar.

#### D. Refractometry

1. To determine refractive index of a liquid by using Abbe's refractometer.
2. To determine percentage composition of a mixture of two liquids by refractometry (Glycerol and water).

#### SUGGESTED READINGS

- Coordination Chemistry; Banerjee, D.; Tata Mc Graw Hill; 1997.
- Concise Coordination Chemistry; Gopalan, R. & Ramalingam, V.; Vikas; 2003.
- The Biological Chemistry of Elements; Frausto de Silva, J.J. R. & Williams, R.J.P.; Oxford; 1994.
- Bio-inorganic Chemistry of Elements; Hussain Reddy, K.; New Age; 2005.
- A textbook of Organic Chemistry; Bansal, R.K.; 4th ed.; Wiley Eastern; 2003.
- Organic Chemistry; Morrison and Boyd ; 6th ed. ; PHI; 2003.
- Fundamentals of Organic Chemistry; Solomon's and Frye ; 10th ed.; John-Wiley; 2012.
- Reaction Mechanism in Organic Chemistry; Mukherji and Singh; 3rd ed.; Macmillan; 2007.
- Physical Chemistry; Barrow, G. M.; 5th ed.; McGraw-Hill; International Student edition; 1992.
- Physical Chemistry; Alberty, Selby et al; Wiley Eastern Ltd.
- Fundamentals of Molecular Spectroscopy; Barnwell, C.N., E. M. Mc. Cash; 4th ed.; Tata McGraw Hill; 1994.
- Electronic Absorption Spectroscopy and related techniques; Satyanarayana, D N; Universities Press.
- Vogel's text book of Quantitative Inorganic Analysis (revised); Bassett, J., Denney, R. C., Jeffery, G. H and Mendham, J.; 6th ed.; ELBS; 2007.
- Experimental Inorganic Chemistry; Palmer, W.G.; Cambridge.
- Analytical Chemistry; Gary D-Christian; 6th ed.; Wiley; 2008.
- Vogel's Textbook of Quantitative Inorganic Analysis; Bassett, J.; Denny, R.C; 6th ed.; ELBS; 2007.
- Vogel's Qualitative Inorganic Analysis; Svehla, G.; Pearson Education; 2012.
- Vogel's Quantitative Chemical Analysis; Mendham, J.; Pearson; 2009.
- Vogel's book of Practical Organic Chemistry; Furniss, B. S., Hannaford, A. J.; Rogers, V.; Smith P.W.G.; 5th ed.; ELBS; 2009.

- Laboratory manual in Organic Chemistry; Bansal, R. K.; Wiley Eastern.
- Experimental Organic Chemistry; Singh, P.R.; Gupta, D.S. and K.S. Barpal; Vol I & II; Tata McGraw Hill.
- Comprehensive Practical Organic Chemistry; Ahluwalia, V. K. & Aggarwal, R.; Universities Press.
- Practical Physical Chemistry; Khosla, B. D.; Garg, V. C. & Gulati, A., Chand, R. & Co.; 2011.
- Selected Experiments in Physical Chemistry; Mukherjee N. G. & Ghosh, J. N.; S. Chand & Sons.
- Experiments in Physical Chemistry; Das, R. C, and Behra, B.; Tata McGraw Hill.

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**5. Polymer Chemistry (Discipline Specific Elective -I)**

Semester	Core Course	Course Title	Credit
V	DSE-I	Polymer Chemistry	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Understand the structure, properties and methods of determining molecular weight of polymers.
- Acquire knowledge on synthesis, kinetics, characterisation and processing of polymers.
- Polymer additives and application of polymers in modern technology and day-to-day life.

**POLYMER CHEMISTRY****THEORY****(CREDITS 4)****Unit 1****Introduction**

**Introduction:** Polymer structure; Stereochemistry; Nomenclature of polymer based on source, structure and trade; Molecular interactions and Polymer Crystals; Rheology and solubility of Polymers.

**Molecular weight of polymers:** Number average, weight average and viscosity; Osmometry, lightscattering; End group analysis and gel permeation chromatography.

**Naturally Occurring Polymers:** Proteins, Nucleic acids and polysaccharides.

**Unit 2****Polymerisation Reactions**

**Polycondensation/Step reaction Polymerisation:** Interfacial, homogenous and ring opening polymerisation.

**Chain reactions/ addition/ radical Polymerisation:** Radical chain polymerisation, Polymerisation techniques, ionic polymerisation and complex catalysis systems; polyenes

**Copolymerisation:** Kinetics of copolymerisation and composition of copolymers; Block copolymers and graft copolymers.

**Ionic polymers** (Brief introduction)



### Unit 3

#### Characterisation and Processing of Polymers:

**Characterisation:** UV-Visible spectrophotometry, IR, NMR, ESR, X-ray, electron diffraction, thermal analysis and Chromatography.

**Processing:** Compression molding, injection molding, extrusion and blow molding, fabrication and finishing.

**Additives:** Fillers, Reinforcements, Plasticizers, Antioxidants, Thermal stabilizers, UV-stabilizers and colorants.

### Unit 4

#### Polymer Technology and Applications

Fibers, Textile properties, Spinning, fibre-after treatment, Elastomers, Films, Coatings, Adhesives, laminates, Cellular Polymers, Polyelectrolytes, Plastic pipes and molded plastics, vulcanisation.

Thermosetting Resins: Phenolic resins, Amino resins, Unsaturated polyester resins, Epoxy resins, Ion-exchange resins and Zeolites.

#### PRACTICAL

(CREDITS 2)

1. Determination of Critical Micelle Concentration (CMC) of a surfactant by conductometry.
2. Determination of biological polymers (carbohydrates) in a sample.
3. Preparation of polymer: Urea-Formaldehyde Resin.
4. Preparation of Bakelite polymer.

#### SUGGESTED READINGS

- Introduction to Polymer Chemistry; Raymond B-Seymour; McGraw Hill Book Company; 1971
- Text Book of Polymer Science, 2<sup>nd</sup> edition; Fred W. Billmeyer, Jr.; Wiley Interscience New York; 1974.
- Physical Chemistry of Polymers; 2<sup>nd</sup> edition; A. Tager; Mir Publishers Moscow; 1978.
- Principles of Polymerisations; 4<sup>th</sup> edition Wiley; Odian, G, 2004.
- Seymour/ Carragher's Polymers Chemistry; 9<sup>th</sup> edition; Charles E. Carraher Jr.; 2013.
- Inorganic Polymers, James E. Mark; Harry R. Allcock and Robert West; 1992.

**6. Instrumental Methods of Chemical Analysis (Discipline Specific Elective -II)**

Semester	Core Course	Course Title	Credit
VI	DSE-II	Instrumental Methods of Chemical Analysis	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Acquire basic knowledge of spectroscopy and its applications.
- The regions of electromagnetic spectrum, their properties and interactions with matter.
- The underlying principles involved in transitions (rotational, vibrational, electronic, NMR, atomic), interpretation of the corresponding spectra and applications.

**INSTRUMENTAL METHODS OF CHEMICAL ANALYSIS****THEORY****(CREDITS 4)****Unit 1****Introduction to Spectroscopic Methods of Analysis**

**(i) Properties of Electromagnetic Radiations:** The Electromagnetic spectrum. General nature of electromagnetic waves; wave parameters, radiant power (Intensity), superposition of waves, diffraction, transmission, dispersion, refraction, reflection, scattering and polarization of radiation. Absorption, emission, fluorescence and phosphorescence.

**(ii) Instruments for Optical Spectroscopy:** Components of optical instruments: radiation sources; continuous sources, line sources, lasers. Wavelength selectors, sample holders. Radiation detectors; photon detectors; vacuum phototubes, photomultiplier tubes, photoconductivity detectors, silicon diode detectors. Signal processors and read outs.

**Unit 2****Molecular Spectroscopy**

**(i) UV-Visible -Near IR spectroscopy:** UV-Visible-Near IR regions of EMS. Transmittance, absorbance, Beer-Lambert. law, limitations to the applicability of the Beer's law, molecular electronic excitations ( $\pi$ - $\pi^*$ ,  $n$ - $\pi^*$ , d-d transitions, charge transfer transitions, intra-ligand transitions). Fluorescence, phosphorescence. Instrumentation: Light

sources, wavelength dispersion (gratings, prisms, interference filters, lasers). Sample holders, detection of signals (photocells, photo multipliers, diode arrays), Sensitivity and S/N ratio. Single and double beam instruments.

**(ii) Infrared spectroscopy:** Theoretical principles, vibrational modes and IR absorption process, selection rules. Vibrational IR region (4000-400 $\text{cm}^{-1}$ ); group frequency region, the fingerprint region, metal• ligand absorption region, IR peak positions of some common functional groups of organic molecules- IR correlation tables.

**Instrumentation:** Light sources, infrared detectors, sample preparation techniques; liquids, solids. Dispersive IR spectrometer. Fourier transfer spectrometer (FTIR), construction and advantages.

### Unit 3

#### Atomic Spectroscopy

Sample atomization; continuous atomizers, discrete atomizers. Sources of atomic spectra; atomic absorption spectra, atomic emission spectra, atomic fluorescence spectra. Flame atomization (fuel and oxidants), Electrothermal atomization.

**Atomic absorption spectroscopy;** radiation sources-hollow cathode lamps, instruments-single beam spectrophotometer, double beam spectrophotometer.

**Flame emission spectroscopy;** instrumentation, spectrophotometer, photometer.

### Unit 4

#### Chromatographic techniques

**(i) Introduction to Chromatography:** Basic Concept of chromatography; mobile phase and stationary phase. Classification of chromatographic methods, chromatogram, partition coefficients, retention times, retention volumes, the capacity factor, the selectivity factor theoretical plates and efficiency, Van Deemter equation, column resolution.

**(ii) Gas chromatography:** Principle of Gas Chromatography. *Instrumentation*• carrier gas, sample injection systems, column configuration and column ovens. Detectors; flame ionization detectors, thermal conduction detectors, electron capture detectors etc. Columns; packed columns, solid support materials, particle size; open tubular columns. The stationary phase materials.

**(iii) Liquid chromatography:** HPLC, column efficiency in liquid chromatography. Instruments for liquid chromatography; mobile gas reservoirs, solvent treatment system, pumping systems, liquid chromatographic columns, detectors.

**PRACTICAL****(CREDITS 2)**

1. Determination of concentration of an acidic solution by pH metric titrations.
2. Determination of the isoelectric pH of a protein.
3. Potentiometric titration of a Chloride-Iodide Mixture.
4. The standardization of an Fe (II) solution with a standard dichromate solution over Pt and Calomel assembly.
5. Determination of concentration of Ce (IV) Sulphate solution with a standard Fe (II) Solution over Pt and calomel assembly.
6. Determination of  $\lambda_{\text{max}}$  of Potassium permanganate ( $\text{KMnO}_4$ ) solution.
7. Determination of Fe (II) in a sample of well water with thiocyanate as complexation agent, spectrophotometrically.
8. Determination of Aluminium in a given sample solution, spectrophotometrically.
9. Determination of concentration of sodium in an aqueous solution by using a flame photometer.
10. Separation of permanganate and dichromate ions from a binary mixture on an alumina column.

**SUGGESTED READINGS**

- Principles of Instrumental Analysis - 6th Edition by Douglas A. Skoog, F. James Holler, and Stanley Crouch.
- Instrumental Methods of Analysis, 7th ed, Willard, Merritt, Dean, Settle.
- P.W. Atkins: Physical Chemistry.
- G.W. Castellan: Physical Chemistry.
- C. N. Barnwell: Fundamentals of Molecular Spectroscopy.
- Brian Smith: Infrared Spectral Interpretations: Systematic Approach.
- W.J. Moore: Physical Chemistry.

**Course Structure and distribution of different courses with their credits for  
B.Sc. Horticulture**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Horticulture	Core Course	6 credits 4(T)+2(P)
2.	II	Horticulture	Core Course	6 credits 4(T)+2(P)
3.	III	Horticulture	Core Course	6 credits 4(T)+2(P)
4.	III	Horticulture	Core Course	6 credits 4(T)+2(P)
5.	V	Horticulture	Discipline Specific Elective	6 credits 4(T)+2(P)
6.	VI	Horticulture	Discipline Specific Elective	6 credits 4(T)+2(P)

**Course outcomes**

This course provides students with an in-depth knowledge about different horticultural crops grown in Jammu and Kashmir.

Students will acquire comprehensive understanding of the fundamental concepts and principles in classification of soils, types of fertilizers and irrigation practices.

This course provides students with the basic knowledge about the grafting techniques, maintaining tree canopy and aeration.

It will also introduce students to the different pollination strategies made by the plants.

An understanding of concept and importance of Preharvest and post harvest technology, Biotic and abiotic stresses on horticultural crops and their management and Vegetable production is given to the students in this course.

This course will give the students an understanding of the aromatic and medicinal plants with special reference to Jammu and Kashmir.

The course will also introduce to the students the post harvest technology related to cut flowers and pest management.

This course will give the students an understanding of the Horticultural practices including Farm Machinery, Agribusiness etc.

The course will also introduce tools and equipment required for starting small business.

**1. Horticulture (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Horticulture	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will learn basics of Horticulture with special reference to Jammu and Kashmir.
- Students will learn diagnostic characteristics of different kinds of soils needed for some important Horticultural crops.
- Students will learn the different techniques of pruning and growing different nurseries.

**HORTICULTURE****THEORY****(CREDITS 4)****Unit 1**

Scope and importance of horticulture with special reference of J & K

Classification of horticultural crops, horticulture zones of India

Origin of important temperature fruits grown in Kashmir

Area, production and productivity of rosaceous fruits in J&K with special reference to Apple, Pear, Peach, Almond and Apricot.

**Unit 2**

Soil fertility and factors affecting fertility

Essential micro and macro elements in fruit crops.

Deficiency symptoms of essential micro-and macro-elements in fruit crops

Evaluation of nutrient status of soils in orchards.

**Unit 3**

Orchard layout and its types; square, rectangle, quincunx, hexagons, fencing of orchards.

Preparation of field for raising horticultural crops.

Spacing in orchard management (row to row and plant to plant), advantages and limitations.

Planting techniques; Traditional and high density planting, precautions during plantation of fruit crops.

#### **Unit 4**

Nursery techniques and production of healthy plantation materials in temperate fruit crops special reference to Apple, Pear, Peach, Almond and Apricot.

Rejuvenation of old and senile orchards, factors influencing fruitfulness.

Introduction of new exotic varieties and their impact on indigenous varieties and economy.

Effect of non-fruit trees in and around the orchard.

#### **PRACTICAL**

**(CREDITS 2)**

1. Study of various planning and layout of an orchard.
2. Study of the morphological symptoms of mineral deficiency in horticultural crops.
3. Field visit for fruit and leaf collection.
4. Collection of soil sample from an orchard and its nutrient evaluations.
5. Digging of pits for fruit plants.
6. Estimation of soil moisture content, soil pH and Soil fertility.

**2. Horticulture (Core Course-II)**

Semester	Core Course	Course Title	Credit
II	CC-II	Horticulture	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students can name and recognize different types of soils growing in Jammu and Kashmir.
- They will be familiar to soil types of the region and the seasonal know-how of the horticultural crops to be grown in these soils.
- The qualitative and quantitative analysis of fertilizers used for the crops is to be studied in detail.
- In addition knowledge about irrigation practices of fruit orchards both by conventional and modern methods is imparted to the students.

**HORTICULTURE****THEORY****(CREDITS 4)****Unit 1**

Classification of soils with respect to texture, Soil profiles.

Physical and chemical properties of soil for horticultural crops.

Role of soil pH and organic matter in temperate fruit production.

Role of microbes in maintaining soil fertility for horticultural crops.

**Unit 2**

Types of fertilizers and their applications in horticultural crops.

Concept of biofertilizers and their utility.

Types of organic manures and their applications in horticultural crops, vermicomposting and green manuring.

Organic fruit production, its Prospects and limitations.



**Unit 3**

Irrigation practices of fruit orchards, conventional and modern methods.

Importance of irrigation at critical stages of fruit crops.

Harvesting and management of water for irrigation.

Effect of water stress on horticultural fruit production.

**Unit 4**

Role of plant growth regulators in fruit production and ripening.

Factors affecting fruit set and fruit production (light and temperature).

Role of chilling in flowering and fruit set, chilling units for various fruits crops.

Artificial fruit ripening substances-concerns and implications.

**PRACTICAL****(CREDITS 2)**

1. Preparation of fertilizer mixtures and methods of application.
2. Training and pruning of orchard trees, canopy management.
3. Handling and training of various tools used in digging, cutting, pruning harvesting and storage.
4. Determination of soil fertility and soil moisture content through standard techniques.
5. Practical demonstration on drip and sprinkle irrigation.

**3. Horticulture (Core Course-III)**

Semester	Core Course	Course Title	Credit
III	CC-III	Horticulture	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students are given hands on training for prorogation of fruit crops, methods of generating clonal rootstock.
- They are also taught about Pollination and pollinizer management in fruit crops and importance of bee keeping for increasing fruit production.
- The students are also made aware about the important fruit quality traits affecting marketability with special reference to apple.

**HORTICULTURE****THEORY****(CREDITS 4)****Unit 1**

Propagation of fruit crops – concept of scion and rootstock, stock-scion relationships and its significance.

Rootstock types – types and utility of seedling and clonal rootstocks.

Methods of generating clonal rootstock (cuttings, stooling and layering).

Techniques of scion and bud grafting for propagation of cultivars.

**Unit 2**

Bearing habit of fruits trees – Central ladder system, open centre system, advanced systems, alternate bearing and its implications.

Concept, principles and methods of pruning and thinning in fruit crops –advantages and disadvantages.

Management of tree canopy and aeration.

**Unit 3**

Flowering phenology in various rosaceous fruits.

Self and cross pollination, self incompatibility in fruit crops.

Pollination, pollinators and pollinizers in fruit crops.

Pollination and pollinizer management in fruit crops, importance of bee keeping for increasing fruit production

**Unit 4**

Fruit characteristics with special reference to apple, pear, almond, cherry and walnut.

Important fruit quality traits affecting marketability with special reference to apple.

Fruit fall – early, mid and late fruit fall – causes and concerns.

**PRACTICAL****(CREDITS 2)**

1. Field visit to study various methods of asexual propagation of fruit plant.
2. Study of characteristics of fruit with special reference to Apple, pear, walnut, identification of different varieties based on fruit.
3. Study the T-budding, wedge grafting on Apple/ Cherry plant.
4. Field study of bearing habit of fruit crops.
5. Grafting techniques– scion grafting and bud grafting – practical demonstration.

**4. Horticulture (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	Horticulture	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- The understanding of Preharvest and post harvest technology, the causes of postharvest losses, the techniques of fruit handling and their storage is taught to the students.
- The students are also made aware about the Biotic and Abiotic stresses and their management on the horticultural crops.
- The concept of vegetable production, cultivation, ornamental horticulture and principles of landscape gardening is also given to the student's in-order that they can generate their own income.

**HORTICULTURE****THEORY****(CREDITS 4)****Unit 1**

Preharvest and post harvest technology—concept and importance.  
 Causes of post harvest losses—Ripening and senescence.  
 Fruit Harvesting and handling--- processing, value addition (apple, cherry, pear, plum).  
 Different systems of Storage and marketing of horticultural produce.

**Unit 2**

Biotic and abiotic stresses on horticultural crops and their management.  
 Integrated Pest/Disease Management (IPM/IDM): biological and cultural practices (concept and components) Integrated nutrient and water management (INM and IWM).

**Unit 3**

Definition, importance and scope of common vegetables, seasons of growing with reference to Kashmir.  
 Vegetable production systems: home garden, truck garden, floating gardens.  
 Cultivation practices of commercial vegetables: potato, tomato, Brinjal., knoll-kohl, peas, beans, carrot, radish, spinach and Bottle-guard. Vegetable farming for seed production.

Common diseases (fungal) of vegetables and their management (late blight, powdery mildew, downymildew).

#### Unit 4

Introduction to ornamental horticulture, importance and scope of floriculture with special reference to J&K.

Problems and prospectus of floriculture industry in J&K.

Principles of landscape gardening.

Cultivation practices of commercial flowers: Rose, Chrysanthemum, Marigold, Tulip and Gladiolus.

#### PRACTICAL

(CREDITS 2)

1. Tools and techniques used in safe harvesting of apple, pear, cherry, plum.
2. A visit to controlled / modified atmosphere (CA) storage unit.
3. Pest surveillance through light traps, pheromones and field incidences.
4. Seed identification of common vegetables and flowers.
5. Seed viability test.
6. A visit to flower garden in your vicinity.
7. Identification and sample collection of common diseases and pests of vegetables and flowers.

#### SUGGESTED READINGS

- Adams, C.R. and M. P. Early. 2004. Principles of horticulture. Butterworth – Heinemann, Oxford University Press.
- Bansil. P.C. 2008. Horticulture in India. CBS Publishers and Distributors, New Delhi.
- Kumar, N.1997. Introduction to Horticulture, Rajalakshmi Publication, Nagercoil.
- Chadha, K.L. 2001, Handbook of Horticulture, ICAR, New Delhi.
- Chandra, R. and M. Mishra. 2003. Micropropagation of horticultural crops. International Book Distributing Co., Lucknow.
- Chattopadhyaya, P.K.2001. A text book on Pomology (Fundamentals of fruit growing)

Kalyani Publication, New Delhi.

- Christopher, E.P. 2001. Introductory Horticulture, Biotech Books, New Delhi.
- Edmond, J.B. T.L. Senn, F.S. Andrews and P.G. Halfacre, 1975. Fundamentals of Horticulture, Tata MC. Graw Hill Publishing Co. New Delhi.
- George Acquah, 2002, Horticulture-principles and practices. Prentice-Hall of India Pvt. Ltd., New Delhi.
- Vijaikumar UmRao. 2008. Horticulture terms – Definitions and Terminology. IBD publishers, Dehradun.
- Genin, A. 1994. Application of Botany in Horticulture. Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi.

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**5. Horticulture (Core Course-V)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Horticulture	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- This subject deals with the main aim that the student gets an idea about the medicinal and aromatic plants, their management, raising their nurseries and how to extract essential oils from them.
- Students are also imparted knowledge about the main income generating industry of cut flowers.
- Students are taught how to manage pests which cause huge loss to the crops.
- In addition, main emphasis is given on marketing of the horticultural crops.

**HORTICULTURE****THEORY****(CREDITS 4)****Unit 1****Medicinal and aromatic plants**

Introduction, classification and importance with reference to Jammu and Kashmir.

Commercial production technology and processing of important aromatic and medicinal Plants (rosemary, salvia and lavender)

Nursery management and seedling production of aromatic and medicinal plants (rosemary, salvia and lavender).

Extraction procedure of essential oils in medicinal & aromatic plants.

**Unit 2****Post harvest management of cut flower, foliage and pot plants**

Importance, handling, maturity, types of storage, containers, pre-cooling, Transport, Export, methods and economy.

Vase-life physiology of cut flowers, pulsing, holding solutions, grades and packing and loose flowers.

National and international cut flower trade standards.

Govt. supported schemes and promotional activity of cut flowers.

### Unit 3

#### Pest management

Innovative approaches in pest control, behavioral control; pheromones – role in pest Control.

Hormonal control- advantages and limitations.

Chemo sterilants, anti-feedants, attractants and repellants (types, methods, advantages and limitations) in pest control.

Genetic basis of pest control-methods and constrains.

### Unit 4

#### Horticulture Marketing

Marketing of fruits and vegetables, types of marketing

Approaching modern satellite markets (*mandies*)

Negative aspects of middleman ship and forwarding commission charges on marketing of fruits and vegetables.

Unfair practice of topping and its ill effects; storage of fruit and vegetables in pack houses.

### PRACTICAL

(CREDITS 2)

1. Visit to nearby medicinal and aromatic research field.
2. Practicing cultivation of aromatic and medicinal plants for optimum secondary metabolite production,
3. Study Different types of extraction methods of sec metabolites in aromatic and Medicinal plant.
4. Study of Different methods of packaging and export standards of cut flower Industry.
5. Demonstration of Pest control using attractants, repellents and hormones.
6. A visit to nearby Fruit and vegetable market.



**6. Horticulture (Core Course-VI)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Horticulture	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will learn the fundamentals of seed processing. Students will be able to use, identify and assemble the equipments required for Horticulture and landscape development.
- Students will be able to understand the Importance and function of KVK (Krishi Vigyan Kendra), kisan mella, farmers Kiosks that will lead to the generation of skilled man power in the field of Horticulture.

**HORTICULTURE****THEORY****(CREDITS 4)****Unit 1****Seed processing**

Principles of seed processing, seed testing concept and objectives.

Seed processing machines (cleaner cum grader, specific gravity separator, and seed Treater). International Seed testing association (ISTA): role of ISTA in seed testing procedures and rules.

Seed storage: factors affecting seed storage (moisture, temperature and RH).

**Unit 2****Farm machinery**

Tillage implements; primary and secondary, sowing methods by seed drill, seed cum plant protection equipments, harvesting tools and equipments- reapers and Fertilizerdrills Combine.

Equipment for land development and soil conservation tools for Horticulture crops. Power operated sprayers and dusters their operation and types of nozzles and their uses.

Water shed construction and management.

**Unit 3****Agribusiness**

Definition, structure (input farm and product sectors), special features of Agribusiness and its scope in J&K, institutions involved in agribusiness.

Agriculture credit and insurance, agriculture marketing and price analysis.

Agri-finance, marketing management, entrepreneurship skill and new venture planning.

Forms of business organization- sole, public-private partnership. Co-operatives and MNCS (multinational companies).

#### **Unit 4**

Extension education

Agencies involved in agriculture extension education.

Importance and function of KVK (Krishi vigyan kendra), kisan mella, farmers Kiosks.

Budgeting: definition, partial budgeting, enterprise budgeting, cash flow budgeting, limitation of budgeting.

Risk and uncertainty- definitions, types and safeguards. Cost benefit ratio.

#### **PRACTICAL**

**(CREDITS 2)**

1. Comparison of the rate of transpiration by using potometer.
2. Determination of soil nutrients.
3. Practical application of different types of nozzles by using power sprayer.
4. Visit to nearby Horticulture department for observation and operation of various Horticulture equipments.
5. Project work.

**Course Structure and distribution of different courses with their credits for  
B.A./B.Sc. Mathematics**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Calculus	Core Course	6 credits 6(T)
2.	II	Differential Equations	Core Course	6 credits 6(T)
3.	III	Real Analysis	Core Course	6 credits 6(T)
4.	III	Algebra	Core Course	6 credits 6(T)
5.	IV	Numerical Analysis	Discipline Specific Elective	6 credits 6(T)
6.	V	Linear Algebra	Discipline Specific Elective	6 credits 6(T)

**Course outcomes**

A well-structured Mathematical component in B.A/B.Sc. (Programme) Mathematical Sciences empowers the students to;

- Solve problems using a broad range of significant mathematical techniques, including calculus, algebra, geometry, analysis, numerical methods, differential equations, probability and statistics along with hands-on learning.
- Analyze quantitative data using statistical analysis techniques.
- Combine the principles of physics and chemistry, as supported by mathematics to describe the foundational concepts of the physical world and apply these concepts to new situations.
- Apply the techniques of mathematics to understand experimental observations and predict outcomes.
- Collaborate with others, including multidisciplinary groups, to solve scientific problems, and to recognize ethical issues in each respective profession.

**1. Calculus (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Calculus	Theory: 06 Total: 06

**Course specific outcomes**

This course will enable the students to;

- Learn first and second derivative tests for relative extrema and apply the knowledge in problems in business, economics and life sciences.
- Sketch curves in a plane using its mathematical properties in the different coordinate systems of reference.
- Compute area of surfaces of revolution and the volume of solids by integrating over cross-sectional areas.
- Understand the calculus of vector functions and its use to develop the basic principles of planetary motion.

**CALCULUS****THEORY****(CREDITS 6)****Unit 1**

Limit and Continuity ( $\epsilon$  and  $\delta$  definition), types of discontinuities, properties of continuous functions on closed intervals, differentiability of functions, Successive differentiation, Leibnitz's theorem, partial differentiation, total differentials, Euler's theorem on homogenous functions.

**Unit 2**

Tangents and Normals (polar coordinates only), pedal equations, curvature and radius of curvature, asymptotes, singular points, tracing of curves in cartesian and polar coordinates.

**Unit 3**

Rolle's theorem, Mean value theorems, Taylor's theorem with Lagrange's Cauchy's forms of remainder, Taylor's series, Maclaurin's series of  $\sin x$ ,  $\cos x$ ,  $e^{mx}$ ,  $\log(1+x)$ ,  $(1-x)$ , maxima and minima, indeterminate forms.

**Unit 4**

Integration by partial fractions, integration of rational and irrational functions, definite integrals and their properties, reduction formulae for integrals of rational, trigonometric, exponential and logarithmic functions and of their combinations.

**SUGGESTED READINGS**

- G.B. Thomas and R. L. Finney, *Calculus*, Pearson Education, 2007.
- H. Anton, I. Birens and S. Davis, *Calculus*, John Wiley and Sons, Inc., 2002.
- S. D. Chopra, M. L. Kochar and A. Aziz, *Differential Calculus*, Kapoor Publications.

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## 2. Differential Equations (Core Course-II)

Semester	Core Course	Course Title	Credit
II	CC-II	Differential Equations	Theory: 06 Total: 06

### Course specific outcomes

The course will enable the students to;

- Learn basics of differential equations and mathematical modeling.
- Formulate differential equations for various mathematical models.
- Solve first order non-linear differential equations and linear differential equations of higher order using various techniques.
- Apply these techniques to solve and analyze various mathematical models.

## DIFFERENTIAL EQUATIONS

### THEORY

(CREDITS 6)

#### Unit 1

Differential equations, integrating factors, Bernoulli's equation, exact differential equations, necessary and sufficient conditions for exactness, symbolic operators, homogeneous and non homogeneous linear differential equations with constant coefficients and those reducible to such equations.

#### Unit 2

Miscellaneous forms of differential equations, first order higher degree equations solvable for X, Y, Z, P equations from which one variable is explicitly absent, Clairut's form, equations reducible to Clairut's form.

#### Unit 3

Legendre polynomials, Bessel function, recurrence relation and differential equation satisfied by each of these functions, Wronskian and its properties.

#### Unit 4

Formation of partial differential equations, order and degree of partial differentialequations, concept of linear and non-linear partial differential equations, linear partial differential equation of first order, Lagrange's method, Geometrical interpretation of the form  $Pp + Qq = R$ ,

Charpit's method, classification of second order partial differential equations into elliptical, parabolic and hyperbolic through illustrations only.

### SUGGESTED READINGS

- I. Sneddon, *Elements of Partial Differential Equations*, McGraw-Hill, International Edition, 1967.
- M. D. Raisinghania, *Ordinary differential Equations*.
- S. D. Chopra and M.L.Kochar, *Integral Calculus*, Kapoor Pub.
- Shepley L. Ross, *Differential Equations*, 3rd Ed., John Willey and Sons, 1984.
- Schaun Series, *Differential Equations*.

Model Govt. Degree College Shopian

### 3. Real Analysis (Core Course-III)

Semester	Core Course	Course Title	Credit
III	CC-III	Real Analysis	Theory: 06 Total: 06

#### Course specific outcomes

This course will enable the students to;

- Understand many properties of the real line, including completeness and Archimedean properties.
- Learn to define sequences in terms of functions from  $\mathbb{R}$  to a subset of  $\mathbb{R}$
- Recognize bounded, convergent, divergent, Cauchy and monotonic sequences and to calculate their limit superior, limit inferior, and the limit of a bounded sequence. Absolute convergence of an infinite series of real numbers.

#### REAL ANALYSIS

#### THEORY

(CREDITS 6)

#### Unit 1

Finite and infinite sets, examples of countable and uncountable sets, real line, bounded sets, suprema and infima, completeness property of  $\mathbb{R}$ , Archimedean property of  $\mathbb{R}$ , intervals, concept of cluster points and statement of Bolzano- Weierstrass theorem.

#### Unit 2

Real sequence, bounded sequence, Cauchy convergence criterion of sequences, Cauchy's theorem of limits, order preserving inequalities, Squeeze theorem, monotone sequences and their convergence (monotone convergence theorem without proof).

#### Unit 3

Infinite series, Cauchy convergence criterion for series, positive term series, geometric series, comparison test, convergence of p-series, Root test, alternating series, Leibnitz's test, definition and examples of absolute, conditional and uniform convergence.

#### Unit 4

Sequences and series of functions, point wise and uniform convergence, Mn-test, M- test, statements of the results about uniform convergence and integrability and differentiability of functions, power series and radius of convergence.



**SUGGESTED READINGS**

- T.M. Apostol, *Calculus* (Vol I), John Wiley and Sons (Asia) P. Ltd., 2002.
- R.G.Bartle and D.R. Sherbert, *Introduction to Real Analysis*, John Wiley and Sons (Asia) P. Ltd., 2000.
- E. Fischer, *Intermediate Real Analysis*, Springer Verlag, 1983.
- K.A. Ross, *Elementary Analysis – The Theory of Calculus Series-* Undergraduate Texts in Mathematics, Springer Verlag 2003.

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**4. Algebra (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	Algebra	Theory: 06 Total: 06

**Course specific outcomes**

The course will enable the students to;

- Recognize the mathematical objects that are groups, and classify them as abelian, cyclic and permutation groups, etc.
- Link the fundamental concepts of groups and symmetrical figures.
- Analyze the subgroups of cyclic groups and classify subgroups of cyclic groups.
- Explain the significance of the notion of cosets, normal subgroups and factor groups.
- Learn about Lagrange's theorem and Order of groups.
- Know about group Rings, Integral Domains and Fields.

**ALGEBRA****THEORY****(CREDITS 6)****Unit 1**

Definition and examples of groups, examples of abelian and non-abelian groups, the group  $Z_n$  of integers under addition modulo  $n$  and group  $U(n)$  of units under multiplication modulo  $n$ . Cyclic groups from number systems, complex roots of unity, circle group, the general linear group  $GL_n(N, r)$ , groups of symmetries of (i) an isosceles triangle, (ii) an equilateral triangle, (iii) a rectangle and (iv) a square, the permutation group  $Sym(n)$ , groups of quaternion's.

**Unit 2**

Subgroups, cyclic subgroups, the concept of a subgroup generated by a subset and the commutator subgroup of group, examples of subgroups including the center of a group. Cosets, index of subgroup, Lagrange's theorem, order of an element.

**Unit 3**

Normal subgroups: their definition, examples, and characterizations, Quotient groups.

**Unit 4**

Definition and examples of rings, examples of commutative and non-commutative rings: rings from number systems,  $Z_n$  the ring of integers modulo  $n$ , ring of real quaternion's, rings of matrices, polynomial rings, and rings of continuous functions, subrings and ideals, integral domain and fields, examples of fields:  $Z_p$   $Q$ ,  $R$  and  $C$ . Field of rational functions.

### SUGGESTED READINGS

- John B. Fraleigh, *A First Course in Abstract Algebra*, 7th Ed., Pearson 2002.
- M. Artin, *Abstract Algebra*, 2nd Ed., Pearson 2011.
- Joseph A Gallian, *Contemporary Abstract Algebra*, 4th Ed., Narosa 1999.
- George E Andrew, *Number Theory*, Hindustan Publishing Corporation, 1984.

Model Govt. Degree College Shopian

### 5. Numerical Analysis (Discipline Specific Elective-I)

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Numerical Analysis	Theory: 06 Total: 06

#### Course specific outcomes

The course will enable the students to;

- To solve Algebraic and Transcendental equations using various methods like Bisection method and Newton-Raphson Method.
- Link the fundamental concepts of Interpolation and Extrapolation of polynomials.
- Interpolation of given data using Newtons, Gauss and Stirlings formulae.
- Learn about Numerical Differentiation and Numerical Integration using various methods.
- Know about how to solve linear system of equations using Direct methods, Matrix inversion method, Gaussian elimination method, Method of factorization and Iterative methods.
- Learn about Numerical solutions using Picard's method of successive approximations, Euler's method, Modified Euler's method and Runge–Kutta methods.

### NUMERICAL ANALYSIS

#### THEORY

(CREDITS 6)

#### Unit 1

**Errors in Numerical computations:** Numbers and their Accuracy, Errors and their Computation, Absolute, Relative and percentage errors, A general error formula, Error in a series approximation.

**Solution of Algebraic and Transcendental Equations:** The bisection method, The iteration method, The method of false position, Newton-Raphson method, Generalized Newton-Raphson method,

#### Unit 2

**Interpolation:** Errors in polynomial interpolation, Forward differences, Backward differences, Central Differences, Symbolic relations, Differences of a polynomial, Newton's formulae for interpolation formulae, Gauss's central difference formula, Stirling's central difference formula, Interpolation with unevenly spaced points, Lagrange's formula, Error in Lagrange's

formula, Derivation of governing equations, End conditions, Divided differences and their properties, Newton's general interpolation.

### Unit 3

**Curve Fitting: Least-Squares** curve fitting procedures, fitting a straight line, nonlinear curve fitting, Curve fitting by a sum of exponentials

**Numerical Differentiation and Numerical Integration:** Numerical differentiation, Errors in numerical differentiation, Numerical integration, Trapezoidal rule, Simpson's  $1/3$  -rule, Simpson's  $3/8$ -rule, Boole's and Weddle's rule.

### Unit 4

Linear systems of equations, Solution of linear systems – Direct methods, Matrix inversion method, Gaussian elimination method, Method of factorization, Iterative methods: Jacobi's method, Gauss-siedal method,

**Numerical solution of ordinary differential equations:** Introduction, Solution by Taylor's Series, Picard's method of successive approximations, Euler's method, Modified Euler's method, Runge – Kutta methods.

### SUGGESTED READINGS

- Scope as in Introductory Methods of Numerical Analysis by S.S. Sastry, Prentice Hall India (4<sup>th</sup> Edition.)
- G. Sankar Rao New Age International Publishers, New – Hyderabad.
- 2. Finite Differences and Numerical Analysis by H.C. Saxena S. Chand and Company, New Delhi

**6. Linear Algebra (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Linear Algebra	Theory: 06 Total: 06

**Course specific outcomes**

The course will enable the students to;

- To about types and properties of matrices, inverse of a matrix and Cayley Hamilton theorem.
- Link the fundamental concepts of rank to find the solution of Homogenous and Non-Homogeneous equations.
- Elementary transformation and invariance of rank under elementary transformation.
- Normal form and their application to find rank of a matrix.
- Linearly independent and linearly dependent row(column) vectors and their analogous results.
- Learn Vector spaces along with examples, Subspaces, Basis and dimension of a vector space.
- Know about linear transformations, null space, range, rank and nullity of a linear transformation.

**LINEAR ALGEBRA****THEORY****(CREDITS 6)****Unit 1**

Types and properties of matrices, Inverse of a square matrix, matrix polynomials, characteristic equation, Cayley-Hamilton Theorem, Eigen values and eigenvectors of matrices and their determination, rank of a matrix, invariance of rank matrix under elementary transformations. Reduction of matrix to normal form, elementary matrices.

**Unit 2**

Linear dependence and linear independence of row(column) vectors, conditions for columns of a matrix to be linearly dependent, matrix A has rank r iff it has r linearly independent columns, analogous results for rows. Linear homogeneous and non-homogeneous equations, Linear product of two vectors, orthogonal and unitary matrices, determination of orthogonal matrices.

**Unit 3**

Vector spaces, examples, subspaces, algebra of subspaces, quotient spaces, linear dependence, independence and linear span of vectors, basis and dimensions of vector spaces.

**Unit 4**

Linear transformations, null space, range, rank and nullity of a linear transformation, matrix representation of a linear transformation, algebra of linear transformations, dual space and dual basis, homomorphism and isomorphism, isomorphism theorems.

**SUGGESTED READINGS**

- A. Aziz, N. A. Rather and B. A. Zargar, A Text Book of Matrices, KBD.
- Stephen H. Friedberg, Arnold J. Insel, Lawrence E. Spence, Linear Algebra, PHI.
- S. Lang, Introduction to Linear Algebra, Springer.
- Shanti Narayan, A Text Book of Matrices.
- Gilbert Strang, Linear Algebra and its Applications, Thomson (2007)

Model Govt. Degree College Shripiari

**Course Structure and distribution of different courses with their credits for  
B.Sc. Physics**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Mechanics and Relativity	Core Course	6 credits 4(T)+2(P)
2.	II	Electricity and Magnetism	Core Course	6 credits 4(T)+2(P)
3.	III	Kinetic Theory, Thermodynamics and Statistical Physics	Core Course	6 credits 4(T)+2(P)
4.	IV	Waves and Optics	Core Course	6 credits 4(T)+2(P)
5.	V	Quantum and Nuclear Physics	Discipline Specific Elective	6 credits 4(T)+2(P)
6.	VI	Solid State Physics and Electronics	Discipline Specific Elective	6 credits 4(T)+2(P)

**Course outcomes**

A fundamental/systematic or coherent understanding of the academic field of Physics, its different learning areas and applications in basic Physics like Material science, Mechanics, Nuclear and Particle Physics, Atomic and Molecular Physics, Acoustics, Mathematical Physics and its correlation with related disciplinary subjects like Chemistry, Mathematics, Life sciences, etc.

To demonstrate relevant generic skills and global competencies such as (i) problem-solving skills that are required to solve different types of Physics-related problems with well-defined solutions and tackle open-ended problems that belong to the disciplinary-area boundaries (ii) investigative skills, including skills of independent investigation of Physics-related issues and problems; (iii) communication skills involving the ability to listen carefully, to read texts and research papers analytically and to present complex information in a concise manner to different groups/audiences of technical or popular nature (iv) analytical skills involving paying attention to detail and ability to construct logical arguments using correct technical language related to Physics and ability to translate them with popular language when needed (v) ICT skills (vi) personal skills such as the ability to work both independently and in a group.

Demonstrate professional behavior such as being objective, unbiased and truthful in all aspects of work. Students will learn laboratory skills, enabling them to take measurements in a Physics laboratory and analyze the measurements to draw valid conclusions. Students will be capable of oral and written scientific communication and will prove that they can think critically and work independently.



**1. Mechanics and Relativity (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Mechanics and Relativity	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- This course would empower the students to acquire engineering skills and practical knowledge that will help the students in their everyday life.
- This syllabus is more or less intended to make the students feel the subject knowledge gained at the higher secondary level and to cater the basic requirements for their higher studies.
- This course will also provide a theoretical basis for doing experiments in related areas.

**MECHANICS AND RELATIVITY****THEORY****(CREDITS 4)****Unit 1**

**Mechanics and Relativity:** Coordinate Systems: Cartesian, spherical polar coordinates and Cylindrical coordinate systems. Components of velocity and acceleration in spherical polar and Cylindrical coordinate systems. Inertial and non-inertial frames of references, uniformly rotating frame: centripetal acceleration, Coriolis Force and applications; Galilean Transformations. Conservation of Linear and angular momentum in system of particles, principle and equation of rockets.

**Unit 2**

**Inverse Force fields:** Equation of orbits, Kepler's Laws and their derivation, Gravitational law and Field; Potential and Field due to spherical shell, solid sphere and Disc. Rigid Body motion, Rotational motion, moments of inertia and their products, Principle moments and axes, Euler's equations with some applications. Idea of moment of inertia tensor.

**Unit 3**

**Harmonic oscillators:** Harmonic oscillators with examples; Damped harmonic oscillator ; Power Dissipation; Quality Factor; driven harmonic oscillator with and without damping force; Anharmonic Oscillator. Superposition: Superposition of two mutually perpendicular simple harmonic vibrations of the same frequency; Lissajous figures; case of different frequencies.

**Unit 4**

**Relativity:** Newtonian relativity; Michelson-Morley experiment; Special theory of relativity; Lorentz Transformations and their consequences (Relativity of simultaneity, Lorentz-FitzGerald length contraction , time dilation); Relativistic addition of velocities; Variation of mass with velocity, mass energy relation; Space- time four-dimensional continuum; Four-vectors.

**PRACTICAL****(CREDITS 2)**

1. Study of laws of parallel and perpendicular axes for moment of inertia.
2. Study of conservation of momentum in two dimensional collisions.
3. Study of a bar pendulum by graphical method.
4. Determination of value of acceleration due to gravity at a place with Katter's pendulum.
5. Study of oscillations under a bifilar pendulum.
6. Potential energy curves of a 1-d system and oscillations in it for various amplitudes.
7. Study of oscillations of a mass under different combinations of springs.
8. Young's modulus of the material of a rectangular bar by bending.
9. Moment of inertia of an irregular body about an axis through its centre of gravity with a torsion pendulum.
10. Modulus of rigidity of copper by Maxwell's needle.
11. Moment of inertia of a fly wheel.
12. Study of flow of liquids through capillaries.
13. Determination of surface tension of a liquid by different methods.
14. Study of viscosity of a fluid by different methods.
15. Characteristics of a ballistic galvanometer.
16. Use of vibration and deflection magnetometers to study a field.

17. Study of B field due a current.
18. Measurement of low resistance by Carey Foster bridge method.
19. Measurement of inductance using impedance of different frequencies.
20. Study of decay of current in LR and RC circuits.
21. Response curve of LCR circuit and resonance frequency and quality factor.
22. Sensitivity of a cathode ray oscilloscope.
23. Characteristics of a choke.
24. Measurement of inductance.
25. Study of Lorentz force.
26. Study of discrete LC transmission line and a continuous.

### SUGGESTED READINGS

- An introduction to Mechanics: Kelppner and Kolenkow (TataMcGraw-Hill).
- Kittel, Knight, Ruderman, Helholz, Moyer Second. Ed. "Berkely Physics Course, Vol. 1, Mechanics", McGraw Hill, New Delhi.
- Theoretical Mechanics: M. Speigel (Schuam's Outline Tata McGraw-Hill)

**2. Electricity and Magnetism (Core Course-II)**

Semester	Core Course	Course Title	Credit
II	CC-II	Electricity and Magnetism	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Electricity and Electrodynamics have the key role in the development of modern technological world.
- Without electric power and communication facilities, life on earth might stand still.
- A course in electricity and electrodynamics is thus an essential component of physics program at graduate level.
- This course is expected to provide a sound foundation in electricity and electrodynamics.

**ELECTRICITY AND MAGNETISM****THEORY****(CREDITS 4)****Unit 1**

**Vector Analysis:** Review of vector algebra ; gradient and volume integrals of vectors, divergence, Curl and their significance, vector integration, scalar and vector fields, Gauss-divergence theorem and Stoke Theorem, Electrostatic Field, electric flux, differential form of Gauss Law.

**Unit 2**

**Applications of Gauss Theorem** : Electric field due to a point charge, infinite line charge, uniformly charged spherical shell and charged conductor. Electric potential as line integral of electric field , electric dipole, uniformly charged spherical shell and solid sphere , calculation of electric field from potential. Capacitance of parallel plate, spherical and cylindrical condenser. Energy per unit volume of a condenser.

**Unit 3**

**Magnetostatics** : Displacement vector : Gauss's theorem in dielectric, parallel plate capacitor with completely filled with dielectric. Magnetism: Magnetostatics, Applications of Biot Savart law; straight conductor, circular coil, solenoid carrying conductor, Divergence and Curl of

magnetic field, Magnetic vector potential. Ampere's circuital law. Magnetic properties of materials, intensity, magnetic induction, permeability, para, and ferro-magnetic materials.

#### Unit 4

**Electromagnetic Induction:** Faraday's Laws of electromagnetic Induction, Lenz's law, self and mutual inductance,  $L$  of single coil,  $M$  of two coils. Energy stored in a magnetic field, Maxwell's equations and Electromagnetic wave propagation, Equation of continuity of current, Displacement current, Maxwell's equations, Poynting vector, Energy density in electromagnetic field, electromagnetic wave propagation in vacuum, dielectric medium and isotropic, transverse nature of EM waves, Polarization.

#### PRACTICAL

(CREDITS 2)

1. To use a Multimeter for measuring (a) Resistance Current (b) checking electrical fuses.
2. Ballistic Galvanometer:
  - (i) measurement of charge and current sensitivity
  - (ii) Measurement of Critical Damping Resistance
  - (iii) Determine a high resistance by Leakage
  - (iv) To determine Self Inductance of a Coil by Rayleigh's Method
3. To compare capacitances using De'Sauty's Bridge
4. Measurement of field strength  $B$  and its variation in solenoid
5. To study the Characteristics of a Series RC Circuit
6. To study the a series LCR circuit and find its Resonant frequency and Quality Factor
7. To study a parallel LCR circuit and determine Quality factor  $Q$
8. To determine a Low resistance by Carey Foster Bridge
9. To verify the Thevenin and Norton theorem
10. To verify the Superposition, and Maximum Power Transfer Theorem

#### SUGGESTED READINGS

- Electricity and Magnetism, Edward M. Purcell,
- Electricity and Magnetism, J.H. Fewkes & J. Yarwood, vol.1, 1991, Oxford Univ. Press
- Electricity and Magnetism, D C Tayal, 1988,
- D.J. Griffiths, Introduction to Electrodynamics, Benjamin and Cummings
- Advanced Practical Physics for students, B L Flint, Asia Publishing House.
- A Text Book of Practical Physics, Indu Prakash and Ramakrishna, Kitab Mahal, New Delhi.
- Engineering Practical Physics, S.Panigrahi & B.Mallick, Cengage Learning Pvt. Ltd.
- Advanced level Physics Practicals, Michael Nelson. Reprinted 1985, Heinemann Educational Publications

### 3. Kinetic Theory, Thermodynamics and Statistical Physics (Core Course-III)

Semester	Core Course	Course Title	Credit
III	CC-III	Kinetic Theory, Thermodynamics and Statistical Physics	Theory: 04 Practical: 02 Total: 06

#### Course specific outcomes

- This course is to develop a working knowledge of Statistical Mechanics and to use this knowledge to explore various applications related to topics in material science and the physics of condensed matter.
- Further the knowledge of Statistical Physics has a tremendous application in studying cosmological phenomena like origin of the universe, star formation, etc.

#### **KINETIC THEORY, THERMODYNAMICS AND STATISTICAL PHYSICS**

#### **THEORY**

**(CREDITS 4)**

#### **Unit 1**

**Basic concepts:** Degrees of freedom, Equipartition of energy. Specific heat of monatomic diatomic and tri-atomic gases, behaviour at low temperatures, Maxwell's velocity distribution, distribution of speeds; mean values. Transport phenomena in gases: Molecular collisions, mean free path and collision cross section. Transport Phenomenon: transport of momentum, mass and energy and their inter-relationship. Brownian motion, Einstein's theory.

#### **Unit 2**

**Deviation from perfect gas behavior:** van der Waals' equation of state, nature of Vander Waals forces, comparison with experimental results, the critical constants. Joule expansion of ideal gas and of a Vander Waals gas, Joule coefficient, estimates of J-T cooling. Liquefaction of gases: Boyles temperature and inversion temperature, principle of regenerative cooling and of cascade cooling, Liquification of hydrogen and helium, refrigeration cycles, meaning of efficiency. Cooling due to adiabatic demagnetization.

#### **Unit 3**

**Thermodynamics:** Concept of thermal equilibrium, internal energy. Carnot theorem.

Entropy, Principle of increase of entropy, the thermodynamic scale of temperature, its identity with the perfect gas scale, impossibility of attaining the absolute zero, Third law of thermodynamics.

Thermodynamic relationships: Thermodynamic variables ; Extensive and Intensive, Maxwell's general relationship. Clausius-Clapeyron heat equation, thermodynamic potentials and equilibrium of thermodynamical systems, relation with thermodynamical variables.

#### Unit 4

**The Statistical basis of thermodynamics:** Probability and Thermodynamic probability, Probability distribution. The expressions for average properties, constraints, accessible and inaccessible states, distribution of particles with a given total energy into discrete set of energy states; microstates and macrostates.

Probability and entropy: Boltzmann Entropy relation, Statistical interpretation of the second law of thermodynamics, Boltzmann Canonical distribution law; partition function, partition function of an ideal monoatomic gas. The rigorous form of Equipartition of energy. Maxwell-Boltzmann, Fermi-Dirac and Bose-Einstein Statistics (Derivation of distribution laws in each case).

#### PRACTICAL

(CREDITS 2)

1. Study of Brownian motion.
2. Study of adiabatic expansion of a gas.
3. Heating efficiency of electric kettle with varying voltages.
4. Study of temperature dependence of total radiation.
5. Study of temperature dependence of spectral of radiation
6. Resistance thermometry.
7. Thermo-emf of thermometry.
8. Conduction of heat through poor conductors of different geometries.
9. Experimental study of probability distribution for a two-option system using a coloured dice.
10. Study of statistical distribution on nuclear disintegration data (GM counter used as a blackbox)
11. Speed of waves on a stretching string.
12. Studies on torsional waves in a lumped system.
13. Frequency of A. C. supply using electric vibrator.

#### SUGGESTED READINGS

- F. Reif: "Fundamentals of Statistical and Thermal Physics"
- Berkeley Physics Course Vol 5 "Statistical Physics"
- S C Garg, R M Bansal and C K Ghosh, "Thermal Physics" Tata McGraw Hills

**4. Waves and Optics (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	Waves and Optics	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Foundation in optics and photonics is gained by this course and which prepares the students for an intensive study of advanced topics at a later stage.
- This course generates a good attraction for the students while understanding the mechanisms of various practical phenomena like laser optics and fiber communication.

**WAVES AND OPTICS****THEORY****(CREDITS 4)****Unit 1**

**The wave equation:** General solution of one dimensional wave equation; Harmonic waves; Standing waves on a string of fixed length; Energy of a vibrating string The wave equation for longitudinal waves on a thin cylindrical rod; Energy density and energy transmission in waves; Application to Earthquakes. Standing waves on a stretched rectangular membrane: solution by method of separation of variables; normal modes of vibrations.

**Unit 2**

**General Theory of Image Formation:** Cardinal Points of an optical system, general relationships, thick lens formula and lens combination, langrange equation of magnification. Abberations: Chromatic and monochromatic abberations and their reductions. Corrector plates.

**Unit 3**

**Review of Interference of light:** Interference in thin parallel films; Application to Non-reflecting films, Newton rings; Michelson interferometer and its application for precision determination of wavelength; Multiple beam interference; Fabry-Perot interferometer and etalon; Intensity distribution. Fraunhofer diffraction at a slit; the intensity distribution; Two slit diffraction pattern; The intensity distribution.

**Unit 4**



**Diffraction at N parallel slits:** intensity distribution at an N parallel slits. Resolution of images; Rayleigh criterion; Resolving power of a diffraction grating. Fresnel half-period zones; The Zone-Plate; Diffraction at a circular aperture; Diffraction by a straight edge (analysis using halfperiod zones). Polarization by reflection, Malus's law; Double refraction; Refraction in Uniaxial crystals; Optical activity; Rotation of plane of polarization; Origin of optical rotation in liquids and in crystals.

**PRACTICAL****(CREDITS 2)**

1. Study of with two coherent sources of sound.
2. Chladni's figures with varying excitations and loading points.
3. Measurement of sound intensities with different situation.
4. Characteristics of microphone loudspeaker system.
5. Designing an optical viewing system.
6. Study of monochromatic defects of image.
7. Determining the principle points of a combination of lenses.
8. Refractive index of the material of a prism using spectrometer.
9. Refractive index of a transparent liquid using hollow prism and spectrometer.

**SUGGESTED READINGS**

- H.J. Pain "The Physics of Vibrations and Waves", (John Wiley & Sons Ltd.)
- Optics by A. K. Ghatak (TataMcgraw-Hill) References: 1. Jenkins and White, "Fundamentals of Optics", (McGraw Hill)
- Berkley Physics Course, Vol III, "Waves and Oscillations"

**5. Quantum and Nuclear Physics (Discipline Specific Elective -I)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Quantum and Nuclear Physics	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will learn to discuss and explain the key concepts and principles of quantum physics.
- Solution of Schrödinger equation for various standard systems with both analytical and numerical methods and the afterward interpretation of the results obtained builds up a high level confidence in the students motivating them to work independently with key questions and problems in quantum physics.
- Further, an overview of modern nuclear and particle physics stresses on key concepts and processes.
- Applications within other sciences and technology is given a touch. Also students learn to think about possible nuclear models thereby understanding the behavior of weak and strong interactions.

**QUANTUM AND NUCLEAR PHYSICS****THEORY****(CREDITS 4)****Unit 1**

**Black body radiation:** Planck's radiation law; Photoelectric effect; Compton Effect. Pair Production. De-Broglie's matter wave; The concept of wave packets and group velocities; Heisenberg's uncertainty relation for  $p$  and  $x$ ; Its extension to energy and time; Applications of uncertainty principle

**Unit 2**

**Schrödinger's wave equation:** (Time independent form); linearity and superposition; Expectation values; operators; Particle in a box; Finite potential well; Potential Barrier, Tunnel effect. Quantum numbers ( $n, l, m$ ) for an electron in hydrogen atom; Space quantization; Electron probability density.

**Unit 3**

**Electron spin:** Stern-Gerlach experiment; Pauli's exclusion principle; Symmetric and antisymmetric wave functions; Atomic structures (shells and sub-shells); Spin-orbit coupling; Total angular momentum J, L-S coupling; j-j coupling; Normal and anomalous Zeeman Effect; Lande g-factor. Quantization of rotational energies; Rotational energy levels; Pure rotational spectra; Vibrational energy levels, pure vibrational spectra; Rotation-Vibration spectra of diatomic molecules.

**Unit 4**

**Nuclear composition:** Nuclear properties (size, spin, magnetic moment), Stable Nuclei (Nuclear decay, Binding energy), Liquid drop model, Meson theory of nuclear forces. Gamow Theory of Alpha decay (no derivation), Pauli theory of beta-decay, gamma decay, Nuclear Reactions and Cross Section. Interaction and particles; Classification; Leptons and hadrons, Elementary particle quantum numbers; Baryon, lepton and strangeness numbers; Quarks; colour, flavour, Quark confinement.

**PRACTICAL****(CREDITS 2)**

1. Determination of Planck's constant.
2. Determination of e/m by Helical method.
3. Determination of e/m by Thomson method.
4. Study of spectra of hydrogen, helium and mercury.
5. Absorption spectrum of iodine vapour.
6. Study of Zeeman effect. 7. Analysis of a given band spectrum.
8. Study of Raman effect using laser as excitation source.
9. Study of absorption of alpha and beta rays.
10. Study of statistics in radioactive measurement

**SUGGESTED READINGS**

- Concepts of Modern Physics by Arthur Beiser, (Tata McGraw Hill).
- Introductory Nuclear Physics, Kenneth S. Krane, 3rd Ed., Wiley.
- Mani and Mehta, Modern Physics (Tata McGraw-Hill)

**6. Solid State Physics and Electronics (Discipline Specific Elective -II)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Solid State Physics and Electronics	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- The course aims to know about the various properties of solids, structure and exposure to deep interactions like Phonons and Quantum Mechanical Free Electron Gas.
- Concepts like electrical properties, specific heats and Brillouin Zones help the learners to peep deeply inside.
- To come out with a tangible outcome the curriculum provides a good chance to study in detail about the semiconductor class of solids and their extended electronic applications including the operating mechanism of certain electronic devices.

**SOLID STATE PHYSICS AND ELECTRONICS****THEORY****(CREDITS 4)****Unit 1**

**Bravais lattice and seven crystal systems:** Reciprocal Lattice. Elastic waves, density of states of continuous medium; Specific heat; Einstein and Debye models; Lattice waves; One-dimensional monoatomic lattice; Density of states of a lattice; The concept of Phonons, Quantum mechanical free electron gas; Electrical conductivity; Electrical resistivity versus temperature; Heat capacity of conduction electrons.

**Unit 2**

**The Fermi surface:** Electrical conductivity (effects of the Fermi surface); Thermal conductivity in metals. Electrons in one dimensional periodic potential; Kronig-Penney model; Concept of Brillouin zones; Explanation of energy bands on the basis of Brillouin zones; Metals, insulators and semiconductors. Band structure; Intrinsic semiconductors; Temperature dependence of carrier concentration; Impurity states (acceptor and donor).

**Unit 3**

**Extrinsic semiconductors:** The electron-hole concentration product; Electrical conductivity;

Temperature dependence; The effect of magnetic field on a semiconductor; The Hall effect. p-n junction: working (on the basis of energy band diagram); Rectification property; Derivation of rectification equation; The junction transistor, Its working (on the basis of energy band diagram), Tunnel diode.

#### Unit 4

**Transistor load line:** Transistor biasing techniques (Voltage divider); bias stability; Thermal runaway. h-parameters; h-parameter equivalent circuit for CE configuration; FET and its characteristics, MOSFET; types and characteristics, applications of MOSFET. Transistor amplifiers, Two-stage RC coupled amplifier; Equivalent circuit at mid- frequency, Gain at mid – frequency; Emitter follower.

#### PRACTICAL

(CREDITS 2)

1. Goniometric study of crystal faces.
2. Determination of dielectric constant.
3. Hysteresis curve of a ferromagnetic substance.
4. Hall-probe method for measurement of magnetic field.
5. Specific resistance and energy gap of a semiconductor by four probe method.
6. Energy band gap in semiconductor using a PN junction diode.
7. Characteristics of a transistor.
8. Characteristics of a tunnel diode.
9. Characteristics of a JFET
10. Characteristics of a MOSFET.
11. Measurement of h-parameters of a transistor.
12. Study of voltage regulation and ripple factor of a half-wave and full-wave rectifier with L and  $\pi$  filter circuits.
13. Study of Zener diode as voltage regulator.
14. Study of a regulated power supply.
15. Study of Lissajous figure using CRO.
16. Study of VTVM.
17. Study of two stage RC coupled amplifier.
18. Study of AF and RF oscillators

#### SUGGESTED READINGS

- Elementary Solid State Physics: Principle and applications by M. A. Omar (Pearson Education), 2001.
- Electronic Devices and Circuit Theory by R. Boylestad and L. Nashelsky (Prentice Hall

India)

- Integrated Electronics by Millman and Halkias Tata McGraw Hill.
- Introduction to Solid State Physics by Charles Kittel, John Wiley & Sons.

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**Course Structure and distribution of different courses with their credits for  
B.Sc. Zoology**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I	Animal Diversity	Core Course	6 credits 4(T)+2(P)
2.	II	Comparative Anatomy & Developmental Biology of Vertebrates	Core Course	6 credits 4(T)+2(P)
3.	III	Physiology & Biochemistry	Core Course	6 credits 4(T)+2(P)
4.	III	Apiculture	Skill Enhancement Course	4 credits 2(T)+2(P)
5.	IV	Genetics & Evolutionary Biology	Core Course	6 credits 4(T)+2(P)
6.	V	Animal Biotechnology	Discipline Specific Elective	6 credits 4(T)+2(P)
7.	V	Sericulture: Post Harvest Technology	Skill Enhancement Course	4 credits 2(T)+2(P)
8.	VI	Immunology	Discipline Specific Elective	6 credits 4(T)+2(P)
9.	VI	Sericulture	Skill Enhancement Course	4 credits 2(T)+2(P)

**Course outcomes**

Students will be able to learn in-depth knowledge and understanding about the fundamental concepts, principles and processes underlying the academic field of Zoology and its different subfields.

Students will have wide career options including positions in government departments, environmental agencies, education (including universities and colleges) and industry (including consulting firms, agriculture industries and biomedical companies).

Students will be able to startup profitable agri businesses like apiculture, sericulture, fish farming, and vermicompost preparation.

**1. Animal Diversity (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Animal Diversity	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will learn basics of animal systematics and understand hierarchy of different categories.
- Students will learn diagnostic characteristics of different animal phyla through brief studies of examples.
- Students will be able to classify all the invertebrate and vertebrate phyla up to class.
- Students will be able to identify the major groups of organisms with an emphasis on animals and be able to classify them within a phylogenetic framework.
- Students will be able to compare and contrast the characteristics of animals that differentiate them from other forms of life.

**ANIMAL DIVERSITY****THEORY****(CREDITS 4)****Unit 1****1.1 Protista**

General characters and classification up to classes; Locomotion in Protozoa

**1.2. Porifera**

General characters and classification up to classes; Canal System

**1.3. Cnidaria**

General characters and classification up to classes; Polymorphism in Hydrozoa

**1.4. Helminthes**General characters and classification up to classes of platyhelminthes and nemathelminthes; Life history of *Taenia solium* and *Ascaris lumbricoides*; parasitic adaptations**Unit 2****2.1 Annelida**

General characters and classification up to classes; Filter feeding in Polychaetes

**2.2 Arthropoda**

General characters and classification up to classes; Vision in Arthropoda,



Metamorphosis in Insects

### 2.3 Mollusca

General characters and classification up to classes; Torsion in gastropods

### 2.4 Echinodermata

General characters and classification up to classes; Water-vascular system in Asteroidea

## Unit 3

### 3.1 Urochordates

General features and classification; Phylogeny of Protochordata

### 3.2 Cephalochordates

General features and classification

### 3.3 Agnatha

General features of Agnatha and classification of cyclostomes up to classes

### 3.4 Pisces

General features and Classification up to orders; Osmoregulation

## Unit 4

### 4.1 Amphibia

General features and Classification up to orders; Parental care

### 4.2 Reptiles

General features and Classification up to orders; Poisonous and non-poisonous snakes

### 4.3 Aves

General features and Classification up to orders; Flight adaptations

### 4.4 Mammals

General characters and Classification up to orders; adaptive radiation

## PRACTICAL

(CREDITS 2)

1. Study of the museum specimens belonging to all the phyla (available in respective museums).
2. Dissection of following animals to expose different systems:
  - Pheritima
  - Prawn
  - Pila
3. Study of the following permanent slides:
  - T.S. and L.S. of *Sycon*
  - Life history stages of *Taenia*

- T.S. of Male and female *Ascaris*

#### 4. Key for Identification of poisonous and non-poisonous snakes

#### SUGGESTED READINGS

- Ruppert and Barnes, R.D. (2006). *Invertebrate Zoology, VIII Edition*. Holt Saunders International Edition.
- Barnes, R.S.K., Calow, P., Olive, P.J.W., Golding, D.W. and Spicer, J.I. (2002). *The Invertebrates: A New Synthesis, III Edition*, Blackwell Science.
- Young, J.Z. (2004). *The Life of Vertebrates*. III Edition. Oxford university press.
- Pough H. *Vertebrate life*, VIII Edition, Pearson International.
- Hall B.K. and Hallgrimsson B. (2008). *Strickberger's Evolution*. IV Edition. Jones and Bartlett Publishers Inc.
- Jordan, E.L., Verma, P.S., (2013). *Chordate Zoology*. S Chand & Company, New Delhi.

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## 2. Comparative Anatomy & Developmental Biology of Vertebrates (Core Course-II)

Semester	Core Course	Course Title	Credit
II	CC-II	Comparative Anatomy & Developmental Biology of Vertebrates	Theory: 04 Practical: 02 Total: 06

### Course specific outcomes

- Students will be able to describe the vertebrate structures and relate morphology, function and evolution.
- Students will be able to use the evidence of comparative biology to explain how the theory of evolution offers the only scientific explanation for the unity and diversity of life on earth.
- Students also gain knowledge about fundamental steps in vertebrate development from fertilization to organogenesis.
- Students will be able to explicate the methodologies specifically used to study the process of embryonic development in animals.
- Students will be able to identify important unsolved problems in cell and developmental biology.

### COMPARATIVE ANATOMY AND DEVELOPMENTAL BIOLOGY OF VERTEBRATES

#### THEORY

(CREDITS 4)

#### Unit 1

##### 1.1 Integumentary System

Derivatives of integument

##### 1.2 Skeletal System

Evolution of visceral arches

##### 1.3 Digestive System

Brief account of alimentary canal and digestive glands

##### 1.4 Respiratory System

Brief account of Gills, lungs, air sacs and swim bladder

#### Unit 2

##### 2.1 Circulatory System

Evolution of heart and aortic arches

**2.2 Urinogenital System**

Evolution of kidney and urinogenital ducts

**2.3 Nervous System**

Comparative account of brain

**2.4 Sense Organs**

Different types of receptors,

**Unit 3 Early Embryonic Development**

**3.1** Gametogenesis and fertilization in mammals

**3.2** Types and patterns of cleavage

**3.3** Blastulation and gastrulation

**3.4** Role of primary organisers

**Unit 4 Late Embryonic Development and control**

**4.1** Extra embryonic membranes

**4.2** Types of placenta

**4.3** Basic processes in development (gene activation, determination, induction)

**4.4** Basic processes in embryonic development (differentiation, intracellular communications, cell movement and cell death)

**PRACTICAL****(CREDITS 2)**

1. Osteology: Disarticulated skeleton of frog, varanus, fowl and rabbit
2. Study of frog and chick embryology
3. Study of the different types of placenta- histological sections through permanent slides or photomicrographs
4. Dissection of following animals to expose different systems:
  - Scoliodon
  - Frog
  - Rat

**SUGGESTED READINGS**

- Kardong, K.V. (2005) *Vertebrates' Comparative Anatomy, Function and Evolution*. IV Edition. McGraw-Hill Higher Education.
- Kent, G.C. and Carr R.K. (2000). *Comparative Anatomy of the Vertebrates*. IX Edition. The McGraw-Hill Companies.
- Hilderbrand, M and Gaslow G.E. *Analysis of Vertebrate Structure*, John Wiley and Sons.
- Walter, H.E. and Sayles, L.P; *Biology of Vertebrates*, Khosla Publishing

House.

- Gilbert, S. F. (2006). *Developmental Biology*, VIII Edition, Sinauer Associates, Inc., Publishers, Sunderland, Massachusetts, USA.
- Balinsky, B.I. (2008). *An introduction to Embryology*, International Thomson Computer Press.
- Carlson, Bruce M (1996). *Patten's Foundations of Embryology*, McGraw Hill, Inc.

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**3. Physiology & Biochemistry (Core Course-III)**

Semester	Core Course	Course Title	Credit
III	CC-III	Physiology & Biochemistry	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will have an enhanced knowledge and appreciation of animal physiology.
- Students will be able to understand the functions of important physiological systems including the digestive, cardio-respiratory, renal, reproductive and metabolic systems.
- Students will be able to outline the basic control processes of the nervous systems and explain how this drives muscle movement and sensory perception.
- Students will develop an understanding of the role of the endocrine system in maintaining homeostasis and health.
- Student will be better able to explicate the integrative workings of the human body by studying the endocrine system.
- Students will be able to understand the synthesis of proteins, lipids, and carbohydrates and their role in metabolic pathways along with their regulation.

**PHYSIOLOGY AND BIOCHEMISTRY****THEORY****(CREDITS 4)****Unit 1****1.1 Digestion**

Physiology of digestion; Absorption of carbohydrates, proteins and lipids

**1.2 Respiration**

Pulmonary respiration, Respiratory volumes and capacities, Transport of Oxygen and carbon dioxide in blood, types of respiratory pigments, oxygen dissociation curves

**1.3 Excretion**

Formation and excretion of nitrogenous wastes

**1.4 Origin and conduction of cardiac impulse****Unit 2****2.1** Different types of potentials, action potential and its propagation in different nerve fibres**2.2** Molecular and chemical basis of muscle contraction**2.3** Physiology of vision**2.4** Physiology of hearing

**Unit 3 Endocrinology**

- 3.1 Hormonal control of gametogenesis
- 3.2 Hormonal control of reproductive cycles in mammals
- 3.3 Hormones of pituitary, thyroid and Parathyroid
- 3.4 Hormones of Pancreas, Adrenal and Thymus

**Unit 4****4.1 Carbohydrate metabolism**

Glycolysis, Krebs Cycle, Pentose phosphate pathway, Gluconeogenesis, Glycogen metabolism, Electron transport chain;

**4.2 Lipid metabolism**

Biosynthesis and  $\beta$  oxidation of palmitic acid

**4.3 Protein metabolism**

Transamination, deamination and urea cycle

**4.4 Enzymes**

Introduction, Mechanism of action, Enzyme Kinetics, Inhibition and Regulation

**PRACTICAL****(CREDITS 2)**

1. Preparation of hemin and hemochromogen crystals
2. Study of permanent histological sections of mammalian pituitary, thyroid, pancreas, adrenal gland
3. Study of permanent slides of spinal cord, duodenum, liver, lung, kidney, bone, cartilage
4. Qualitative tests for carbohydrates in given solutions (Glucose, Fructose, Sucrose, Lactose)
5. Estimation of total protein in given solutions by Lowry's method
6. Study of activity of salivary amylase under optimum conditions
7. RBC and WBC counting
8. Estimation of haemoglobin

**SUGGESTED READINGS**

- Tortora, G.J. and Derrickson, B.H. (2009). *Principles of Anatomy and Physiology, XII Edition*. John Wiley & Sons, Inc.
- Widmaier, E.P., Raff, H. and Strang, K.T. (2008). *Vander's Human Physiology, XI Edition*., McGraw Hill.
- Guyton, A.C. and Hall, J.E. (2011). *Textbook of Medical Physiology, XII Edition*. Harcourt Asia Pvt. Ltd/ W.B. Saunders Company.
- Berg, J.M., Tymoczko, J.L. and Stryer, L. (2006). *Biochemistry, VI Edition*. W.H. Freeman and Co.

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- Nelson, D.L., Cox, M.M. and Lehninger, A.L. (2009). *Principles of Biochemistry, IV Edition*. W.H. Freeman and Co.
  - Murray, R.K., Granner, D.K., Mayes, P.A. and Rodwell, V.W. (2009). *Harper's Illustrated Biochemistry, XXVIII Edition*. Lange Medical Books/Mc Graw & Hill.

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**4. Apiculture (Skill Enhancement Course-I)**

Semester	Skill Enhancement Course	Course Title	Credit
III	SEC-I	Apiculture	Theory: 02 Practical: 02 Total: 04

**Course specific outcomes**

- Students will learn the fundamentals of beekeeping and responsibilities of beekeepers.
- Students will be able to use, identify and assemble the beekeeping equipment.
- Students will be able to maintain optimum conditions for particular honeybee species, harvest honey and other products, and manage honeybee diseases on scientific lines.
- Students will be able to name and identify particular honeybee species and their body parts including mouth parts, legs and sting.
- Generation of skilled man power in the field of apiculture.

**APICULTURE****THEORY****(CREDITS 2)****Unit 1****Bee Keeping I**

- 1.1 Introduction to Apiculture, honey bee species
- 1.2 Social organization of bee colony
- 1.3 Life cycle of honey bee
- 1.4 Behavioural patterns (bees dance, swarming)

**Unit 2****Bee Keeping II**

- 2.1 Methods of bee keeping, beehive and its types
- 2.2 Bee foraging and production of honey
- 2.3 Bee keeping products: honey and bee wax
- 2.4 Enemies and diseases of honey bees

**PRACTICAL****(CREDITS 2)**

1. Specimen study of different castes of honey bee species

2. Collection and identification of different honey bee species viz. *Apis indica*, *A. dorsata*, *A. mellifera*, *A. florea*
3. Life cycle study of honey bees
4. Study of leg modification in workers
5. Temporary mount preparation of mouth parts of honey bees
6. Temporary mount preparation of sting apparatus of honey bees
7. Demonstration of honey testing methods like blot method, burning method and alkali method etc.
8. Study of different bee hives and allied implements used in bee keeping

#### SUGGESTED READINGS

- Prost, P. J. (1962). *Apiculture*. Oxford and IBH, New Delhi.
- Bisht D.S., *Apiculture*, ICAR Publication.
- Singh S., *Beekeeping in India*, Indian council of Agricultural Research, New Delhi

**5. Genetics & Evolutionary Biology (Core Course-IV)**

Semester	Core Course	Course Title	Credit
IV	CC-IV	Genetics & Evolutionary Biology	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will have a detailed understanding of the Mendelian genetics, chemical basis of heredity, and how quantification of heritable traits provides insight into cellular and molecular mechanisms.
- Students will be able to explain how organisms function at the level of the gene, genome, cell, tissue, organ and organ-system.
- Students will understand natural selection as key to the natural world; how natural selection produces adaptation; the origins of genetic variation and fitness.
- Students will be able to use specific examples to explicate how descent with modification has shaped animal morphology, physiology, life history, and behavior.
- Students will be able to understand what is a species; how new species arise and the history of life and major extinctions.

**GENETICS AND EVOLUTIONARY BIOLOGY****THEORY****(CREDITS 4)****Unit 1**

- 1.1 Mendelian genetics, Linkage, Linkage maps and crossing over
- 1.2 Nature of heterochromatin
- 1.3 Organisation of genetic material in prokaryotes and eukaryotes
- 1.4 Multiple alleles, Letahlity, Epistasis, Sex linked inheritance, extra chromosomal Inheritance

**Unit 2****2.1 Mutations**

Structural and numerical changes in chromosomes; Gene mutations

**2.2 Replication**

Replication in prokaryotes and eukaryotes

**2.3 Transcription and translation**

Transcription and post transcriptional modifications, translation

**2.4 Sex Determination**

Chromosomal mechanisms, dosage compensation

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**Unit 3****3.1 Introduction to Evolutionary Theories**

Lamarckism, Darwinism, Neo-Darwinism

**3.2 Evidences of Evolution**

Types of fossils, Dating of fossils, Phylogeny of horse

**3.3 Processes of Evolutionary Change**

Organic variations; Isolating Mechanisms; Natural selection, Industrial melanism

**3.4 Natural Selection**

Directional, Stabilizing and Disruptive selection, Artificial selection

**Unit 4****4.1 Species Concept**

Biological species concept; Modes of speciation (Allopatric, Sympatric)

**4.2 Macro-evolution**

Macro-evolutionary Principles (example: Darwin's Finches)

**4.3 Extinction**

Mass extinction, Causes and Role of extinction in evolution

**4.4 Major extinctions**

K-T extinction

**PRACTICAL****(CREDITS 2)**

1. Study of Human Karyotypes (normal and abnormal).
2. Study of fossil evidences from pictures
3. Study of homology and analogy from suitable specimens/ pictures
4. Charts:
  - a) Phylogeny of horse with diagrams
  - b) Darwin's Finches with diagrams/ cut outs of beaks of different species
5. Visit to Natural History Museum and to national parks within and outside state and submission of report

**SUGGESTED READINGS**

- Gardner, E.J., Simmons, M.J. and Snustad, D.P. (2008). *Principles of Genetics, VII Edition*. Wiley, India.
- Snustad, D.P. and Simmons, M.J. (2008). *Principles of Genetics, V Edition*. John Wiley and Sons Inc.
- Gupta, P.K. (2018). *Genetics*. Rastogi Publications, New Delhi.
- Ridley, M. (2004). *Evolution, III Edition*. Blackwell Publishing.
- Barton, N.H., Briggs, D.E.G., Eisen, J.A., Goldstein, D.B. and Patel, N.H. (2007). *Evolution*. Cold Spring, Harbour Laboratory Press.

- Hall, B.K. and Hallgrímsson, B. (2008). *Evolution, IV Edition*. Jones and Bartlett Publishers.
- Campbell, N.A. and Reece, J.B. (2011). *Biology, IX Edition*. Pearson, Benjamin, Cummings.
- Douglas, J. Futuyma (1997). *Evolutionary Biology*. Sinauer Associates.

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**6. Animal Biotechnology (Discipline Specific Elective-I)**

Semester	Discipline Specific Elective	Course Title	Credit
V	DSE-I	Animal Biotechnology	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will be able to understand the concept, tools and techniques associated with recombinant DNA technology.
- Students will have a detailed understanding of DNA manipulative enzymes, isolation of gene of interest, cloning and expression vectors, construction of genomic DNA library and cDNA library, blotting, PCR, sequencing, transfection, and transgenic techniques.
- Students will be able to explicate the role of biotechnology to laboratory animal models for human and animal disease and production of transgenic animals.
- Students will be familiarized with the concept, types and management of microbial culture and production of pharmaceuticals, growth hormones and vaccines.
- Students will be able to demonstrate use of molecular biology techniques to genetically engineer the animals for pharmaceuticals, molecular diagnosis, disease control and gene therapy.

**ANIMAL BIOTECHNOLOGY****THEORY****(CREDITS 4)****Unit 1****Introduction****1.1** Concept and scope of biotechnology**1.2** Cloning vectors: plasmids, cosmids, phagemids, lambda bacteriophage, and expression vectors (characters)**1.3** Restriction enzymes: nomenclature, detailed study of type II**1.4** Transformation techniques: calcium chloride method and electroporation**Unit 2****Gene manipulation****2.1** Construction of genomic and CDNA libraries and screening by colony and plaque hybridization**2.2** Southern, Northern and Western blotting

2.3 DNA sequencing: Sanger method

2.4 Polymerase Chain Reaction, DNA Fingerprinting and DNA microarray

### Unit 3

#### Genetically modified organisms

3.1 Production of cloned and transgenic animals: Nuclear transplantation, Retroviral method, DNA microinjection

3.2 Transgenic animals (mice, cattle, sheep, goat, birds, fishes)

3.3 Applications of transgenic animals

3.4 Production of pharmaceuticals, production of donor organs, knockout mice.

### Unit 4

#### Culture techniques and applications

4.1 Preparation of growth media

4.2 Microbial culture techniques and management

4.3 Molecular diagnosis of genetic diseases

4.4 Recombinant DNA in medicine (recombinant insulin and human growth hormone), gene therapy

#### PRACTICAL

(CREDITS 2)

1. Restriction digestion of plasmid DNA
2. To study following techniques through photographs
  - a) Southern blotting
  - b) Northern blotting
  - c) Western blotting
  - d) DNA sequencing (Sanger's method)
  - e) PCR
  - f) DNA fingerprinting
3. Project report on animal cell culture

#### SUGGESTED READINGS

- Brown, T.A. (1988). *Molecular Biology Labfax II: Gene Cloning and DNA Analysis, II Edition*. Academic Press, California, USA.
- Glick, B.R. and Pasternak, J.J. (2009). *Molecular Biotechnology – Principles and Applications of Recombinant DNA, IV Edition*. ASM Press, Washington, USA.

- Griffiths, A.J.F., Miller, J.H., Suzuki, D.T., Lewontin, R.c. and Gelbart, W.M. (2009). *An introduction to Genetic Analysis, IX Edition*. Freeman and Co., New York, USA.
- Snustad, D.P. and Simmons, M.J. (2008). *Principles of Genetics, V Edition*. John Wiley and Sons Inc.
- Watson, J.D., Myers, R.M., Caudy, A. and Witkowski, J.K. (2007). *Recombinant DNA Genes and Genomes – A Short Course, III Edition*. Freeman and Co., New York, USA.
- Beauchamp, T.I. and Childress, J.F. (2008). *Principles of Biomedical Ethics, VI Edition*. Oxford University Press.

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**7. Sericulture: Post Harvest Technology (Skill Enhancement Course-II)**

Semester	Skill Enhancement Course	Course Title	Credit
V	SEC-II	Sericulture: Post Harvest Technology	Theory: 02 Practical: 02 Total: 04

**Course specific outcomes**

- Students will be able to understand the concept, methods, appliances and industrialized options associated with raw silk processing technology.
- Students will have a detailed understanding of storage, sorting, deflossing, cooking, brushing and reeling of cocoons.
- Students will be familiarized with the industrial aspects of bleaching, dyeing, printing, finishing and production of silk garments to bring about the choicest colours and shades on silk leading to value addition of the silk materials.
- Students will be imparted hands on training in post cocoon technology.

**SERICULTURE-POST HARVEST TECHNOLOGY****THEORY****(CREDITS 2)****Unit 1****Silk Processing Technology I**

- 1.1 Present status of raw silk processing technology in India, technological options
- 1.2 Storage, sorting, deflossing and cooking of cocoons
- 1.3 Cocoon brushing and reeling
- 1.4 Reeling appliances-charaka, cottage basin, multi-end silk reeling machine

**Unit 2****Silk Processing Technology II**

- 2.1 Processing of reeled silk (general account)
- 2.2 Bleaching and dyeing of silk
- 2.3 Methods of printing and finishing
- 2.4 Spinning and production of silk garments

**PRACTICAL****(CREDITS 2)**

1. Study of cocoons of different silkworm races
2. Demonstration of cocoon cooking and brushing
3. Demonstration of reeling of cocoons
4. Filament length of different races of *Bombyx mori*
5. Determination of denier of mulberry silk
6. Methods of dyeing of silk
7. Visit to any reeling station

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**8. Immunology (Discipline Specific Elective-II)**

Semester	Discipline Specific Elective	Course Title	Credit
VI	DSE-II	Immunology	Theory: 04 Practical: 02 Total: 06

**Course specific outcomes**

- Students will be able to demonstrate the basic knowledge of immunological processes at a cellular and molecular level, and define central immunological principles and concepts.
- Students will be able to outline, compare and contrast the key mechanisms and cellular players of innate and adaptive immunity and how they relate.
- Students will be able to outline key events and cellular players in antigen processing and presentation, and how the nature of the antigen will shape resulting effector responses.
- Students will be able to understand and explain the basis of allergy, immunodeficiency, autoimmunity and transplantation.
- Students will be able to understand the principles governing vaccination and the mechanisms of protection against infectious diseases.

**IMMUNOLOGY****THEORY****(CREDITS 4)****Unit 1****Overview of the Immune System**

- 1.1 Introduction to basic concepts in immunology
- 1.2 Components of immune system
- 1.3 Principles of innate and adaptive immune system; Haematopoiesis
- 1.4 Cells and organs of immune system

**Unit 2****Antigens and antibodies**

- 2.1 Basic properties of antigens

2.2 B and T cell epitopes, haptens and adjuvants

2.3 Structure, classes and function of antibodies, monoclonal antibodies

2.4 Antigen antibody interactions as tools for research and diagnosis

### Unit 3

#### Working of the Immune System

3.1 Structure and functions of MHC

3.2 Exogenous and endogenous pathways of antigen presentation and processing

3.3 Basic properties and functions of cytokines

3.4 Complement system: components and pathways

### Unit 4

#### Working of the Immune System

4.1 Gell and Coombs

4.2 Classification and brief description of various types of hypersensitivities

4.3 Introduction to concepts of autoimmunity and immunodeficiency

4.4 Introduction to vaccines

### PRACTICAL

(CREDITS 2)

1. Demonstration of lymphoid organs
2. Histological study of spleen, thymus and lymph nodes through slides/photographs
3. Preparation of stained blood film to study various types of blood cells
4. Ouchterlony's double immune-diffusion method
5. ABO blood group determination
6. Demonstration of
  - a) ELISA
  - b) Immunoelectrophoresis

### SUGGESTED READINGS

- Kindt, T.J., Goldsby, R.A., Osborne, B.A. and Kuby, J. (2006). *Immunology, VI Edition*. W.H. Freeman and Company.
- David, M., Jonathan, B., David, R.B. and Ivan, R. (2006). *Immunology, VII Edition*. Mosby, Elsevier Publication.

- Abbas K. Abul and Lechtman H. Andrew (2003). *Cellular and Molecular Immunology*, V Edition. Saunders Publication.

### 9. Sericulture (Skill Enhancement Course-III)

Semester	Skill Enhancement Course	Course Title	Credit
VI	SEC-III	Sericulture	Theory: 02 Practical: 02 Total: 04

#### Course specific outcomes

- Students will be able to understand the life cycle of mulberry and non-mulberry silkworms.
- Students will be imparted training to rear silkworms, harvest silk and byproducts and manage silkworm diseases on scientific lines.
- Students will be able to name and identify mulberry and non-mulberry silkworms.
- Students will be able to demonstrate proficiency in reeling, mother moth and seed examination.
- Generation of skilled man power in the field of sericulture.

## SERICULTURE

### THEORY

(CREDITS 2)

#### Unit 1

##### Sericulture I

- 1.1 Past, present and future of sericulture in J & K
- 1.2 Sericulture and its components
- 1.3 Life cycle of mulberry silk moth-Bombyx mori
- 1.4 Life cycle of non-mulberry silk moths-Tasar, Muga and Eri

#### Unit 2

##### Sericulture II

- 2.1 Rearing of silk worms- mulberry and non-mulberry silk worms
- 2.2 Harvesting and post harvest processing of cocoons

2.3 By-products of sericulture

2.4 Silkworm diseases- viral, bacterial, protozoan and fungal

## PRACTICAL

(CREDITS 2)

1. Specimen study of mulberry and non-mulberry silk moths
2. Life cycle study/laboratory rearing of *Bombyx mori*
3. Study of silk gland of *Bombyx mori* through the dissection of 5<sup>th</sup> instar silkworm
4. Demonstration of cocoon reeling and determination of filament length of cocoons
5. Mother moth and seed examination
6. Visit to any sericultural research institution

## SUGGESTED READINGS

- Handbook of Practical Sericulture: S.R. Ullal and M.N. Narasimhanna CSB, Bangalore
- Appropriate Sericultural Techniques; Ed. M. S. Jolly, Director, CSR & TI, Mysore.
- Handbook of Silkworm Rearing: Agriculture and Technical Manual-1, Fuzi Pub. Co. Ltd., Tokyo, Japan 1972
- Manual of Silkworm Egg Production; M. N. Narasimhanna, CSB, Bangalore 1988
- Silkworm Rearing; Wupang—Chun and Chen Da-Chung, Pub. By FAO, Rome 1988
- Improved Method of Rearing Young age silkworm; S. Krishnaswamy, reprinted CSB, Bangalore, 1986

**Course Structure and distribution of different courses with their credits for Bachelor in Commerce (General)**

S.No	Semester	Course Title	Course Type	Total Credits
1.	I	Financial Accounting	Core Course	6 credits 4(T)+2(P)
2.	I	Business Law	Core Course	6 credits 4(T)+2(P)
3.	II	Corporate Accounting	Core Course	6 credits 4(T)+2(P)
4.	II	Corporate Laws	Core Course	6 credits 4(T)+2(P)
5.	III	Human Resource Management	Core Course	6 credits 4(T)+2(P)
6.	III	Business Mathematics	Core Course	6 credits 4(T)+2(P)
7.	III	Management Principles & Applications	Core Course	6 credits 4(T)+2(P)
8.	III	E-Commerce/Personal Selling & Salesmanship/Financial Economics/Personal Tax Planning/Elementary Computer Applications	Skill Enhancement Elective Course (SEC) -I	4 Credits: 2(T)+2(P)
9.	IV	Cost Accounting	Core Course	6 credits 4(T)+2(P)
10.	IV	Goods & Services Tax (GST)	Core Course	6 credits 4(T)+2(P)
11.	IV	Computer Applications in Business	Core Course	6 credits 4(T)+2(P)
12.	V	Principles of Marketing	Core Course	6 credits 4(T)+2(P)
13.	V	Fundamentals of Financial Management	Core Course	6 credits 4(T)+2(P)
14.	V	Banking & Insurance/Computerized Accounting System/Advertising	(DSE) -I	6 credits 4(T)+2(P)
15.	V	Corporate Tax Planning/Management Accounting/ Financial Markets	(DSE) -II	6 credits 4(T)+2(P)

16.	VI	Auditing & Corporate Governance	Core Course	6 credits 4(T)+2(P)
17.	VI	Income Tax Law & Practice	Core Course	5 credits 4(T)+2(P)
18	VI	Fundamentals of Investment/International Business/ New Venture Planning	(DSE) -III	6 credits 4(T)+2(P)
19	VI	Business Research Methods & Project Work/Financial Reporting & Analysis/Consumer Affairs & Customer Care	(DSE) -IV	6 credits 4(T)+2(P)

### Course Outcomes

Programme learning outcomes for B. Com include various subject specific skills and generic skills like mind management, creativity and innovation of competencies in diverse areas of Commerce and Business, the achievement of which will be demonstrated by the students of B. Com. The programme learning outcomes of B. Com enables a student to prepare for further study, employment, and good citizenship. Further, the difference in the level of achievement of programme outreach provides for comparing of learning levels and standards across different college/institution. The various learning outcomes of the programme are mentioned below:

1. Bachelor's Degree in Commerce results in giving comprehensive knowledge of Marketing, Human Resource Management, Business and Corporate Law, Economics, Finance, Accounting, Management, Tax and several other branches of Commerce that includes Investment, Insurance, and Banking. Thus, this programme helps students in building a concrete footing for advanced studies in Commerce and to stand with the requirement of business sector, insurance, banking seeking youth fit for employment.
2. Students undergoing this programme will be equipped to the world of work, particularly, work of the future. The student will get a first-hand exposure of working in the real world.
3. Students completing this programme will be able to develop managerial knowledge and tactical dexterity, with a broader skill set and encourages them to seek out audacious, innovative solutions for today's business.
4. Completion of this programme will also enable the students to formulate business problems and provide innovative solutions thus, molding them into future visionaries,



management leaders that are compassionate yet efficient.

5. The course provides an extreme and rigorous base for teaching, research, and allied businessadministrations.

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**1. Financial Accounting (Core Course-I)**

Semester	Core Course	Course Title	Credit
I	CC-I	Financial Accounting	Theory: 04; Internal: 02 Total: 06

**Course Specific outcomes**

1. This course will equip students with fundamental accounting skill and applications.
2. The course will make students aware about partnership business and key accounting skills needed to manage partnership business affairs.

**FINANCIAL ACCOUNTING****THEORY****(CREDITS 4)****Unit – 1****(a) Theoretical Framework**

- i. Accounting as an information system, the users of financial accounting information and their needs. Qualitative characteristics of accounting, information. Functions, advantages and limitations of accounting. Branches of accounting. Bases of accounting; cash basis and accrual basis.
- ii. The nature of financial accounting principles - Basic concepts and conventions: entity, money measurement, going concern, cost, realization, accruals, periodicity, consistency, prudence (conservatism), materiality and full disclosures.
- iii. Financial accounting standards: Concept, benefits, procedure for issuing accounting standards in India. Salient features of First-Time Adoption of Indian Accounting Standard (Ind-AS) 101. International Financial Reporting Standards (IFRS): - Need and procedures.

**(b) Accounting Process**

From recording of a business transaction to preparation of trial balance including

adjustments.

## Unit – 2

### (a) **Depreciation: Methods and Computation**

The nature of depreciation. The accounting concept of depreciation. Factors in the measurement of depreciation. Methods of computing depreciation: straight line method and diminishing balance method; Disposal of depreciable assets-change of method.

### (b) Final Accounts

Capital and revenue expenditures and receipts: general introduction only. Preparation of financial statements of non- corporate business entities.

## Unit – 3

### **Accounting for Hire-Purchase and Installment Systems, Consignment, and Joint Venture**

i) **Accounting for Hire-Purchase** Transactions, Journal entries and ledger accounts in the books of Hire Vendors and Hire purchaser for large value items including Default and repossession.

ii) **Consignment:** Features, Accounting treatment in the books of the consignor and consignee.

iii) **Joint Venture:** Accounting procedures: Joint Bank Account, Records Maintained by Co-venturer of (a) all transactions (b) only his own transactions. (Memorandum joint venture account).

## Unit - 4

### (a) **Accounting for Inland Branches**

Concept of dependent branches; accounting aspects; debtors system, stock and debtors system, branch final accounts system and whole sale basis system. Independent branches: concept- accounting treatment: important adjustment entries and preparation of consolidated profit and loss account and balance sheet.

### (b) Accounting for Dissolution of Partnership Firm

Accounting of Dissolution of the Partnership Firm Including Insolvency of partners, sale to a limited company and piecemeal distribution.

**UNIT - 5 AND UNIT – 6 (FOR INTERNAL ASSESSMENT) CREDITS: 02****Computerized Accounting Systems**

- i.* Tally: Creating a Company; Configure and Features settings; Creating Accounting Ledgers and Groups; Creating Stock Items and Groups; Vouchers Entry
- ii.* Generating Reports - Cash Book, Ledger Accounts, Trial Balance, Profit and Loss Account, Balance Sheet, Funds Flow Statement, Cash Flow Statement
- iii.* Selecting and shutting a Company; Backup and Restore data of a Company

**Note: Each student will have a choice to select one of the above and submit report as an assignment for evaluation by the concerned teacher**

**Note:**

- 1. The relevant Indian Accounting Standards in line with the IFRS for all the above topics should be covered.**
- 2. Any revision of relevant Indian Accounting Standard would become applicable immediately.**

**SUGGESTED READINGS:**

1. Robert N Anthony, David Hawkins, Kenneth A. Merchant, *Accounting: Text and Cases*. McGraw- Hill Education, 13 Ed. 2013.
2. Charles T. Horngren and Donna Philbrick, *Introduction to Financial Accounting*, Pearson Education.
3. J.R. Monga, *Financial Accounting: Concepts and Applications*. Mayur Paper Backs, New Delhi.
4. M.C.Shukla, T.S. Grewal and S.C.Gupta. *Advanced Accounts. Vol.-I*. S. Chand & Co., New Delhi.
5. S.N. Maheshwari, and. S. K. Maheshwari. *Financial Accounting*. Vikas Publishing House, New Delhi.
6. Deepak Sehgal. *Financial Accounting*. Vikas Publishing H House, New Delhi.

7. Bhushan Kumar Goyal and HN Tiwari, *Financial Accounting*, International Book House
8. Goldwin, Alderman and Sanyal, *Financial Accounting*, Cengage Learning.
9. Tulsian, P.C. *Financial Accounting*, Pearson Education.
10. *Compendium of Statements and Standards of Accounting*. The Institute of Chartered Accountants of India, New Delhi

*Note: Latest edition of text books may be used*

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**2. Business Law (Core Course-II)**

Semester	Core Course	Course Title	Credit
I	CC-II	Business Law	Theory: 04; Internal: 02 Total: 06

**Course specific outcomes**

1. A student can learn and practice legality of contracts and their validity.
2. Learners of the course will be able to understand the basics of cheque system, endorsement and business process involved.

**BUSINESS LAW****THEORY****(CREDITS 4)****Unit – 1****The Indian Contract Act, 1872: General Principles of Contract**

Contract - meaning, characteristics and kinds, Essentials of a valid contract - Offer and acceptance, consideration, contractual capacity, free consent, legality of objects. Void agreements. Discharge of a contract - modes of discharge, breach and remedies against breach of contract. Contingent contracts. Quasi - contracts

**Unit – 2****The Indian Contract Act, 1872: Specific Contracts**

Contract of Indemnity and Guarantee: Meaning and Characteristics. Contract of Bailment: Meaning and Characteristics, Rights and duties of Bailor and Bailee. Contract of Agency: Meaning of Agency, Types of Agents, Rights and Duties of Principal and Agent.

**Unit – 3****The Sale of Goods Act, 1930**

Contract of sale, meaning and difference between sale and agreement to sell. Conditions and warranties. Transfer of ownership in goods including sale by a non-owner. Performance of contract of sale. Unpaid seller - meaning, rights of an unpaid

seller against the goods and the buyer.

#### Unit – 4

#### **The Negotiable Instrument Act 1881 and The Limited Liability Partnership Act, 2008**

Salient Features of LLP. Differences between LLP and Partnership, LLP and Company. Incorporation Document. Incorporation by Registration.

Meaning, Characteristics, and Types of Negotiable Instruments: Promissory Note, Bill of Exchange, Cheque, Holder in Due Course, Negotiation: Types of Endorsement, Crossing of Cheque, Bouncing of Cheque.

#### **UNIT – 5 AND UNIT – 6 (FOR INTERNAL ASSESSMENT) CREDITS: 02**

*Identification, analysis and discussion of leading cases related to any one of the following:*

3. *The Indian contract Act 1872.*
4. *Sale of Goods Act 1930.*
5. *Negotiable instruments Act 1881.*

**Note:** *Each student is required to submit the Case Study Report to the concerned teacher for evaluation purposes.*

#### **SUGGESTED READINGS:**

1. M.C. Kuchhal, and Vivek Kuchhal, Business Law, Vikas Publishing House, New Delhi. Avtar Singh, Business Law, Eastern Book Company, Lucknow.
2. Ravinder Kumar, Legal Aspects of Business, Cengage Learning
3. SN Maheshwari and SK Maheshwari, Business Law, National Publishing House, New Delhi.
4. Aggarwal S K, Business Law, Galgotia Publishers Company, New Delhi.
5. Bhushan Kumar Goyal and Jain Kinneri, Business Laws, International Book House
6. Sushma Arora, Business Laws, Taxmann Publications.
7. Akhileshwar Pathak, Legal Aspects of Business, McGraw Hill Education, 6<sup>th</sup>ed.

### 3. Corporate Accounting (Core Course-III)

Semester	Core Course	Course Title	Credit
I	CC-III	Corporate Accounting	Theory: 04; Internal: 02 Total: 06

#### Course specific outcomes

1. Students of this course can understand the concepts and applications of shares and debentures.
2. Understanding business combinations and mergers are essential part of this course. Students can use these concepts in practice using computers while being a part of an organization.

### **CORPORATE ACCOUNTING**

#### **THEORY**

**(CREDITS 4)**

#### **Unit – 1**

##### **(a) Accounting for Share Capital & Debentures**

Issue, forfeiture and reissue of forfeited shares: concept & process of book building; Issue of rights and bonus shares;

Buy back of shares; Redemption of preference shares; Issue and Redemption of Debentures

##### *(b) Valuation of Goodwill and Valuation of Shares*

Concepts and calculation: simple problem only

#### *Unit – 2*

##### **(a) Final Accounts of Companies**

Preparation of profit and loss account and balance sheet of corporate entities, excluding calculation of managerial remuneration, Disposal of company profits.

##### *(b) Cash Flow Statement*

Concept of Funds, Preparation of Cash Flow Statement as per Indian Accounting Standard



(Ind – AS:7)

*Unit – 3*

### **Amalgamation of Companies**

Concepts and accounting treatment as per Accounting Standard: 14 (ICAI) (excluding inter- company holdings). Internal reconstruction: concepts and accounting treatment excluding scheme of reconstruction.

*Unit – 4*

### **Accounts of Holding Companies/Parent Companies**

Preparation of consolidated balance sheet with one subsidiary company; Relevant provisions of Accounting Standard: 21 (ICAI).

## **UNIT – 5 AND UNIT – 6 (FOR INTERNAL ASSESSMENT)**

**CREDITS: 02**

Collection of Data for the preparation of Final Accounts of any Corporate/Organisation to be identified by concerned teacher.

Analysis of the collected data by using Common Size Statements, Comparative Statements and Ratio Analysis (Liquidity, Solvency and Profitability).

**Note: Each Student is required to submit an analyzed report to the concerned teacher for evaluation.**

**Note:**

- 1. The relevant Indian Accounting Standards in line with the IFRS for all the above topics should be covered.**
- 2. Any revision of relevant Indian Accounting Standard would become applicable immediately.**

### **SUGGESTED READINGS:**

- 1. J.R. Monga, Fundamentals of Corporate Accounting. Mayur Paper Backs, New Delhi.**

2. M.C. Shukla, T.S. Grewal, and S.C. Gupta. Advanced Accounts. Vol.-II. S. Chand & Co., New Delhi.
3. S.N. Maheshwari, and S. K. Maheshwari. Corporate Accounting. Vikas Publishing House, New Delhi.
4. Ashok Sehgal, Fundamentals of Corporate Accounting. Taxman Publication, New Delhi.
5. V.K. Goyal and RuchiGoyal,. Corporate Accounting. PHI Learning.
6. Jain, S.P. and K.L. Narang. Corporate Accounting. Kalyani Publishers, New Delhi.
7. Bhushan Kumar Goyal, Fundamentals of Corporate Accounting, International Book House
8. P. C. Tulsian and Bharat Tulsian, Corporate Accounting, S.Chand
9. Amitabha Mukherjee, Mohammed Hanif, Corporate Accounting, McGraw Hill Education
10. Compendium of Statements and Standards of Accounting. The Institute of Chartered Accountants of India, New Delhi.

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**4. Corporate Laws (Core Course-IV)**

.Semester	Core Course	Course Title	Credit
II	CC-IV	Corporate Laws	Theory: 04; Internal: 02 Total: 06

**Course specific outcomes**

1. Students can apply the knowledge about the formation of a joint stock company.
2. The learners can understand the administration of corporate legal structure, key players and methods of winding up of a company.

**CORPORATE LAWS****THEORY****(CREDITS: 04)****Unit - 1**

Introduction - Meaning and Characteristics of a company; lifting of corporate veil; types of companies including one-person company, small company and dormant company; association not for profit; illegal association; formation of company, promoters, their legal position, pre-incorporation contract;. Administration of Company Law [including National Company Law Tribunal (NCLT), National Company Law Appellate Tribunal (NCLAT), Special Courts].

**Unit - 2**

Documents - Memorandum of association: Clauses, Articles of association: Contents of Articles of Association. Doctrine of constructive notice and indoor management prospectus: shelf and red herring prospectus, Misstatement in prospectus.

Dividends, and Audit: Provisions relating to payment of Dividend, Provisions relating to Audit, Auditors' Appointment and duties. Auditors' Report: types and contents.

**Unit - 3**

Management: Director: Qualifications, Disqualifications, types, powers and duties, appointment and removal, director identity number. Key managerial personnel. Types of

meeting: Statutory meeting, AGM, Extraordinary General Meeting, BODs meeting, Class meeting. Committees of Board of Directors - Audit Committee, Corporate Social Responsibility Committee: Constitution and purpose.

#### Unit – 4

Winding Up - Concept and modes of Winding Up.

Insider-Trading, Whistle-Blowing - Insider-Trading; meaning and legal provisions; Whistle- blowing: Concept and Mechanism.

Depositories Law: The depositories Act 1996: Meaning, features, rights and obligations of depositories; participants, issuers and beneficial owners.

#### Unit – 5 and Unit – 6 (For Internal Assessment)

(Credits:02)

1. Practical on Online registration of a company and demonstration thereof by each student individually  
or
2. Case studies of winding up of a select company and submission of report thereof by each student individually

#### SUGGESTED READINGS:

1. MC Kuchhal, Modern Indian Company Law, Shri Mahaveer Book Depot (Publishers), Delhi.
2. GK Kapoor and Sanjay Dhamija, Company Law, Bharat Law House, Delhi.
3. Anil Kumar, Corporate Laws, Indian Book House, Delhi
4. Reena Chadha and Sumant Chadha, Corporate Laws, Scholar Tech Press, Delhi.
5. Avtar Singh, Introduction to Company Law, Eastern Book Company
6. Ramaiya, A Guide to Companies Act, LexisNexis, Wadhwa and Buttersworth.
7. Manual of Companies Act, Corporate Laws and SEBI Guideline, Bharat Law House, New Delhi,.
8. A Compendium of Companies Act 2013, along with Rules, by Taxmann Publications.
9. Gower and Davies, Principles of Modern Company Law, Sweet & Maxwell
10. Sharma, J.P., An Easy Approach to Corporate Laws, Ane Books Pvt. Ltd., New Delhi

**5. Human Resource Management (Core Course-V)**

Semester	Core Course	Course Title	Credit
II	AECC	Human Resource Management	Theory: 04; Internal: 02 Total: 06

**Course specific outcomes:**

1. Learners of this course will be able to practice human resource management practices in the organization they are placed in.
2. Students can practice various leadership styles and can make a dent in the rank and file of an organization.

**HUMAN RESOURCE MANAGEMENT****THEORY****(CREDITS: 04)*****Unit - 1*****Introduction**

Human Resource Management: Concept and Functions, Role, Evolution of HRM, HRM v/s HRD; HR Policies, Emerging Challenges of Human Resource Management; Concept of Human Resource Information System

***Unit - 2*****Acquisition of Human Resource**

Human Resource Planning: Concept and Process; Job Analysis – Job Description and Job Specification; Recruitment: Concept and Sources (Internal and External); Selection: Concept and Process

***Unit - 3*****Training and Development**

Concept and Importance; Identifying Training and Development Needs; Designing Training Programmes; Role- Specific and Competency-Based Training; Techniques of Evaluating Training Effectiveness; Methods of Training; Concept of Management Development

*Unit - 4***Performance Appraisal and Employee Compensation**

Performance Appraisal: Nature, objectives and importance; Modern techniques of performance appraisal; potential appraisal; job changes - transfers and promotions; Compensation: concept and policies; job evaluation; methods of wage payments and incentive plans; fringe benefits; performance linked compensation.

**Unit – 5 and Unit – 6 (For Internal Assessment)****(Credits: 02)**

Concerned Teacher to identify a case study from Unit – 2, Unit – 3 and Unit – 4. Students, at the instructions of the concerned teacher, to opt at least one case and submit an assignment and make a presentation on the case opted.

**Suggested Readings:**

1. Gary Dessler. A Framework for Human Resource Management. Pearson Education.
2. DeCenzo, D.A. and S.P. Robbins, Personnel/Human Resource Management, Pearson Education.
3. Bohlander and Snell, Principles of Human Resource Management, Cengage Learning
4. Ivancevich, John M. Human Resource Management. McGraw Hill.
5. Wreather and Davis. Human Resource Management. Pearson Education.
6. Robert L. Mathis and John H. Jackson. Human Resource Management. Cengage Learning.
7. TN Chhabra, Human Resource Management, Dhanpat Rai & Co., Delhi
8. Biswajeet Pattanayak, Human Resource Management, PHI Learning

*Note: Latest edition of text books may be used*

**6. Business Mathematics (Core Course-VI)**

Semester	Core Course	Course Title	Credit
III	CC-VI	Business Mathematics	Theory: 04; Internal: 02 Total: 06

**Course specific outcomes:**

1. Learners of this course can add credibility to business decisions with the application of mathematics.
2. The subject can equip the students with various financial operations related to banking and insurance.

**BUSINESS MATHEMATICS****THEORY****(CREDITS: 04)****Unit - 1****Matrices and Determinants**

Algebra of matrices. Inverse of a matrix, Matrix Operation – Business Application. Solution of system of linear equations (having unique solution and involving not more than three variables) using matrix inversion Method and Cremer's Rule.

**Unit - 2****Calculus I**

Mathematical functions and their types- linear, quadratic, polynomial, exponential, Logarithmic function. Concepts of limit, and continuity of a function. Concept and rules of differentiation, Maxima and Minima involving second or higher order derivatives. Concept of Marginal Analysis, Concept of Elasticity, Applied Maximum and Minimum Problems including effect of Tax on Monopolist's optimum price and quantity, Economic Order Quantity.

**Unit - 3****Calculus II**

Partial Differentiation: Partial derivatives up to second order; Euler's theorem on Homogenous functions. Total differentiation, differentiation of implicit functions With the help of total differentiation. Integration: Standard forms. Methods of integration – by substitution, by parts, and by use of partial fractions; Definite integration; Finding areas in simple cases. Application of Integration to marginal analysis. Consumer's and Producer's Surplus, Rate of Sales and the Learning Curve.

#### Unit - 4

##### Mathematics of Finance

Rates of interest-nominal, effective and their inter-relationships in different compounding situations. Compounding and discounting of a sum using different types of rates. Types of annuities, like ordinary, due, deferred, continuous, perpetual, and their future and present values using different types of rates of interest. Depreciation of Assets.

*Unit – 5 and Unit – 6 (For Internal Assessment)*

*(Credits: 02)*

*Tutorials / Assignment / Presentation based.*

##### SUGGESTED READINGS:

1. Mizrahi and Sullivan. Mathematics for Business and Social Sciences. Wiley and Sons.
2. Budnick, P. Applied Mathematics. McGraw Hill Education.
3. R.G.D. Allen, Mathematical Analysis For Economists
4. Ayres, Frank Jr. Schaum's Outlines Series: Theory and Problems of Mathematics of Finance. McGraw Hill Education.
5. Dowling, E.T., Mathematics for Economics, Schaum's Outlines Series. McGraw Hill Education.
6. Wikes, F.M., Mathematics for Business, Finance and Economics. Thomson Learning.
7. Thukral, J.K., Mathematics for Business Studies.
8. Vohra, N.D., Quantitative Techniques in Management. McGraw Hill Education.



9. Soni, R.S.,. Business Mathematics. Ane Books, New Delhi.
10. Singh J. K., Business Mathematics. Himalaya Publishing House.

*Note: Latest edition of text books may be used.*

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**7. Management Principles & Applications (Core Course-VII)**

Semester	Core Course	Course Title	Credit
III	CC-VII	Management Principles & Applications	Theory: 04; Internal: 02 Total: 06

**Course specific outcomes:**

1. Learners of the course can practice the management principles in the organizations there are placed effectively.
2. Issues related to employee motivation and leadership can be practiced in wide organizational setups and cultures.

**MANAGEMENT PRINCIPLES & APPLICATIONS****THEORY****(CREDITS: 04)****Unit – 1****Management Thought**

Evolution of the Management Thought, Classical Approach – Taylor, Fayol, Neo-Classical and Human Relations Approaches – Mayo, Hawthorne Experiments, Behavioural Approach, Systems Approach; Contingency Approach – Lawrence & Lorsch, MBO - Peter F. Drucker, Michael Porter – Five-force analysis; Value-Chain, Analysis; ‘Fortune at the Bottom of the Pyramid’ – C.K. Prahalad.

**Unit - 2****Planning**

Concept, Process, Importance and Limitations; Types of Plans

Strategic Planning — Definition, Importance and Techniques; Environmental Analysis and Diagnosis (Internal and external environment) –SWOT/TOWS/WOTS-UP, BCG Matrix, Competitor Analysis

**Unit - 3****Organising and Staffing**

Concept and process of organising – An overview, Span of management, Different types of authority (line, staff and functional), Decentralisation, Delegation of authority Formal and Informal Structure; Principles of Organising; Network Organisation Structure Staffing: Concept of staffing, staffing process

#### *Unit - 4*

#### **Directing and Controlling**

*Motivation:* Concept, Importance; Major Motivation theories - Maslow's Need-Hierarchy Theory; Herzberg's Two-factor Theory, Vroom's Expectation Theory.

*Leadership:* Concept, Importance, Major theories of Leadership (Likert's scale theory, Blake and Mouten's Managerial Grid theory, Transactional leadership, Transformational Leadership, Transforming Leadership.

*Communication:* Concept, Process and Types; Barriers to Effective Communication

*Control:* Concept, Process, Limitations, Principles of Effective Control, Major Techniques of control - Ratio Analysis, ROI, Budgetary Control, EVA

#### ***Unit – 5 and Unit – 6 (For Internal Assessment)***

***(Credits: 02)***

*Concerned Teacher to identify a case study from Unit – 2, Unit – 3 and Unit – 4.*

*Students, at the instructions of the concerned teacher, to opt at least one case and submit an assignment and make a presentation on the case opted.*

#### **SUGGESTED READINGS:**

1. Harold Koontz and Heinz Weihrich, Essentials of Management: An International and Leadership Perspective, McGraw Hill Education.
2. Stephen P Robbins and Madhushree Nanda Agrawal, Fundamentals of Management: Essential Concepts and Applications, Pearson Education.
3. George Terry, Principles of Management, Richard D. Irwin
4. Newman, Summer, and Gilbert, Management, PHI
5. James H. Donnelly, Fundamentals of Management, Pearson Education.

6. B.P. Singh and A.K.Singh, Essentials of Management, Excel Books
7. Griffin, Management Principles and Application, Cengage Learning
8. Robert Kreitner, Management Theory and Application, Cengage Learning
9. TN Chhabra, Management Concepts and Practice, Dhanpat Rai & Co. (Pvt. Ltd.),  
New Delhi

*Note: Latest edition of text books may be used*

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**8. E-Commerce (Core Course-VII)**

Semester	Core Course	Course Title	Credit
III	CC-VII	E-Commerce	Theory: 02; Practical: 02 Total: 04

**Course specific outcomes:**

1. This course entails the practical knowledge about business operation in e- marketplace setups.
2. Students can find convenient to manage banking related issues at the end of this course.

**E-COMMERCE****THEORY****(CREDITS: 04)****Unit-1**

**Introduction:** Meaning, Nature, concepts, advantages, disadvantages and reasons for transacting online, types of E- Commerce, E- commerce business models (Introduction, key elements of a business model and categorizing major E- commerce business models), forces behind e- commerce.

**Technology used in E- Commerce:** The dynamics of World Wide Web and internet (meaning, evolution and features), Designing, building and launching e-commerce website (A systematic approach involving decisions regarding selection of hardware, software, outsourcing Vs in- house development of a website)

**Unit- 2**

**E-payment System:** Models and methods of e-payments (Debt Card, Credit Card, Smart Cards, e- money). Digital Signatures (Procedure, working and legal position), payment gateways, online banking, risks involved in e-payment.

**On-line Business Transactions**

Meaning, purpose, advantages and disadvantages of transacting online, E-commerce applications in various industries like banking, insurance payment of utility bills, online marketing.

**Part-II: Practical/Tutorials: Credits: 02**

**Unit – 3 & 4**

1. Development of website.
2. Surfing of different search engines.
3. Learning of HTML/Front Page.
4. Establishing of internet connection.
5. E-shopping.
6. Using of different electronic payments system such as credit card, debit card, electronic fund transfer, internet banking, mobile banking, UPI, NEFT, RTGS.

**SUGGESTED READINGS:**

1. Kenneth C. Laudon, E- Commerce: Business, Technology, Society, 4th Edition, Pearson
2. Joseph PT. E-Commerce: An Indian Perspective, Prentice hall of India Pvt Ltd. New Delhi.
3. David Whitely (2010), E-commerce, Strategy, technologies and Applications, Tata McGraw Hill Publishing Company Limited, New Delhi.
4. Dr.K.Abirami Devi &Dr. M. Alagammai, E-Commerce, Margham Publications, Chennai
5. Kamalesh N. Agarwala Business on the net, an introduction to the 'Whats' and 'Hows' of e-commerce Macmilan India Limited, New Delhi.

**8a. Personal Selling and Salesmanship (SEC-I)**

The purpose of this course is to familiarize the students with the fundamentals of personal selling and the selling process; to understand selling as a career option and how to be a successful salesman.

Semester	Course	Course Title	Credit
III	SEC-I	Personal Selling and Salesmanship	Theory: 02; Practical: 02 Total: 04

**Course specific outcomes:**

1. Learners of this course can be effective salesman with key skills to identify and address the need of a customer.
2. The students can help retain the customer and make sales consistent to enhance the graph of business profitability.

**PERSONAL SELLING AND SALESMANSHIP****THEORY****(CREDITS: 02)****Unit -1**

**Introduction to Personal Selling:** Nature and importance of personal selling, myths of selling, Difference Between Personal Selling, Salesmanship and Sales Management, Characteristics of a good salesman, types of selling situations, types of salespersons, Career opportunities in selling, Measures for making selling an attractive career.

**Unit -2**

**Buying Motives:** Concept of motivation, Maslow's theory of need hierarchy; Dynamic nature of motivation; Buying motives and their uses in personal selling.

**Selling Process:** Prospecting and qualifying; Pre-approach; Approach; Presentation and demonstration; Handling of objections; Closing the sale; Post sales activities.

**TUTORIALS;****CREDITS: 02**

**Unit- 3 & Unit-4**

1. Preparation of:
  - a. Sales Report & Documents
  - b. Sales Manual
  - c. Order Book/Sales Book
  - d. After sale services report
2. Demonstration of product; handling of customer complaints and closing of sale.

**SUGGESTED READINGS:**

- *Spiro, Stanton, and Rich, Management of the Sales force*, McGraw Hill.
- Rusell, F. A. Beach and Richard H. Buskirk, *Selling: Principles and Practices*, McGraw Hill
- Futrell, Charles, *Sales Management: Behaviour, Practices and Cases*, The Dryden Press.
- Still, Richard R., Edward W. Cundiff and Norman A. P. Govoni, *Sales Management: Decision*.
- *Strategies and Cases*, Prentice Hall of India Ltd., New Delhi.
- Johnson, Kurtz and Schueing, *Sales Management*, McGraw Hill.
- Kapoor Neeru, *Advertising and personal Selling*, Pinnacle, New Delhi.



**8b. FINANCIAL ECONOMICS**

Semester	Course	Course Title	Credit
III	SEC-I	Financial Economics	Theory: 02; Practical: 02 Total: 04

**Course specific outcomes:**

- The basic outcome of the course is to expose the students to the nuances of financial markets especially money and capital markets.
- Students of this course can understand and practice the basics capital markets, price determination, demand and supply and how fundamentals tools can be used for long term investing.

**FINANCIAL ECONOMICS****THEORY****(CREDITS: 02)****Unit 1****Introduction**

Patterns of corporate financing: Common stock; Debt; Preferences; Basic theory of interest; Discounting and present value; NPV and Internal Rate of Return; Fixed-income securities; bond prices and yields; interest rate sensitivity and duration; Term structure of interest rates; yield curves; spot rates and forward rates; Introduction to Options and Derivatives – forwards and futures; Hedging.

**Unit-2****Mean-Variance Portfolio Theory**

Single-period random cash flows; Random asset returns; Portfolio mean and variance; Feasible combinations of mean and variance; Mean-Variance Portfolio analysis: the Markowitz model and the two-fund theorem; Risk-free assets and the one-fund theorem. Capital Asset Pricing Model (CAPM); Capital Market Line; Estimation of beta of an asset and of a portfolio; Security Market Line; use of the CAPM model in investment analysis and as a pricing formula.

**Unit-3 &4 (Internal Assessment)**

***Presentation and submission of report on any of the topics included in Unit-1 and Unit-2.***

***Note:*** Each student shall be required to prepare and submit an assignment and give a class presentation on any of the topics as included in Unit-1 to Unit-2. The teacher shall evaluate the student accordingly.

**SUGGESTED READINGS:**

- *David G. Luenberger, Investment Science, Oxford University Press, USA, 1997.*
- *Hull, John C., Options, Futures and Other Derivatives, Pearson Education, 6th edition, 2005.*
- *Thomas E. Copeland, J. Fred Weston and Kuldeep Shastri, Financial Theory and Corporate Policy, Prentice Hall, 4th edition, 2003.*
- *Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance, McGraw-Hill, 7th edition, 2002.*
- *Stephen A. Ross, Randolph W. Westerfield and Bradford D. Jordan, Fundamentals of Corporate Finance. McGraw-Hill, 7th edition, 2005.*
- *Burton G. Malkiel, A Random Walk Down Wall Street, W.W. Norton & Company, 2003.*
- *William Sharpe, Gordon Alexander and Jeffery Bailey, Investments, Prentice Hall*

**Note:** *Latest edition of text books may be used.*

**8c. PERSONAL TAX PLANNING**

Semester	Course	Course Title	Credit
III	SEC-I	Financial Economics	Theory: 02; Practical: 02 Total: 04

**Course specific objectives**

1. Students of this course can understand and practice tax related matters like calculation and filing of income tax.
2. Tax implication of various allowances, deductions, rebates and reliefs can be implemented by the students in real life situations.

**PERSONAL TAX PLANNING****THEORY****(CREDITS: 02)****Unit – 1**

Meaning of tax planning, tax avoidance and tax evasion; Objective of tax planning. Basic framework of income tax law; Basic Concepts: Person, Assesse, Previous year, Assessment year, Gross total income, Total Income

Tax planning with reference to residential status, Determination of residential status of an individual, Relationship between residential status and incidence of tax.

**Unit – 2****Tax Planning with Reference to Salary Income**

Summarized provisions relating to computation of income under the head salary, Taxation of present benefits: Bonus, Fees and commission, Meaning, Types and tax implications of allowances, Meaning, Types, Valuation and tax implication of perquisites and Allowances, Terminal benefits like gratuity, Leave encashment, Commuted pension.

**Unit – 3**

*Concerned Teacher to identify Case Study based on Syllabi of Unit – 1 and Unit – 2*

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*Assignments based on field survey/Quiz Programs/classroom presentations/seminars/Group Discussions.*

**SUGGESTED READINGS:**

- Singhania, Vinod K., Singhania, Kapil and Monica Singhania, Direct Tax Planning and Management, taxman Publications, Pvt. Ltd., New Delhi.
- Ahuja, Girish and Gupta, Ravi, Corporate Tax Planning and Management, Bharat Law House, Delhi.
- Goyal, S. P., Direct Tax Planning, SahityaBhawan Publication, Agra.
- Acharya, Shuklendra and Gurha, M. G., Tax Planning under Direct Taxes, Modern Law Publication, Allahabad.

**Note:** *Latest edition of text books may be used.*

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**8d. ELEMENTARY COMPUTER APPLICATIONS**

Semester	Course	Course Title	Credit
III	SEC-I	Elementary Computer applications	Theory: 02; Practical: 02 Total: 04

**Course specific objectives**

1. Learners can create documents in the MS word and produce seamless DTP skills.
2. Specific mathematical/statistical operations learnt from Excel can be useful to work on large database in the organizations.

**ELEMENTARY COMPUTER APPLICATIONS****THEORY****(CREDITS: 02)****Part I: Theory: 30 Marks Unit-1**

**Word Processing :** Introduction to word Processing, Word processing concepts, Use of Templates, Working with word document: Editing text, Find and replace text, Formatting, spell check, Autocorrect, Auto text; Bullets and numbering, Tabs, Paragraph Formatting, Indent, Page Formatting, Header and footer, Tables: Inserting, filling and formatting a table; Inserting Pictures and Video; Mail Merge: including linking with Database; Printing documents.

**Unit-2**

**Spreadsheet and its Business:**, Managing worksheets; Formatting, Entering data, Editing, and Printing a worksheet; Handling operators in formula, Project involving multiple spreadsheets, Organizing Charts and graphs.

**Generally used Spreadsheet functions:** Mathematical, Statistical, Financial, Logical, Date and Time, Lookup and reference, Database, and Text functions.

**Part II: Practical/Tutorials: 02 Credits**

1. *Creation of word document.*
2. Usage of different templates.

3. Using of mail merge option.
4. Formula usage in MS Excel.
5. Preparation of charts; bar charts, pie charts; line charts.

**SUGGESTED READINGS:**

- PK Sinha, Computer Fundamentals, BPB Publications, Delhi.
- Lallit Mali, Micro soft Office- 2016, Notion Press, Delhi.
- Bittu Kumar, Mastering Ms Office, BPB Publications, Delhi.
- G. Manjunath, Computer Basics, Vasan's Publications, Chennai.
- Ritu Arora, Advance Excel 2016, Training Guide, BPB Publications, Delhi.

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## 9. COST ACCOUNTING

Semester	Core Course	Course Title	Credit
IV	CC-VIII	Cost Accounting	Theory: 04; Practical: 02 Total: 06

### Course specific objectives

1. The students can demonstrably help the organization create cost sheet, prepare tender quotations and ascertain specific cost items.
2. Process and service costing are important aspects of a cost accounting and are students possessing these skills are sought after by the corporate houses.

## COST ACCOUNTING

### THEORY

**(CREDITS: 04)**

#### Unit – 1

##### Introduction

- (a) Meaning, objectives and advantages of cost accounting; Difference between cost accounting and financial accounting;
- (b) Cost concepts and cost, installation of a costing system; Elements of Cost; Role of a cost accountant in an organization.

#### Unit – 2

##### Elements of Cost: Material and Labour

- a. **Materials:** Material/inventory control techniques. Accounting and control of purchases, storage and issue of materials. Methods of pricing of materials issues — FIFO, LIFO, Simple Average, Weighted Average, Replacement, Standard Cost. Treatment of Material Losses.
- b. **Labour:** Accounting and Control of labour cost. Time keeping and time booking. Concept and treatment of idle time, over time, labour turnover and fringe benefits.

- c. **Overheads:** Classification, allocation, apportionment and absorption of overheads; Under and over-absorption.

### Unit – 3

#### Methods of Costing

Unit costing, Job costing, Contract costing

### Unit – 4

Process costing (process losses, valuation of work-in-progress, joint and by-products), Service costing (only transport); Reconciliation of cost and financial accounts.

### Unit – 5 and Unit – 6 (For Internal Assessment)

(02 Credits)

Collection of Cost Data and preparation of Comparative Cost Sheet of two manufacturing units of a industry to be identified by concerned teacher. While comparing the data so collected each student will do the analysis stage-wise

(Prime Cost, Works Cost, Cost of Production, Cost of Goods Sold, Cost of Sales and Profits) of select manufacturing units of an industry and offering suggestions and submit the report to the concerned teach for evaluation.

#### SUGGESTED READING:

1. Charles T. Horngren, Srikant M. Datar, Madhav V. Rajan , Cost Accounting: A Managerial Emphasis, Pearson Education.
2. JawaharLal, Cost Accounting. McGraw Hill Education
3. Nigam, B.M. Lall and I.C. Jain. Cost Accounting: Principles and Practice. PHI Learning
4. Rajiv Goel, Cost Accounting. International Book House
5. Singh, Surender. Cost Accounting, Scholar Tech Press, New Delhi.
6. Jain, S.P. and K.L. Narang. Cost Accounting: Principles and Methods. Kalyani Publishers Arora, M.N.



7. Cost Accounting - Principles and Practice. Vikas Publishing House, New Delhi. Maheshwari, S.N. and S.N. Mittal.
8. Cost Accounting: Theory and Problems. Shri Mahavir Book Depot, New Delhi.

*Note: Latest edition of text books may be used*

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**10. GOODS & SERVICES TAX (GST)**

Semester	Course	Course Title	Credit
IV	SEC-IX	GOODS & SERVICES TAX (GST)	Theory: 04; Practical: 02 Total: 06

**Course specific objectives:**

1. The students can vividly address the corporate needs in the new tax regime.
2. The students will be equipped with the administration, implementation and transition of new regime for hassle free absorption in the corporate houses.

**GOODS & SERVICES TAX (GST)****THEORY****(CREDITS: 04)****Unit - 1****Introduction**

Defects of Indian Indirect Tax System; Concept of VAT: Meaning, Variants & Methods, Rationale for GST, Structure of GST (SGST, CGST, UTGST & IGST), State Compensation Mechanism, Registration. Difference between GST and VAT

**Unit - 2****Administration, Levy & Collection of GST**

GST; Structure, Council and Powers; GST Network; Objectives, Registration for GST; Taxable Event: "Supply" of Goods & Services, Place of Supply: Within state, Interstate, Import & Export, Time of supply, Valuation for GST- Valuation rules, taxability of reimbursement of expenses., Exemption from GST: Small supplies & Composition Scheme, Classification of Goods & Services: Composite & Mixed Supplies.

**Unit – 3****Input Tax Credit**

Concept, Computation of GST Liability; Order of Adjustment of Input tax credit against output CGST, SGST, IGST. Eligibility & Ineligibility for Input Tax Credit, Tax Credit in respect of Capital Goods, Recovery of Excess Tax Credit, Availability of Tax Credit in special circumstances, Transfer of Input Credit (Input Service Distribution)

**Unit - 4****Procedures & Special Provisions**

Tax Invoice, Credit & Debit Notes, Returns, Audit in GST, Assessment: Self Assessment, Best Judgment, Offences, Penalties and Appeals, Impact of GST on Wholesale and Retail Business, Treatment of Imports and Exports, GST

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**Unit – 5 and Unit – 6 (For Internal Assessment****(02 Credits)**

Concerned Teacher to elaborate e-filing of various GST returns using hypothetical figures.

Each student , at the instructions of the concerned teacher, to submit an assignment on various types of returns and make a presentation on the same.

**SUGGESTED READINGS:**

- The Central Goods and Services Tax, 2017
- The Integrated Goods and Services Tax, 2017
- The Union Territory Goods and Services Tax, 2017
- The Goods and Services Tax (Compensation to States), 2017
- The Constitution (One hundred and First Amendment) Act, 2016
- Gupta, S.S. , GST- How to meet your obligations (April 2017), Taxmann Publications
- Halakandhi, S., G.S.T ( Vastu and Sevakar) (Hindi) Vol-1, 2017
- Gupta, S.S., Vastu and Sevakar, Taxmann Publications, 2017
- Vastu and Sevakar Vidhan by Government of India

**Note: Latest edition of text book may be used.**

**Journals**

- *Income Tax Reports*. Company Law Institute of India Pvt. Ltd., Chennai.
- *Taxman*. Taxman Allied Services Pvt. Ltd., New Delhi.
- *Current Tax Reporter*. Current Tax Reporter, Jodhpur.

**Software**

1. Vinod Kumar Singhania, *e-filing of Income Tax Returns and Computation of Tax*, Taxmann Publication Pvt. Ltd, New Delhi. Latest version
2. 'Excel Utility' available at *income tax India e-filing.gov.in*

## 11.COMPUTER APPLICATIONS IN BUSINESS

Semester	Core Course	Course Title	Credit
IV	CC-X	COMPUTER APPLICATIONS IN BUSINESS	Theory: 04; Practical: 02 Total: 06

### Course Specific Objectives

1. To provide students computer skills and knowledge to enhance usefulness of information technology tools for business operations.
2. Help make students independent to transverse through IT tools and techniques to create ecosystems for gainful employment.

### THEORY

(CREDITS: 04)

#### Unit -1

#### Basic Concepts

Characteristics of a Computer; Advantages of Computers; Limitation of Computers; Types of Computers; Applications of computers, Computers in Business, Facilities Available in Computerised System, Indian Computing Environment, Office Automation, Components of a Computer System, Hardware Components of Micro Computer, Classification of Software, Generation of Computers, Computer Languages, Language Translators, Hardware, Firmware, Live-ware; Software; System Software: Operating system, Translators, interpreter, compiler; Overview of operating system, function of operating system; Application software: General Purpose Packaged Software and tailor-made software.

#### Unit - 2

#### Internet

Meaning of Internet; Growth of internet, Owner of Internet, Anatomy of Internet, Net Etiquette; World Wide Web; Internet Protocols, Usage of Internet to society, Search Engines, Data Communication and Networking: Introduction, Data Communication, Multiplexing, Components of Computer Network, Local Area Network (LAN), Uses of a Network, Topology, Networking Cables.

**Unit – 3****PC-Software Packages**

Introduction, Disk Operating System (DOS), Windows, Word Processor, Starting Word 2010. Editing Documents in Word 2010, Formatting Documents, Clip Gallery, Page Setting, Application of a Word Processor in Corporate Sector, Database Management Packages, Starting Access 2010, Working with Tables, Working with Forms, Working with Reports, Spreadsheet Packages, Starting Excel 2010, Working with Documents, Data Entry and Editing, Types of Cell Entries, Commonly Used Functions, Absolute and Relative Cell Referencing, Number Format, Charting with Excel, Macros, Importing and Exporting Files, Printing a Workbook, Application of a Spreadsheet in Corporate Sector.

**Unit - 4****Data Processing**

Introduction, Modes of Data Processing, Basic of Data Processing, Data Hierarchy, Data Structure, Application Portfolio Development, Management of Data Processing Systems in Business Organizations, Computerised Financial Accounting System (FAS), Computerised Inventory Control System, Computerised Payroll System, Computerised Invoicing System.

*Unit – 5 and Unit – 6 (For Internal Assessment)*

*(Credits: 02)*

1. **Use of word processing package/ List some key features supported by modern word processing packages.**
2. **Cut and paste and copy and paste facilities in Ms-word**
3. **Use of Style Sheet in Ms-word**
4. **Use of font size and style in Ms-word**
5. **Use of grammar and Spell Checker in Ms-Word**
6. **Word Wrap Features**
7. **Use of Work book and Worksheet in Ms-Excel**
8. **Concept of cell in Ms-Excel**
9. **Use of Formulas in Ms-Excel**

*Each student is required to demonstrate the use of above and the concerned teacher shall evaluate the students individually.*

## 12. PRINCIPLES OF MARKETING

Semester	Course	Course Title	Credit
V	Core-XI	PRINCIPLES OF MARKETING	Theory: 04; Practical: 02 Total: 06

### Course Specific Objectives

1. The objective of this course is to provide to students basic knowledge of concepts, principles, tools and techniques of marketing and their implementation in the real life scenario.
2. Students can translate the skills learnt in the course in different trades of life and can visually appeal the target customers.

## PRINCIPLES OF MARKETING

### THEORY

(CREDITS: 04)

#### Unit – 1

**Marketing:** Nature, Scope and Importance; Marketing Concepts; Selling v/s Marketing; Concept of Marketing mix.

**Consumer Behaviour:** Nature and Importance, Consumer buying decision process; Factors influencing consumer buying behaviour.

**Market segmentation:** Concept, Importance and Bases.

#### Unit – 2

**Product:** Concept and importance, Product classifications; Concept of product mix; Branding, packaging and labeling; Product life-cycle; New Product Development Process;

**Pricing:** Significance; Factors affecting price of a product; Pricing policies and strategies.

#### Unit – 3

**Distribution Channels:** Meaning and Importance; Types of distribution channels; Factors affecting choice of distribution channel; Wholesaling and retailing; Types of Retailers;

**Unit - 4**

**Promotion:** Nature and importance of promotion; Communication process; Types of promotion: advertising, personal selling, public relations & sales promotion; Factors affecting promotion mix decisions.

**Unit – 5 and Unit – 6 (For Internal Assessment)****(02 Credits)**

Concerned Teacher to identify a case study from Unit – 1, Unit – 3 and Unit – 4.

Each student, at the instructions of the concerned teacher, will submit an assignment and deliver a presentation on the case assigned to him/her.

**SUGGESTED READINGS:**

- Kotler, Philip, Gary Armstrong, Prafulla Agnihotri and Ehsanul Haque. Principles of Marketing. 13<sup>th</sup> edition. Pearson Education.
- Michael, J. Etzel, Bruce J. Walker, William J Stanton and Ajay Pandit. Marketing: Concepts and Cases. (Special Indian Edition)., McGraw Hill Education
- William D. Perreault, and McCarthy, E. Jerome., Basic Marketing. Pearson Education.
- Majaro, Simon. The Essence of Marketing. Pearson Education, New Delhi.
- The Consumer Protection Act 1986.
- Iacobucci and Kapoor, Marketing Management: A South Asian Perspective. Cengage Learning.
- Dhruv Grewal and Michael Levy, Marketing, McGraw Hill Education.
- Chhabra, T.N., and S. K. Grover. Marketing Management. Fourth Edition. Dhanpat Rai & Company.
- Neeru Kapoor, Principles of Marketing, PHI Learning
- RajendraMaheshwari, Principles of Marketing, International Book House



**13.FUNDAMENTALS OF FINANCIAL MANAGEMENT**

Semester	Course	Course Title	Credit
V	Core-XII	FUNDAMENTALS OF FINANCIAL MANAGEMENT	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives**

1. The students can practice four important functions of financial management and relate them with the financial structure of various organizations.
2. Students can be assets to organizations dealing with compounding and discounting of money.

**FUNDAMENTALS OF FINANCIAL MANAGEMENT****THEORY****(CREDITS: 04)****Unit - 1****Introduction**

Nature, scope and objective of Financial Management, Time value of money, Concept of Present Value and Future Value (Lumpsum and Annuity); Risk and Return Analysis: Computation of Beta and Standard Deviation (Individual Securities)

**Unit - 2****Capital Budgeting**

The Capital Budgeting Process, Techniques: Payback Period Method, Accounting Rate of Return, Net Present Value (NPV), Net Terminal Value, Internal Rate of Return (IRR), Profitability Index

**Unit - 3****Cost of Capital**

Cost of Capital and Financing Decision: Sources of long-term financing Estimation of Cost of Capital. Methods for Calculating cost of equity capital, Cost of Retained Earnings, Cost of Debt and Cost of Preference Capital, Weighted Average cost of capital (WACC); Capital

Structure: Concept and Determinants of Capital Structure.

#### Unit - 4

#### **Dividend and Working Capital Decisions**

Concept of Dividend: Determinants and Types

Concepts of Working Capital, Factors affecting Working Capital requirements

#### *Unit – 5 and Unit – 6 (For Internal Assessment)*

*(Credits: 02)*

Concerned Teacher to identify any particular stock of a company and show practical demonstration of risk-return analysis. Based on the practical demonstration by the concerned teacher, each students shall submit an assignment and make presentation thereof.

#### **SUGGESTED READINGS:**

- James C. Van Horne and Sanjay Dhamija, Financial Management and Policy, Pearson Education.
- Levy H. and M. Sarnat . Principles of Financial Management. Pearson Education
- Brigham and Houston, Fundamentals of Financial Management, Cengage Learning
- Khan and Jain. Basic Financial Management, McGraw Hill Education.
- Prasanna Chandra, Fundamentals of Financial Management. McGraw Hill Education.
- Singh, J.K. Financial Management- text and Problems. Dhanpat Rai and Company, Delhi.
- Rustagi, R.P. Fundamentals of Financial Management. Taxmann Publication Pvt. Ltd.
- Singh, Surender and Kaur, Rajeev. Fundamentals of Financial Management. Mayur Paperback, New Delhi.
- Pandey, I.M. Financial Management. Vikas Publications.
- Bhabatosh Banerjee, Fundamentals of Financial Management, PHI Learning

**14a.BANKING AND INSURANCE**

Semester	Course	Course Title	Credit
V	DSE – 1	BANKING AND INSURANCE	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives**

1. The core skills learned can be implemented in the BFSI sectors by the students to act as an important corporate member to introduce innovation.
2. To impart knowledge about the basic principles of the banking and insurance and practice the nuances of banking in the real life scenario.

**BANKING AND INSURANCE****THEORY****(CREDITS: 04)****Unit – 1****Introduction:**

Origin of banking: definition, banker and customer relationship, General and special types of customers, Origin and growth of commercial banks in India. Financial Services offered by banks, changing role of commercial banks, types of banks.

**Unit – 2****Bank Deposits and Advances**

Deposits: Concept, significance and classification (time and demand deposits). Advances: Concept, significance and classification, principles of sound lending.

**Unit – 3****Insurance**

Concept of risk, Types of business risk, Assessment and transfer, Basic principles of insurance: utmost good faith, Indemnity, Economic function, Proximate cause,

Subrogation and contribution, Types of insurance: Life and Non- life, Re-insurance.

#### **Unit – 4**

Insurance Regulatory and Development Authority of India, Organizational structure and powers, Role and functions, Emerging dimensions of Insurance.

#### ***Unit – 5 and Unit – 6 (For Internal Assessment)***

***(Credits: 02)***

#### ***Demonstration of E-Banking***

Fund transfer using Internet banking, Debit cards, Credit cards, mPay, NEFT, RTGS.  
(Invitation of bank official for practical demonstration).

Evaluation: Viva voce by internal Team( Concerned teacher and a senior faculty to be nominated by the concerned college principal)

#### **SUGGESTED READINGS:**

- Gupta Anil, Mir M Amin and Amin Umar., Banking and Insurance, Himalaya Publishing House
- Agarwal, O.P., Banking and Insurance, Himalaya Publishing House Satyadevi, C., Financial Services Banking and Insurance, S.Chand
- Suneja, H.R., Practical and Law of Banking, Himalya Publishing House
- Chabra, T.N., Elements of Banking Law, Dhanpat Rai and Sons
- Arthur, C. and C. William Jr., Risk Management and Insurance, McGraw Hill
- Saxena, G.S; Legal Aspects of Banking Operations, Sultan Chand and Sons
- Varshney, P.N., Banking Law and Practice, Sultan Chand and Sons
- Jyotsna Sethi and Nishwan Bhatia, Elements of Banking and Insurance, PHI Learning

*Note: Latest edition of text books may be used.*

**14b.COMPUTERIZED ACCOUNTING SYSTEM**

Semester	Course	Course Title	Credit
V	DSE – 1	Computerized accounting system	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. This course will enhance the skills needed for computerized accounting system and to enable the students to develop simple accounting applications.
2. Using tally ERP the students can master the fastest accounting processes without much effort.

**COMPUTERIZED ACCOUNTING SYSTEM****THEORY****(CREDITS: 04)****Unit - 1**

**Basics:** Review basic spreadsheet concepts, Review and apply basic accounting concepts, Prepare spreadsheets and charts for financial statements, financial analyses, and supporting schedules, including a complete accounting worksheet and financial statement project. Learn appropriate use of spreadsheet formulas and functions as required, such as specialized functions, databases, pivot tables/charts and what if analysis.

**Unit - 2****MAINTAINING CHART OF ACCOUNTS IN ERP:**

Introduction-Getting Started with ERP - Mouse/Keyboard Conventions-Company Creation-Shuta Company-Select a Company-Alter Company Details-Company Features and Configurations-F11: Company Features-F12: Configuration-Chart of Accounts-Ledger-Group-Ledger Creation-Single Ledger Creation-Multi Ledger Creation-Altering and Displaying Ledgers-Group Creation-Single Group Creation-Multiple Group Creation-

Displaying Groups and Ledgers-Displaying Groups-Display of Ledgers-Deletion of Groups and Ledgers – P2P procure to page.

### Unit - 3

#### **MAINTAINING STOCK KEEPING UNITS (SKU):**

Introduction-Inventory Masters in ERP - Creating Inventory Masters-Creation of Stock Group-Creation of Units of Measure-Creation of Stock Item-Creation of Godown-Defining of Stock Opening Balance in ERP Stock Category-Reports.

### Unit - 4

#### **RECORDING DAY-TO-DAY TRANSACTIONS IN ERP:**

Introduction-Business Transactions-Source Document for Voucher-Recording Transactions in ERP - Accounting Vouchers-Receipt Voucher (F6)- Contra Voucher (F4)- Payment Voucher (F5)-Purchase Voucher (F9)-Sales Voucher (F8)-Debit Note Voucher-Credit Note (Ctrl+F8)-Journal Voucher (F7).

#### ***Unit – 5 and Unit – 6 (For Internal Assessment)***

***(Credits: 02)***

Using of Tally Software to prepare the following of a notional company:-

1. Journal and ledger.
2. Subsidiary books.
3. Income statement.
4. Balance sheet

Each student is required to demonstrate the use of Tally Software of the above and the concerned teacher shall evaluate the students individually.

**14c.ADVERTISING**

Semester	Course	Course Title	Credit
V	DSE – 1	ADVERTISING	Theory: 04; Practical: 02 Total: 06

**Course Specific Objective:**

1. The objective of this course is to familiarize the students with the basic concepts, tools and techniques of advertising used in marketing and how such skills can be translated in real life scenario.
2. The course will enhance the marketing abilities of the students to become independent from different channels.

**ADVERTISING****THEORY****(CREDITS: 04)****Unit - 1****Introduction**

Advertising: Meaning, Nature and Objectives; DAGMAR approach; Pros & Cons of Advertising; Types of advertising; Advertising as a communication process; Advertising as a marketing tool; Audience analysis; Setting of Advertising Budget: Determinants and Major Methods.

**Unit - 2****Media Decisions**

Media: Role, Types – their characteristics, merits and demerits; Media selection, Factors influencing media choice; Media scheduling; Internet as an advertising media,

**Unit - 3****Message Development and Advertising Agency**

Advertising Creativity, Advertising appeals; Advertising copy, its qualities and elements,

Preparing ads for different media. Advertising Agency: Role, Types and Selection.

#### **Unit - 4**

##### **Evaluation and Recent Trends**

Evaluating communication and sales effects; Pre- and Post-testing techniques. Social, ethical and legal aspects of advertising in India. Recent developments and issues in advertising.

##### **Unit – 5 and Unit – 6 (For Internal Assessment) (Credits: 02)**

Case Studies of different companies on various aspects on advertising – advertising strategies, ad wars, morality Vs money etc.

Presentation and written assignment of the case so studied.

**Note:** Each student shall be required to prepare and submit an assignment and give a class presentation of the case so assigned by the teacher. The teacher shall evaluate the student accordingly.

##### **SUGGESTED READINGS:**

- George E Belch, Michael A Belch, KeyoorPurani, Advertising and Promotion : An Integrated Marketing Communications Perspective (SIE), McGraw Hill Education.
- S. Wats Dunn, and Arnold M. Barban. Advertising: Its Role in Marketing. Dryden Press.
- Burnett, Wells, and Moriatty. Advertising: Principles and Practice. 5<sup>th</sup> ed. Prentice Hall of India, New Delhi.
- Batra, Myers and Aakers. Advertising Management. PHI Learning.
- Terence A. Shimp. Advertising and Promotion: An IMC Approach. Cengage Learning.
- Sharma, Kavita. Advertising: Planning and Decision Making, Taxmann Publications.
- JaishreeJethwaney and Shruti Jain, Advertising Management, Oxford University Press, 2012



- Chunawala and Sethia, Advertising, Himalaya Publishing House.
- Ruchi Gupta, Advertising, S. Chand & Co.
- O'Guinn, Advertising and Promotion: An Integrated Brand Approach, Cengage Learning.

**Note:** *Latest edition of text books may be used.*

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**15a.CORPORATE TAX PLANNING**

Semester	Course	Course Title	Credit
V	DSE – 2	CORPORATE TAX PLANNING	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. The course will help develop knowledge of corporate tax planning and its impact on decision-making.
2. Students can become tax consultants at the local level and can address the critical tax issues of the small and medium corporate houses.

**CORPORATE TAX PLANNING****THEORY****(CREDITS: 04)****Unit - 1****Introduction**

Tax planning, tax management, tax evasion, tax avoidance; corporate tax in India; Residential status of companies and tax incidence; Tax liability and minimum alternate tax; Tax on distributed profits

**Unit - 2****Tax Planning-1**

Tax planning with reference to setting up of a new business: Locational aspect, nature of business, form of organization; Tax planning with reference to financial management decision - Capital structure, dividend including deemed dividend and bonus shares

**Unit - 3****Tax Planning-2**

Tax planning with reference to specific management decisions - Make or buy; own or lease; repair or replace. Tax planning with reference to employees' remuneration. Tax

planning with reference to receipt of insurance compensation. Tax planning with reference to distribution of assets at the time of liquidation.

#### Unit - 4

##### Special provisions relating to non-residents

Double taxation relief; Provisions regulating transfer pricing; Advance rulings; Advance pricing agreement

#### *Unit – 5 and Unit – 6 (For Internal Assessment) (Credits: 02)*

Concerned Teacher to identify Case Study based on Syllabi of Unit – 1 to Unit – 4 and presentation thereof

Assignments based on field survey/Quiz Programs/ classroom presentations/seminars/Group Discussions.

#### **SUGGESTED READINGS:**

- Vinod K. Singhania and Monica Singhania, Corporate Tax Planning. Taxmann Publications Pvt. Ltd., New Delhi.
- Girish Ahuja and Ravi Gupta. Corporate Tax Planning and Management. Bharat Law House, Delhi.
- Shuklendra Acharya and M.G. Gurha. Tax Planning under Direct Taxes. Modern Law Publication, Allahabad.
- D.P. Mittal, Law of Transfer Pricing. Taxmann Publications Pvt. Ltd., New Delhi.
- IAS – 12 and AS – 22.
- T.P. Ghosh, IFRS, Taxmann Publications Pvt. Ltd. New Delhi.

#### **Journals:**

- Income Tax Reports, Company Law Institute of India Pvt. Ltd., Chennai.
- Taxman, Taxman Allied Services Pvt. Ltd., New Delhi.
- Current Tax Reporter, Current Tax Reporter, Jodhpur.

*Note: Latest edition of text books may be used*

**15b.MANAGEMENT ACCOUNTING**

Semester	Course	Course Title	Credit
V	DSE – 2	MANAGEMENT ACCOUNTING	Theory: 04; Practical: 02 Total: 06

**Course Specific Objective:**

1. The course will impart the students, knowledge about the use of financial, cost and other data for the purpose of managerial planning, control and decision making.
2. Students can learn how management accounting system is implemented in the organization as a vehicle for various decision making.

**MANAGEMENT ACCOUNTING****THEORY****(CREDITS: 04)****Unit – 1**

**Introduction(6 Lectures)** Meaning, Objectives, Nature and Scope of management accounting, Difference between cost accounting and management accounting, Cost control and Cost reduction, Cost management.

**Unit - 2 Budgetary Control**

Budgeting and Budgetary Control: Concept of budget, budgeting and budgetary control, objectives, merits, and limitations. Budget administration. Functional budgets. Fixed and flexible budgets. Zero base budgeting. Programme and performance budgeting.

**Unit - 3 Standard Costing**

Standard Costing and Variance Analysis: Meaning of standard cost and standard costing, advantages, limitations and applications. Variance Analysis – material, labour, overheads and sales variances. Disposition of Variances, Control Ratios.

**Unit - Marginal Costing**

Absorption versus Variable Costing: Distinctive features and income determination. Cost-Volume-Profit Analysis, Profit/Volume ratio. Break-even analysis-algebraic and graphic

methods. Angle of incidence, margin of safety, Key factor,

### **Decision Making**

Decision making situations – profitable product mix, Acceptance or Rejection of special/export offers, Make or buy, Addition or Elimination of a product line, sell or process further, operate or shut down.

### **Unit – 5 and Unit – 6 (For Internal Assessment)**

**(Credits: 02)**

Preparation of budget on any functional area of an organization viz: Production, Sales, Cash etc.

Submission of report and Presentation of the budget in the class room by each individual student. The concerned teacher shall evaluate each student individually based on the performance.

### **SUGGESTED READINGS:**

- Charles T. Horngren, Gary L. Sundem, Dave Burgstahler, Jeff O. Schatzberg. Introduction to Management Accounting , Pearson Education.
- Anthony A. Atkinson, Robert S. Kaplan, Ella Mae Matsumura, S. Mark Young. Management Accounting. Dorling Kindersley(India) Pvt. Ltd.
- Ronald W. Hilton and David E. Platt. Managerial Accounting: Creating Value in a Global Business Environment, Mc Graw Hill Education.
- Singh, Surender. Management Accounting, Scholar Tech Press, New Delhi.
- Goel, Rajiv, Management Accounting. International Book House,
- Arora, M.N. M a n a g e m e n t A c c o u n t i n g .Vikas Publishing House, New Delhi.
- Maheshwari, S.N. and S.N. Mittal. M a n a g e m e n t Accounting. Shree Mahavir Book Depot, New Delhi.
- Singh, S. K. and Gupta Lovleen. Management Accounting – Theory and Practice. Pinnacle Publishing House.
- Khan, M.Y. and Jain, P.K. Management Accounting. McGraw Hill Education
- H.V. Jhamb, Fundamentals of Management Accounting, Ane Books Pvt. Ltd.

**15c.FINANCIAL MARKETS**

Semester	Course	Course Title	Credit
V	DSE – 2	FINANCIAL MARKETS	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. The students of this course will understand and practice the basic knowledge of financial markets and institutions and familiarize themselves with major financial services in India.
2. The students can understand and practice the functioning of stock markets with the understanding of primary and secondary markets.

**FINANCIAL MARKETS****THEORY****(CREDITS: 04)****Unit - 1****Introduction**

Financial System and its Components – financial markets and institutions; Financial intermediation; Flow of funds matrix; Financial system and economic development; An overview of Indian financial system

**Unit - 2****Financial Markets**

Money market – functions, organisation and instruments. Role of central bank in money market; Indian money market – An overview, Capital Markets – functions, organisation and instruments. Indian debt market; Indian equity market – primary and secondary markets; Role of stock exchanges in India

**Unit - 3****Financial Institutions**

Commercial banking – introduction, its role in project finance and working capital finance; Development Financial institutions (DFIs) – An overview and role in Indian economy; Life and non-life insurance companies in India; Mutual Funds – Introduction and their role in capital market development. Non-banking financial companies (NBFCs).

#### Unit - 4

##### Financial Services

Overview of financial services industry: Merchant banking – pre and post issue management, underwriting. Regulatory framework relating to merchant banking in India

#### *Unit – 5 and Unit – 6 (For Internal Assessment)*

*(Credits: 02)*

Presentation and Submission of report on the basis of Case Study of leading Financial Market Scams (E.g., Harshad Mehta, Ketan Parekh, Satyam scam or any foreign case of Financial or banking scam etc.).

Evaluation: Students shall be evaluated on the basis of report of the selected case.

#### SUGGESTED READINGS:

- L M Bhole, and Jitendra Mahakud. Financial Institution and Markets, McGraw-Hill Education
- Khan, M.Y. Indian Financial System, McGraw-Hill Education.
- Dhanekar. Pricing of Securities. New Delhi: Bharat Publishing House.
- Prasanna, Chandra. Financial Management: Theory and Practice. McGraw-Hill Education.
- Clifford Gomez, Financial Markets, Institutions and Financial Services, PHI Learning
- MY Khan and PK Jain. Financial Services. McGraw Hill Education.
- Singh, J.K. Venture Capital Financing in India. Dhanpat Rai and Company, New Delhi.
- Annual Reports of Major Financial Institutions in India.

**Note:** Latest edition of text books may be used.

**16.AUDITING & CORPORATE GOVERNANCE**

Semester	Course	Course Title	Credit
VI	Core	AUDITING & CORPORATE GOVERNANCE	Theory: 04; Practical: 02 Total: 06

**Course Specific Objective:**

1. The course will help students provide knowledge of auditing principles, procedures and techniques in accordance with current legal requirements and professional standards
2. Students can learn and practice the principles of Corporate Governance and Corporate Social Responsibility in the organizational setting.

**AUDITING & CORPORATE GOVERNANCE****THEORY****(CREDITS: 04)****Unit – 1****Auditing**

Meaning, Objectives, Auditing Standards; Classification of Audit; Audit Planning, Internal Control – Internal Check and Internal Audit; Audit Procedure – Vouching and verification of Assets & Liabilities.

**Unit - 2****Audit of Companies**

Audit of Limited Companies: Company Auditor- Qualifications and disqualifications, Appointment, Rotation, Removal, Remuneration, Rights and Duties; Auditor's Report- Contents and Types. Liabilities of Statutory Auditors under the Companies Act 2013

**Unit - 3****Special Areas of Audit**

Features of Cost audit, Tax audit, and Management audit;

Recent Trends in Auditing: Basic considerations of audit in EDP Environment;

Computer aided audit techniques and tools



**Unit - 4****Corporate Governance and CSR**

Conceptual framework of Corporate Governance: Theories & Models, Broad Committees; Corporate Governance Reforms; Codes & Standards on Corporate Governance;

Concept of CSR; Strategic Planning and Corporate Social Responsibility; CSR and Business Ethics, CSR and Corporate Governance; CSR provisions under the Companies Act 2013; CSR Committee; Standards on CSR

**Unit – 5 and Unit – 6 (For Internal Assessment)****(Credits: 02)**

I. The students in groups (each group comprising of maximum of three students) shall be required to design the audit program/chalk out the internal check system of selected commercial/industrial concerns.

OR

II. Study of major Corporate Scandals in India and Abroad. Students, at the instructions of the concerned teacher, to opt at least one case and submit an assignment and make a presentation on the case opted.

**SUGGESTED READINGS:**

- Ravinder Kumar and Virender Sharma, Auditing Principles and Practice, PHI Learning.
- ArunaJha, Auditing. Taxmann Publication.
- K. Singh, and Gupta Lovleen. Auditing Theory and Practice. Galgotia Publishing Company.
- Anil Kumar, Corporate Governance: Theory and Practice, Indian Book House, New Delhi
- MC Kuchhal, Modern Indian Company Law, Shri Mahaveer Book Depot. (Publishers). (Relevant Chapters).

- KV Bhanumurthy and Usha Krishna, Politics, Ethics and Social Responsibility of Business, Pearson Education.
- Erik Banks, Corporate Governance: Financial Responsibility, Controls and Ethics, Palgrave Macmillan.
- N Balasubramanian, A Casebook on Corporate Governance and Stewardship, McGraw Hill Education.
- B.N. Ghosh, Business Ethics and Corporate Governance, McGraw Hill Education.
- S K Mandal, Ethics in Business and Corporate Governance, McGraw Hill Education.
- Bob Tricker, Corporate Governance-Principles, Policies, and Practice (Indian Edition), Oxford University Press.
- Christine Mallin, Corporate Governance (Indian Edition), Oxford University Press.
- Relevant Publications of ICAI on Auditing (CARO).
- Sharma, J.P., Corporate Governance, Business Ethics, and CSR, Ane Books Pvt Ltd, New Delhi.

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**17.INCOME TAX LAW & PRACTICE**

Semester	Course	Course Title	Credit
VI	Core	INCOME TAX LAW & PRACTICE	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. The knowledge gained in this course will equip students with application of principles and provisions of Income-tax Act, 1961 and the relevant Rules.
2. Students can help tax payers in e-filing and can therefore earn a livelihood out of it.

**INCOME TAX LAW & PRACTICE****THEORY****(CREDITS: 04)****Unit – 1****Introduction**

**Basic concepts:** Income, agricultural income, person, assessee, assessment year, previous year, gross total income, total income, maximum marginal rate of tax; Permanent Account Number (PAN)

**Residential status;** Scope of total income on the basis of residential status Exempted income under section 10

**Unit – 2****Computation of Income under different heads-1**

Income from Salaries; Income from house property

**Unit – 3****Computation of Income under different heads-2**

Profits and gains of business or profession; Capital gains; Income from other sources

**Unit – 4****Computation of Total Income and Tax Liability**

Income of other persons included in assessee's total income; Aggregation of income and set-off and carry forward of losses; Deductions from gross total income; Rebates and reliefs

Computation of total income of individuals and firms; Tax liability of an individual and a firm; Five leading cases decided by the Supreme Court

***Unit – 5 and Unit – 6 (For Internal Assessment)******(Credits: 02)***

There shall be a practical examination on E-filing of Income Tax Returns using a software utility tool. The student is required to fill appropriate Form and generate the XML file for submission to the concerned teacher for evaluation.

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**18a.FUNDAMENTALS OF INVESTMENT**

Semester	Course	Course Title	Credit
V	DSE-III	FUNDAMENTALS OF INVESTMENT	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. The Course will familiarize the students with different investment alternatives, introduce them to the framework of their analysis and valuation and highlight the role of investor protection.
2. The students can venture in stock market and can thus earn a decent livelihood.

**FUNDAMENTALS OF INVESTMENT****THEORY****(CREDITS:04)****Unit - 1****Introduction**

Investment: Concept, Features, Importance, Objectives and Types, Investment Decision Process, Indian Securities Market: Market Participants and Trading of Securities, Security Market Indices, Sources of Financial Information, Concept of Return and Risk

**Unit - 2****Fixed Income Securities**

Bond: Concept, Features and Types; Types of Bond Risks, Default Risk and Credit Rating.

**Unit - 3****Approaches to Equity Analysis**

Fundamental Analysis: Concept, Objectives, Approaches, Advantages and Limitations.

Technical Analysis: Concept, Assumptions, Theories (Dow Theory, Elliott Wave, Random Walk), Difference between Fundamental Analysis and Technical Analysis

Concept of Efficient Market Hypothesis

#### **Unit - 4**

##### **Investor Protection**

SEBI: Functions and Role; Investor Grievances and their Redressal System, Insider Trading, Investors'

*Unit – 5 and Unit – 6 (For Internal Assessment) (Credits: 02)*

Concerned Teacher to identify Case Study based on Syllabi of Units – 1 to Unit – 4

Preparation of case study report, presentation and submission of the same to the concerned teacher for evaluation.

##### **SUGGESTED READINGS:**

- C.P. Jones, Investments Analysis and Management, Wiley, 8<sup>th</sup>ed.
- Prasanna Chandra, Investment Analysis and Portfolio Management, McGraw Hill Education
- R.P. Rustogi, Fundamentals of Investment, Sultan Chand & Sons, New Delhi.
- N.D. Vohra and B.R. Bagri, Futures and Options, McGraw Hill Education
- Mayo, An Introduction to Investment, Cengage Learning.
- Ahmad Javed, Mir M Amin and Khan Imran., Fundamentals of Investment., Himalaya Publishing House

**18b.INTERNATIONAL BUSINESS**

Semester	Course	Course Title	Credit
VI	DSE-III	INTERNATIONAL BUSINESS	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. The objective of the course is to familiarise the students with the concepts, importance and dynamics of international business and India's involvement with global business.
2. The course also seeks to provide theoretical foundations of international business to the extent these are relevant to the global business operations and developments.

**INTERNATIONAL BUSINESS****THEORY****(CREDITS:04)****Unit - 1**

Introduction to International Business: *Globalisation and its importance in world economy; Impact of globalization; Modes of entry into international business.*

- a. *International Business Environment: economic, cultural and political-legal environments.*

**Unit-2**

Theories of International Trade - *an overview (Classical Theories, Product Life Cycle theory, Theory of National Competitive Advantage); types of tariff and non tariff barriers ( Subsidy, Quota and Embargo in detail).*

- a. *World trade organization ((WTO) - Its objectives, principles, organizational structure and functioning; GAAT. Balance of payment account and its components.*

**Unit-3**

Regional Economic Co-operation: *Types of RTAs: FTAs, customs union, common Market, Economic union. (NAFTA and SAARC).*

- a. *International Financial Environment: International financial system and institutions (IMF and World Bank - Objectives and Functions); Foreign exchange markets; Foreign*

investments - types and flows; Determinants of Exchange rate.

#### **Unit-4**

*Foreign Trade Promotional Measures and Organizations in India; Special Economic Zones (SEZs): Features; Measures for promoting foreign investments into and from India; Indian joint ventures and acquisitions abroad.*

- a. Financing of foreign trade and payment terms - sources of trade finance (Banks, factoring, forfeiting, Banker's Acceptance and Corporate Guarantee) and forms of payment
- b. (Cash in advance, Letter of Credit, Documentary Collection, Open Account).

**Unit – 5 and Unit – 6 (For Internal Assessment)**

**(Credits: 02)**

Case Study on Balance of Payments(BOP) position of India in comparison with B.O.P position of any advanced country in Western Europe, North America or Japan. A three year data usage is quite desirable. Preparation of assignment and presentation of the same. (in groups of maximum of three students).

**OR**

Case Study on any one of the Regional Trade Agreements: SAARC, ASEAN, NAFTA or EU. Preparation of assignment and presentation of the same (in groups of maximum of three students).

**OR**

Case Study on How Foreign Trade of Kashmiri Exports/handicrafts is affected? Preparation of assignment and presentation of the same (in groups of maximum of three students).

#### **SUGGESTED READINGS:**

- Charles W.L. Hill and Arun Kumar Jain, International Business. New Delhi: McGraw Hill Education.
- Daniels John, D. Lee H. Radenbaugh and David P. Sullivan. International Business. Pearson Education.



- Johnson, Derbe., and Colin Turner. International Business - Themes & Issues in the Modern Global Economy. London: Roulledge.
- Bennett, Roger. International Business. Pearson Education.
- Peng and Srivastav, Global Business, Cengage Learning

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**18c.NEW VENTURE PLANNING**

Semester	Course	Course Title	Credit
VI	DSE-III	NEW VENTURE PLANNING	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. The curriculum aims at giving exposure to students regarding different aspects of setting up a new business. After completing the course student should be able to develop an understanding of the process of identifying various sources of new business ideas of products and services.
2. The understanding of this paper will help them to examine, evaluate and approach different sources of finance, the nature of marketing effort required and to develop a comprehensive business plan.

**NEW VENTURE PLANNING****THEORY****(CREDITS: 04)****Unit - 1****Starting New Venture**

Opportunity identification; Sources of innovative ideas; Techniques for generating ideas; Entrepreneurial imagination and creativity; Role of creative thinking; Impediments to creativity.

Pathways to new ventures – Creating new ventures, Acquiring an established venture: Advantages and Examination of key issues, Franchising: How a franchise works, Evaluating the franchising opportunities.

**Unit – 2****Form of Organisation & Legal Challenges in Setting up Business**

Form of organization: Sole proprietorship, Partnership, Limited liability partnership and Company.

Intellectual Property Protection: Patents, Trademarks and Copyrights; Requirements and

Procedures for filing a patent, trademark and copyright; Legal Acts governing business in India,

### **Unit – 3**

#### **Finance & Marketing Aspects of New Ventures**

Source of finance: Venture Capital market; Stages of Venture Capital Financing; Alternate sources of financing for Indian entrepreneurs: Bank funding, Government policy packages, State Financial Corporation (SFCs), Business Incubators and Facilitators, Informal Risk capital, Angel investors.

Developing a marketing plan; Customer analysis, Sales analysis and Competition analysis; Market Research.; Sales Forecasting & Evaluation; Pricing decision.

### **Unit – 4**

#### **Business Plan Preparation for New Ventures**

Business Plan: Concept, Benefits and Elements; Developing a well-conceived business plan, Pitfalls to avoid in business plan; Executive summary of Business Plan, Business description, Marketing: market niche and market share, Research design and development. Operations Management, Finances, Critical-Risk. Harvest strategy. Milestone schedule.

#### **Unit – 5 and Unit – 6 (For Internal Assessment)**

**(Credits: 02)**

**Case Studies:** Case studies related to business or start-ups in social networking, e-commerce, services, retailing, travel and hospitality. e.g. Facebook, Amazon India, Flipkart, Myntra, Indigo Airlines, Infosys, Fab India, Jabong, make my trip, etc.

Presentation and submission of written assignment by each student on the case opted.

#### **SUGGESTED READINGS:**

- Kuratko, D. F., and Rao, T. V., Entrepreneurship: A South Asia Perspective, Cengage Learning.
- Robert, H. M., manimala, M. Peters., and D. Shepherd, Entrepreneurship, Tata

McGraw Hill, India.

- Barringer, B. R., and Ireland, R. D., Entrepreneurship: Successfully Launching New Ventures, Pearson Education, India.
- Allen, K. R., Launching New Ventures: An Entrepreneurial Approach, Cengage Learning.
- Ramachandran, K, Entrepreneurship Development, Tata McGraw Hill, India.
- Roy, Rajeev, Entrepreneurship, Oxford University Press.
- Kumar, Arya, Entrepreneurship: Creating and Leading and Entrepreneurial Organization, Pearson Education, India.
- Holt, David H., Entrepreneurship: New Venture Creation. PHI Learning.

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**19a.BUSINESS RESEARCH METHODS & PROJECT WORK**

Semester	Course	Course Title	Credit
VI	DSE-IV	BUSINESS RESEARCH METHODS & PROJECT WORK	Theory: 04; Practical: 02 Total: 06

**Course Specific Objective:**

1. This course aims at providing the general understanding of business research and the methods of business research.
2. The course will impart learning about how to collect, analyze, present and interpret data.

**BUSINESS RESEARCH METHODS & PROJECT WORK****THEORY****(CREDITS:04)****Unit - 1****Introduction**

Meaning, Scope and Purpose of Research; Scope of Business Research; Purpose of Research; Unit of Analysis – Individual, Organization, Groups; Concept of Construct, Attributes and Variables

**Unit - 2****Research Process**

Problem Identification and Definition; Basic Research Methods: Field Study, Laboratory Study, Survey Method, Observational Method

**Unit - 3****Scale Measurement and Hypothesis Testing**

Measurement Scales: Nominal, Ordinal, Interval and Ratio; Sampling: Methods, Sample Size Determination

**Hypothesis Testing:** Concept, Tests concerning means and proportions

#### **Unit - 4**

#### **Report Preparation**

Research Report: Meaning, Types and Layout; Steps in Report Writing; Citations, Bibliography and Annexure in Report; JEL Classification

#### ***Unit – 5 and Unit – 6 (Internal Assessment)***

***(Credits: 02)***

Students are required to prepare and submit a Project Report to be assigned by the concerned teacher on any specific topic based on the contents of the syllabi of Unit-1 to Unit-IV.

#### **SUGGESTED READINGS:**

- D.N Elhance, VeenaElhance and B.M Agarwal ,Fundamentals of Statistics, Kitab Mahal Publications
- C.R Kothari, Research Methodology—Methods and Techniques, New Age International Publishers
- Naresh K Malhotra and Satya Bhushan Dash, Marketing Research—An Applied Orientation, Pearson Publication
- S.C Gupta, Fundamentals of Statistics, Himalaya Publishing House

**19b.FINANCIAL REPORTING & ANALYSIS**

Semester	Course	Course Title	Credit
VI	DSE-IV	FINANCIAL REPORTING & ANALYSIS	Theory: 04; Practical: 02 Total: 06

**Course Specific Objectives:**

1. The students will be able to understand, analyze and interpret the basic framework of financial reporting and with examples how such reports are produced in corporate setting.
2. The reports will help the students to visualize the data in a rather different manner and they can enhance their standing in the corporate ladder.

**FINANCIAL REPORTING & ANALYSIS****THEORY****(CREDITS: 04)****Unit – 1****Accounting Process**

Journalizing, preparation of Ledger and Posting, balancing of accounts, Preparation of Trial balance, Accounting errors and rectification.

**Unit - 2****Financial Statements**

Structure of financial statement: Introduction, Position statement, Income statement and Cash flow statement.

Additional Disclosure Statements: Need for additional statements, auditor's report and Director's report.

**Unit – 3****Analysis & Interpretation of Financial Statements**

Ration Analysis – Liquidity, Solvency, Activity & profitability analysis, Comparative & common size analysis (vertical & horizontal analysis), DuPont analysis, Financial management's use of financial analysis, Graphing financial information.

#### **Unit – 4**

##### **Basics of Financial Reporting**

Conceptual framework for financial reporting, Purpose of financial reporting, Users of financial reports. Concept of IFRS. IFRS convergence with Indian Accounting Standards.

#### **Unit – 5 and Unit – 6 (Internal Assessment) (Credits: 02)**

Analysis of Financial Statements of select companies by computing various accounting ratios. Evaluation: Submission of assignments by the students individually.

#### **SUGGESTED READINGS:**

1. Lal, Jawahar, Corporate Financial Reporting: Theory & Practice, Taxman Applied Services, New Delhi.
2. Raiyani, J. R. and Lodha, G., International Financial Reporting Standard (IFRS) and Indian Accounting Practices, New Century Publications.
3. Singh, N. T. and Agarwal. P., Corporate Financial Reporting in India, Raj Publishing, Jaipur.
4. Hennie, V. G., International Financial Reporting Standards: A Practical Guide, Washington, World bank.
5. Alexander, D., Britton, A., and Jorissen, A., Global Financial Reporting and Analysis, Cengage Learning, Indian Edition.

**Note:** *Latest edition of text books may be used.*



**19c.CONSUMER AFFAIRS & CUSTOMER CARE**

Semester	Course	Course Title	Credit
VI	DSE-IV	CONSUMER AFFAIRS & CUSTOMER CARE	Theory: 04; Practical: 02 Total: 06

**Course Specific Objective:**

1. This paper seeks to familiarize the students with of their rights as a consumer, the social framework of consumer rights and legal framework of protecting consumer rights.
2. It also provides an understanding of the procedure of redress of consumer complaints, and the role of different agencies in establishing product and service standards.
3. The student should be able to comprehend the business firms' interface with consumers and the consumer related regulatory and business environment.

**CONSUMER AFFAIRS & CUSTOMER CARE****THEORY****(CREDITS:04)****Unit – 1****Conceptual Framework**

Consumer and Markets: Concept of Consumer, Nature of markets, Concept of Price in Retail and Wholesale, Maximum Retail Price (MRP) and Local Taxes, Fair Price, labeling and packaging. Experiencing and Voicing Dissatisfaction: Consumer Satisfaction/dissatisfaction-Grievances-Complaint, Consumer Complaining Behaviour: Alternatives available to Dissatisfied Consumers; Internal and External Complaint handling: Corporate Redress Systems and Public Redress Systems

**Unit - 2****The Consumer Protection Act, 1986 (CPA)**

Objectives and Basic Concepts: Consumer, goods, service, defect in goods, deficiency in

service, spurious goods and services, unfair trade practice, restrictive trade practice. Organizational set- up under the Consumer Protection Act: Advisory Bodies: Consumer Protection Councils at the Central, State and District Levels, Basic Consumer Rights; Adjudicatory Bodies: District Forums, State Commissions, National Commission: Their Composition, Powers, and Jurisdiction (Pecuniary and Territorial), Role of Supreme Court under the CPA.

### **Unit – 3**

#### **Grievance Redress Mechanism under the Consumer Protection Act, 1986**

Who can file a complaint? Grounds of filing a complaint; Limitation period; Procedure for filing and hearing of a complaint; Disposal of cases, Relief/Remedy to be provided; Temporary Injunction, Enforcement of order, Appeal, frivolous and vexatious complaints; Offences and penalties.

### **Unit – 4**

#### **Industry Regulators (Consumer Complaint Redressal Mechanism) and Quality/Standardization**

Banking: RBI and Banking Ombudsman; Insurance: IRDA and Insurance Ombudsman; Telecommunication: TRAI; Food Products: FSSAI; Electricity Supply: Electricity Regulatory Commission; Advertising: ASCI.

**Quality and Standardization:** Voluntary and Mandatory standards; Role of BIS, Indian Standards Mark (ISI), Ag- mark, Hallmarking, Licensing and Surveillance; ISO: An overview

#### **Unit – 5 and Unit – 6 (For Internal Assessment)**

**(Credits: 02)**

Concerned Teacher to identify Leading Cases decided under Consumer Protection Act: Medical Negligence; Banking; Insurance; Housing & Real Estate; Electricity, Water, and Telecom Services; Education; Unfair Trade Practice.

*The students are required to prepare, present and submit the report on any one of the case opted.*

**SUGGESTED READINGS:**

- Khanna, Sri Ram, Savita Hanspal, Sheetal Kapoor, and H.K. Awasthi. Consumer Affairs” (2007) Delhi University Publication. 334 pp.
- Aggarwal, V. K. (2003). Consumer Protection: Law and Practice. 5<sup>th</sup> ed. Bharat Law House, Delhi, or latest edition.
- Girimaji, Pushpa (2002). Consumer Right for Everyone Penguin Books.
- Nader, Ralph (1973). The Consumer and Corporate Accountability. USA, Harcourt Brace Jovanovich, Inc.
- Sharma, Deepa (2011). Consumer Protection and Grievance-Redress in India: A Study of Insurance Industry (LAP LAMBERT Academic Publishing GmbH & Co.KG, Saarbrucken, Germany. 263 pp.
- Empowering Consumers e-book, [www.consumeraffairs.nic.in](http://www.consumeraffairs.nic.in)
- eBook, [www.bis.org](http://www.bis.org).
- The Consumer Protection Act, 1986.

**ARTICLES:**

- Verma, D. P. S. (2002). Developments in Consumer Protection in India. Journal of Consumer Policy. Vol. 25. No. pp 107 –123.
- Verma, D.P.S. (2002). Regulating Misleading Advertisements, Legal Provisions and Institutional Framework. Vikalpa. Vol. 26. No. 2. pp. 51-57.
- Ralph L. Day and Laird E. Landon, Jr. (1997). Towards a Theory of Consumer Complaining Behaviour. Ag Woodside, et al. (eds.). Consumer and Industrial Buying Behaviour. New York; North Holland pp. 425-37.
- George, S. Day and A. Aaker (1970). A Guide to consumerism. Journal of Marketing. Vol. 34. pp 12-19.
- Sharma, Deepa (2003). New measures for Consumer Protection in India. The Indian Journal of Commerce. Vol.56. No.4. pp. 96-106
- Sharma, Deepa (2011). Consumer Grievance Redress by Insurance Ombudsman.

BIMAQUEST.Vol.11. pp.29-47.

**PERIODICALS:**

- Consumer Protection Judgments (CPJ) (Relevant cases reported in various issues)
- Recent issues of magazines: Insight, published by CERC, Ahmedabad ‘Consumer Voice’, Published by VOICE Society, New Delhi.
- Upbhokta Jagran, Ministry of Consumer Affairs, Govt., of Indi. New Delhi.

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**Structure and distribution of Ability Enhancement Course (Environmental Studies)  
with credits for B.A./B.Sc./BBA/BCA and B.Com. Programmes**

S.No.	Semester	Course Title	Course Type	Total Credits
1.	I & II	Environmental Studies	Core Course	4 credits 4(T)

**Course outcomes**

The Environmental Studies prepares students for careers as leaders in understanding and addressing complex environmental issues from a problem-oriented, interdisciplinary perspective.

Students will be able to critically evaluate all sides of environmental issues and apply knowledge from different disciplines to form well-informed opinions about how to interact with the environment on a personal and social level.

Students will be able to recognize the physical, chemical and biological components of the earth's system's and how they function.

Through field experiences, students will be able to apply learning from numerous courses. Students will have a greater understanding of not only individual creatures, but also the systems in which they live, as a result of these experiences.

Students will also see how natural processes and human-designed systems interact, both positively and negatively.

Students will be able to conduct independent research on human-environment interactions.

Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.

Demonstrate proficiency in quantitative methods, qualitative analysis, critical thinking, and written and oral communication needed to conduct high-level work as interdisciplinary scholars and/or practitioners

**1. Environmental Studies (Core Course-I)**

Semester	Ability Enhancement Course	Course Title	Credit
I	AEC-I	Environmental Studies	Theory: 04; Total: 04

**Course specific outcomes**

- Understanding of complex environmental issues from a problem-oriented, interdisciplinary perspective.
- Understand key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- Appreciate concepts and methods from ecological and physical sciences and their application in environmental problem solving.
- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Reflect critically about their roles and identities as citizens, consumers and environmental actors in a complex, interconnected world.

**ENVIRONMENTAL STUDIES****THEORY****(CREDITS 4)****Unit 1 Understanding Environment**

Environment: Concepts and importance; Component of environment: Physical, biological and social; Eco-system definition, structure and function: producers, consumers and decomposers, food chains, food webs and ecological pyramids, energy flow in an ecosystem; Eco-system services: ecological, economic, social, aesthetic and informational value.

**Unit 2 Natural Resources**

Land resources: global land use patterns, concept land degradation and desertification; Forest resources: use and consequences of over-exploitation; Water resources: use and consequences of over-utilization, concept of water harvesting and water shed management, water conflicts; energy resources; Renewable and non-renewable energy sources, growing energy needs and alternate energy sources.

**Unit 3 Biodiversity and its Conservation**

Bio Diversity: definition, levels and values (commercial, ecological, social and aesthetic); Threats to bio diversity: habitat loss, poaching of wild life, man-wildlife conflicts,

biological invasions; Concept of endemism and hot-spots of bio-diversity; Conservation of Bio-diversity: In-Situ and Ex-Situ concepts.

#### **Unit 4 Environmental Issues, Policies and Practices**

Causes, effects and control measures of: air, water, soil, noise and solid waste pollution; Concept of natural disasters and global environmental issues: increase in greenhouse gases, climate change, acid rain and stratospheric ozone layer depletion; salient features of: water (prevention and control of pollution) Act, 1974, air (prevention and control of pollution) Act, 1981, environment protection Act, 1986; Environmental education, environmental movements (Chipko, silent valley) and environmental ethics.

#### **SUGGESTED READINGS**

- Bharucha, Erach, 2005. Text Book of Environmental Studies, Universities Press (India), Hyderabad.
- Joseph, Benny, 2005. Environmental Studies, McGraw Hill companies.
- De, Anil Kumar and De, Arnab Kumar, 2nd edition. New Age International Publishers.
- Kanagasabai, S. 2010. Text Book on Environmental Studies. PHI Learning.
- Sharma, P. D. 2015. Ecology and Environment.
- Chauhan, B. S. 2008, Environmental Studies. University Science Press.
- Kaushak and Kaushak. 2016. Perspectives in Environmental Studies.
- Jaiswal, P.S.2007.Environmental Law. Pioneer Publications, Delhi.
- Ghosh, G.K.1992. Environmental Pollution. Ashiah Publication, Delhi.