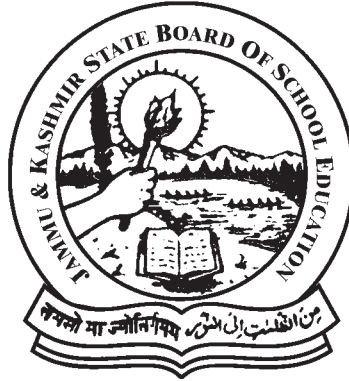# The Jammu and Kashmir State Board of School Education

SYLLABI AND COURSES OF STUDY

FOR

CLASS XI

KASHMIR :   FROM NOVEMBER, 2011
JAMMU :   FROM APRIL, 2012

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SCHEME OF STUDIES

The Scheme of Studies and the combination of subjects at +2 stage has been prepared as per new scheme of studies. The revised combination of subjects is now as per with the standard at National level particularly the standard set by the CBSE and has vertical linkage with under graduate courses offered by the university of Kashmir/Jammu.

The students who will seek admission in Higher Secondary Part - I from the academic session (Oct-Nov)-2011 in case of Kashmir Division including winter zone of Jammu Division and Academic Session (April-May, 2012) in case of Jammu Division shall follow the given below scheme.

Subject Combination at Higher Secondary Part - I:

FACULTY OF SCIENCE

Group I	Group II	Group III	Group IV	Group V	Group VI	Group VII
General English (Compulsory)	Physics (Compulsory)	Chemistry (Compulsory)	Mathematics, Applied-Mathematics	Biology Statistics Geography	Geology Biotechnology Microbiology Biochemistry	Computer Science Informatics Practices, Environmental Science Functional English Physical Education Islamic Studies Vedic Studies Buddhist Studies Electronics.

Note : A student shall have to opt two subjects from IV to VII group, but not more than one from each group.

FACULTY OF HOME SCIENCE

Group I	Group II	Group III	Group IV	Group V
General-English (Compulsory)	Family, Health Care & Prevention (Compulsory)	Food Science (Compulsory)	Management of Resources (Compulsory)	Computer Science Informatics Practices Environmental Science Functional English Islamic Studies Vedic Studies Buddist Studies Physical Education Travel, Tourism and Hotel Management

Note : A student shall have to opt any one subject from group V.

I

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FACULTY OF COMMERCE

Group I	Group II	Group III	Group IV	Group V	Group VI
General-English (Compulsory)	Business-Studies (Compulsory)	Accountancy (Compulsory)	Entrepreneurship OR Economics	Type writing & Short hand Business-Mathematics	Computer Science Informatics Practices, Environmental Science Functional English Islamic Studies Vedic Studies Buddhist Studies Physical Education Travel, Tourism & Hotel Management

Note : A student shall have to opt any two subjects from IV to VI groups, but not more than one from each group.

FACULTY OF HUMANITIES :

Group I	Group II	Group III	Group IV	Group V	Group VI	Group VII	Group VIII
General English (Compulsory)	Urdu Hindi Kashmiri Dogri Punjabi Bhoti	Arabic Sanskrit Persian Economics	Mathematics, Applied-Mathematics Sociology	Psychology Music Geography Philosophy Education	History Home-Science (Elective)	Statistics Political-Science	Computer Science Informatics Practices Environmental Science Functional English Islamic Studies Physical Education Travel, Tourism & Hotel Management English Literature Vedic Studies Buddhist Studies

Note :   I.   A student shall have to opt any four subjects from II to VIII group, but not more than one from each group.

    II.   No repetition / similarity or incomplete combination of subjects is allowed.

   III.   While choosing subjects students are advised to opt for such subjects or combination of subject which are available and taught in the institution as per the above mentioned.

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SCHEME OF ASSESSMENT
(HUMANITIES & COMMERCE)

The performance of the regular students shall be assessed on the basis of one Unit test (Unit Test - U_1 and one Term Test (T_1) given during the transaction of the First Term, and one Unit test U_2 and one Term Test (T_2) given during the transaction of the Second Term course.

TOTAL MARKS INCLUDING BOTH TERMS : 100 MARKS

FIRST TERM COURSE

Weightage	:	50 marks
Unit Test (U_1)	:	15 marks
Term Test (T_1) at end of Term 1	:	35 marks

SECOND TERM COURSE

Weightage	:	50 marks
Unit Test (U_2)	:	15 marks
Term Test 2 (T_2) at end of Term 2	:	35 marks

Question Paper Design for Term Tests
(First & Second Term Test)

Marks : 35   Time : 2½ hrs.

Type of Questions

i.	3 Long answer type questions of 5 Marks each	:	$3 \times 5 = 15$ marks
ii.	3 Short answer type questions of 3 Marks each	:	$3 \times 3 = 9$ marks
iii.	3 very short answer type questions of 02 marks each	:	$3 \times 2 = 6$ marks
iv.	5 Objectives of 1 Mark each	:	$5 \times 1 = 5$ marks

Total number of questions : 14

SCHEME OF ASSESSMENT

SCIENCE

The performance of regular students in Science subjects with theory of 70 marks and practicals of 30 marks shall be assessed on the basis of their performance in (i) one unit test (U_1) given during transaction of First Term Course, (ii) First term test (T_1) will be given at the end of the Term Course, (iii) one unit test (U_2) given during Second Term Course and (iv) Second Term Test given at the end of Second Term course.

Distribution of marks between Units and Term Tests in case of subjects involving Practical work of 30 marks. (15 marks each)

Course for 1st Term

Theory	**:**	**35 marks**			**Time : 2½ hrs.**
Practicals :		**15 marks**			
Unit Test (U_1)	:	10 marks			
First Term Test (T_1)	:	25 marks	35 marks	50 marks	
Practicals (T_1)	:	15 marks			

Course for 2nd Term					**100 marks**
Theory	**:**	**35 marks**			
Practicals	**:**	**15 marks**			
Unit Test (U_2)	:	10 marks			
Secondt Term Test (T_2)	:	25 marks	35 marks	50 marks	
Practicals (T_2)	:	15 marks			

Question paper design for Term Tests
(First and Second Term Tests)

1.	2 Long Answer Type questions of 4 marks	$= 2 \times 4 = 8$ marks
2.	2 Short Answer Type questions of 3 marks	$= 2 \times 3 = 6$ marks
3.	4 Very Short Answer Type questions of 2 marks	$= 4 \times 2 = 8$ marks
4.	3 Multiple Choice Questions of 1 mark	$= 3 \times 1 = 3$ marks
	No. of question = 11	**= 25 marks.**

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Distribution of marks in subjects involving theory of 70 marks and practical of 30 marks between Units and Term Tests like Computer Sciences, Physical Education and Informatics Practices.

Theory : 70 Marks   **Practicals : 30 Marks**

Course for 1st Term

Theory	:	35 marks each
Practical	:	15 marks each
Time	:	2 hrs. & 30 min. (For theory paper Term T_1 and Term T_2 respectively)

Unit Test (U_1)	:	**10 marks**	**Units (U_2)**	:	**10 marks**
First Term Test (T_1)	:	**25 marks**	**First Term Test (T_2)**	:	**25 marks**
Practical (T_1)	:	**15 marks**	**Practical (T_2)**	:	**15 marks**

Question paper design for Term Tests

Type of Questions

1.	2 Long Answer Type questions of 4 marks	=	$2 \times 4 = 8$ marks
2.	2 Short Answer Type questions of 3 marks	=	$2 \times 3 = 6$ marks
3.	4 Very Short Answer Type questions of 2 marks	=	$4 \times 2 = 8$ marks
4.	3 Objective Type questions of 1 mark	=	$3 \times 1 = 3$ marks
			Total Marks = 25 Marks

Distribution of marks in subjects involving theory of 50 marks and practical of 50 marks between Units and Term Tests like Music.

Theory : 50 marks   **Practicals : 50 marks**

Course for each Term

Theory	:	25 marks each
Practical	:	25 marks each
Time	:	2 hrs. & 30 min. (For theory paper Term T_1 and Term T_2 respectively)

Unit Test (U_1)	:	5 marks	Units (U_2)	:	5 marks
First Term Test (T_1)	:	20 marks	First Term Test (T_2)	:	20 marks
Practical (T_1)	:	25 marks	Practical (T_2)	:	25 marks

Question paper design for Term Tests

Type of Questions

1.	2 Long Answer Type questions of 4 marks	=	$2 \times 4 = 8$ marks
2.	2 Short Answer Type questions of 3 marks	=	$2 \times 3 = 6$ marks
3.	2 Very Short Answer Type questions of 2 marks	=	$2 \times 2 = 4$ marks
4.	2 Objective Type questions of 1 mark	=	$2 \times 1 = 2$ marks
			Total Marks = 20 Marks

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SCHEME OF ASSESSMENT/EXAMINATION

The Higher Secondary Part-1 (11th) Examination set by the Board at the end of Class XI, on the basis of syllabi prescribed for Class 11th is open to eligible candidates and shall be conducted according to the following scheme of assessment under Continuous and Comprehensive Evaluation.

Subject	MARKS			
	Theory		Practical	Total
	U_1+T_1	U_2+T_2	T_1+T_2	
1. General English	50	50	X	100
2. History	50	50	X	100
3. Economics	50	50	X	100
4. Geography	35	35	30	100
5. Political Science	50	50	X	100
6. Philosophy	50	50	X	100
7. Education	50	50	X	100
8. Psychology	35	35	30	100
9. Sociology	50	50	X	100
10. Home Science (Elective)	35	35	30	100
11. Music	25	25	50	100
12. Statistics	35	35	30	100
13. Mathematics	50	50	X	100
14. Islamic Studies	50	50	X	100
15. Vedic Studies	50	50	X	100
16. Hindi	50	50	X	100
17. Dogri	50	50	X	100

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18. Sanskrit	50	50	X	100
19. Bhoti	50	50	X	100
20. Punjabi	50	50	X	100
21. English Literature	50	50	X	100
22. Urdu	50	50	X	100
23. Kashmiri	50	50	X	100
24. Arabic	50	50	X	100
25. Persian	50	50	X	100
26. Buddhist Studies	50	50	X	100
27. Applied Mathematics	50	50	X	100
28. Physics	35	35	30	100
29. Chemistry	35	35	30	100
30. Biology	35	35	30	100
31. Geology	35	35	30	100
32. Biotechnology	35	35	30	100
33. Microbiology	35	35	30	100
34. Environmental Science	35	35	30	100
35. Functional English	50	50	X	100
36. Bio-Chemistry	35	35	30	100
37. Computer Science	35	35	30	100
38. Informatics Practices	35	35	30	100
39. Physical Education	35	35	30	100
40. Electronics	35	35	30	100
41. Home Science (Full Stream)	35	35	30	100

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42. Business Studies	50	50	X	100
43. Accountancy	50	50	X	100
44. Entrepreneurship	35	35	30	100
45. Business Mathematics	50	50	X	100
46. Travel, Tourism and Hotel Management	50	50	X	100

47. Typing and Shorthand		**Theory**	**Practical**		
Term I.	External Examination	X	25		
	Internal Examination		25	50	
					100
Term II.	External Examination	X	25		
	Internal Examination		25	50	

Code : 201

GENERAL ENGLISH

I.   General aims of Teaching English

1. To develop student's ability to use English accurately, appropriately, effectively and fluently for communication in various situations.

2. To develop student's ability to read and understand texts in English on different subjects and topics with minimal help from teachers.

3. To develop student's ability to use English appropriately for effective written communication for some of the common communicative functions.

4. To hone their ability to listen to and understand English when used in academic and social situations.

5. To enable students to become self reliant for learning many aspects of language and also to learn other content subjects.

6. To enrich their knowledge of grammar for accurate and precise communication.

7. To enrich their vocabulary and to enable them to use words most appropriate to situations.

8. To develop their skills to read and appreciate literature and develop a liking towards English language.

II.   Domains

The major domains of teaching English are:

1. Listening
2. Speaking
3. Reading
4. Writing
5. Communication
6. Grammar
7. Vocabulary

8. Study Skills

9. Literary skills

III. Specific Objectives of Teaching English as a Second language in Class XI

A. Listening

1. To develop students' ability to listen to and understand instructions.

2. To develop their ability to listen to lectures, talks, interviews on familiar topics and get specific items of information.

3. To develop their ability to listen to and get an overall idea of the content of lectures, talks, discussions etc.

4. To develop their ability to gather almost full information by listening to live discussions, talks, lectures and also by listening to radio and television.

B. Speaking:

1. To enable students to pronounce words and phrases accurately.

2. To use pauses meaningfully in long utterances.

3. To use the right intonation to communicate the intended meaning.

4. To read prose passages, dialogues and poems aloud with correct pronunciation, stress and intonation.

C. Communication:

1. To enable students to use English in day to day situations for common communicative functions.

2. To enable students to use English appropriately in academic and social situations.

3. To enable students to speak reasonably fluently, with minimal hesitations.

D. Reading:

1. To enable students to read and understand prose and poems on a variety of academic and general topics from textbooks, reference sources and other common sources such as newspapers and magazines.

2. To enable students to employ the right reading strategies to suit the purpose of reading.

3. To develop students' ability to read and gather specific items of information from a variety of sources.

4. To develop their ability to read for an overall idea of the content of texts.

5. To develop their ability to read texts for full understanding.

6. To develop their ability to read fluently with reasonable degree of comprehension.

7. To develop in students an interest towards English Literature.

E. Writing:

1. To familiarize students with qualities of good and effective writing.

2. To develop their ability to write coherently and cohesively.

3. To develop their ability to write accurately and appropriately using language appropriate to the audience, situation and purpose of writing.

4. To develop their ability to write short paragraphs and essays on variety of topics.

5. To develop their ability to use English for writing letters for a variety of purposes.

6. To develop their ability to use English for e-mail communication.

F. Study Skills:

1. To sharpen their ability to use dictionary as a reference tool.

2. To develop their ability to read and make notes for study purposes.

3. To develop their ability to transcend information from verbal to visual format and vice-versa.

4. To develop their ability to make summaries of long prose passages.

G. Grammar:

1. To enhance their understanding of grammatical concepts.

2. To develop their ability to apply grammar rules in communicative situations.

3. To develop their ability to monitor their own language behavior.

4. To develop their ability to use the knowledge of grammar while listening, speaking, reading and writing.

H. Vocabulary:

1. To enrich their vocabulary.

2. To familiarize them with the concepts of synonyms, antonyms, collocations etc.

3. To develop their ability to use words most appropriate to the communicative situation.

4. To equip them with the strategies to cope up with unfamiliar words while reading texts in English.

IV Course Books Prescribed:

1. *Chinar I*– An Anthology of Prose and Poetry for class XI – Published by Foundation Books in cooperation with Jammu and Kashmir State Board of School Education.

2. A Course in English Grammar and Composition – for classes XI and XII, Published by Foundation Books in cooperation with Jammu and Kashmir State Board of School Education.

TERM-WISE SYLLABUS

Overall Term breakup

Term I:

1. *Chinar I* – Units 1 to 9

2. Grammar and Composition:

    2.1 Grammar: Units 1 to 9

    2.2 Composition: Units 35, 36 and 37 on Paragraph Writing

Term II:

1.   *Chinar I* – Units 10 to 18

2.   Grammar and Composition

   2.1   Grammar: Units 10 to 17

   2.2   Composition: Units 38, 39 and 40 on Letters and Forms

Detailed breakup of syllabus

Term I:

1.   **Unit Test 1 will cover the following lessons:**

   a.   *Chinar I* – Units 1 to 6

   b.   Grammar – Units 1 to 6, covering

   - Compound and Complex Sentences, and
   - The Simple Present Tense
   - The Simple Past Tense
   - The Progressive

   c.   Composition: Unit 35 & 36 (Paragraph Writing)

2.   **Term Test will cover the following**

   a.   *Chinar I* – Units 1 to 9

   b.   Grammar – Units 1 to 9, covering

   - The Compound and Complex Sentences.
   - The Progressive: Present/Past.
   - The Perfect: Present/Past

   c.   Composition: Unit 35, 36 and 37 on Paragraph Writing

Term II

1.   Unit Test II will cover the following lessons:

   a.   *Chinar I* – Units 10 to 15.

      b.   Grammar – Units 10 to 12 covering

- The Future tense (Simple)
- Auxiliaries
- Relative clauses

      c.   Composition: Unit 38 & 39 (Letters and Forms I & II)

2.   Term Test will cover the following

      a.   *Chinar I* – Units 10 to 18

      b.   Grammar – Units 10 to 17, covering

- The future: Progressive/Perfect
- Auxiliaries
- Relative clauses
- Conditional clauses

      c.   Composition: Unit 38, 39 and 40 on Letters and Forms I, II, and III

Scheme of Testing and Evaluation:

The learning outcome and learner performance will be assessed as per the following scheme.

Term I:

1.   Unit Test 1 (U_1)   -   15 marks

2.   Terminal Test (T_1)   -   35 marks   Total Marks= 50

Term II:

1.   Unit Test 2 (U_2)   -   15 marks

2.   Terminal Test (T_2)   -   35 marks   Total Marks = 50

Grand Total = 100 marks

Design of Unit Test

Total marks: 15

1. Unit Tests will test the following skills to the specifications given below:

1. Reading   6 marks

1.1   Seen comprehension   3 marks

Questions should be based on passages and poems from the *Chinar* I. They should be largely of inferential comprehension level. Questions on poems should be based on stanza given from the prescribed poems.

1.2   Unseen comprehension

Questions should be based on a short passage of not more than 300 words (Questions should have a variety of both factual and inferential comprehension to the proportion of 20:80. There should be a good variety of different types of comprehension questions: like questions of multiple choice, true/false, yes/no etc.   3 marks

2. Vocabulary   3 marks

2.1   Word meaning   1 mark
2.2   Pronunciation   ½ mark
2.3   Collocation   1 mark
2.4   Spelling   ½ mark

3. Grammar   3 marks

Contextualized exercises to test the student's ability to apply the knowledge of grammar in these areas.

4. Writing & Study Skills   3 marks

4.1   Writing a short paragraph of about 200 words describing an object, a place
        or person   2 marks

4.2   Completing notes on a given passage of about 300 words   1 mark

Design of Terminal Test

Total Marks: 35   Time:2:30hrs

1.   Reading Comprehension   18 marks

1.1   Comprehension on seen passage/stanza of a poem 8 marks

Total eight questions based on the prescribed units for the Term from *Chinar* I,

of which nine to be based on prose units and three based on poems. Questions should be largely of inferential comprehension level.

1.2   Reference to context (Poems)   5 mark

Two stanzas from poems prescribed for the term from *Chinar I* will be given and students are required to attempt only one stanza.

1.3   Comprehension on unseen passage   5 mark

Questions should be based on a short descriptive or narrative passage of not more than 250 words. Questions on unseen passage should have a mixture of both factual and inferential comprehension to the proportion of 20:80. There should be a good mixture of different types of comprehension questions: multiple choice, true/false, yes/no etc.

2.   Vocabulary   5 marks

2.1   Word meanings   1 mark

2.2   Pronunciation   1 mark

2.3   Collocation   1 mark

2.4   Spelling   1 mark

2.5   Usage   1 mark

3.   Grammar   06 marks

Contextualized exercises to test the student's ability to apply the knowledge of grammar. There will be one exercise for 2 marks which will ask students to identify errors in a given set of sentences or a short paragraph and rewrite them/it after making necessary corrections.

4.   Writing and Study Skills   06 marks

4.1   Writing a short paragraph of about 100 words on familiar topics.

<div align="center">OR</div>

Writing an essay of about 200 words on a familiar topic.   3 marks

4.2   Writing a formal letter performing one of the common communicative functions

OR

Writing a personal letter performing one of the common communicative functions   3 marks

Promotion to class XII

In order to be eligible for promotion to class XII, a student must secure a minimum of 33% in aggregate in the Unit-Tests and the Terminal Tests. Learner's performance on Unit Tests and Terminal tests should be analyzed and necessary remedial measures should be adopted to improve the performance of those who have not done well in the tests.

IV. Course Books Prescribed:

1.   *Chinar–I*   An Anthology of Prose and Poetry for class XI –   Published by Foundation Books in cooperation with Jammu and Kasmir State Board of School Education.

2.   A Course in English Grammar and Composition – for classes XI   and XII, Published by Foundation Books in cooperation with Jammu and Kashmir State Board of School Education.

Code : 213

HISTORY

FIRST TERM COURSE

Time: 2 ½ Hours   **WEIGHTAGE: 50 Marks**

UNIT I   **7 marks**

    (i)   The Harrapan Culture

    (ii)   Geographical Extent & Main Features,

UNIT II   **5 marks**

    (ii)   Comparative Study of Early and Later Vedic Age with special reference to Social, Economic and Religious life.

UNIT III: Jainism and Buddhism: **05 marks**

    (i)   Causes and Origin

    (ii)   Doctrine of Jainism.

    (iii) Doctrine of Buddhism.

    (iv) Causes of the Spread and Decline of Buddhism.

UNIT IV: **05 marks**

Emergence of Territorial State and Rise of the Magadha

Rise & Growth of the Magadha Empire.

UNIT V: **04 marks**

Effects of Iranian and Macedonian invasions.

UNIT VI: Age of the Mauryans   **07 marks**

    (i)   Administration of Chander Gupta Maurya.

    (ii)   Ashoka and his Dharma.

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UNIT VII: Central Asian contact with special reference to Kushana

07 marks

(i)   Ghandara and Mathura School of Arts.

(ii)   Science and Technology

(iii)   Trade and Commerce.

UNIT VIII: Life in Gupta Age   05 marks

(i)   Administration

(ii)   Trends in Trades

(iii)   Social Development

(iv)   Art & Literature,

(v)   Science and Technology.

UNIT IX: 05 marks

(i)   Harsha's Administration.

(ii)   Hieun Tsang's Account

(iii)   Nalanda.

(iv)   Science and Technology,

(v)   Trade and Commerce.

SECOND TERM COURSE

Weightage: 50 Marks   **Time: 2 ½hrs**

UNIT I : Indian Society (800 – 1200 A.D.)   10 Marks

(i)   Social Change: Growth of Feudalism

(ii)   The Caste System & the Emergence of Rajputs,

(iii)   Religious Movements & Beliefs with reference of Sankara's philosophy.

UNIT II: The Age of Conflict   10 Marks

(i)   Invasion of Mahmud Ghaznavi.

(ii)   Invasions of Muhammad Ghori.

(iii) Condition of Indian on the eve of Turkish invasions with references to Rajput political, social organization; Causes for the success of the Turks.

UNIT III: The Delhi Sultanate   10 Marks

(i) A brief survey of the conquests of Ilbari Turks; Consolidation under IItumish & Balban.

(ii) Expansion of Delhi Sultanate under the Khaljis with special reference to Allauddin's conquests.

(iii) Aladdin's land revenue policy. Market control, Military Reforms.

(iv) Muhammad Tughlaq's experiments; Causes of the decline of the Delhi Sultanate.

UNIT IV: Government of the Delhi Sultanate   10 Marks

(i) Central Administration,

(ii) Local Administration.

(iii) The Sultans and the Nobles.

(iv) Nature of the State.

(v) Religious Freedom under the Sultanate,

UNIT V: Society & Culture   10 Marks

(i) Peasants & Rural Gentry,

(ii) A Brief Survey of Architecture,

(iii) The Sufi Movement with special references to the Chisti and Suharwardi Silsilas.

(iv) The Bhakti Movements,

Books Suggested:

1. Ancient India published by NCERT, New Delhi.

2. Medieval India published by NCERT, New Delhi.

Note: Term 1st shall comprise $\boxed{\begin{array}{l} U_1 = 15 \\ T_1 = 35 \end{array}}$ & Term 2nd shall comprise $\boxed{\begin{array}{l} U_2 = 15 \\ T_2 = 35 \end{array}}$

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Code : 214

ECONOMICS

Term Ist

M.Marks:50   **Time:2½ hours**

Unit 1:   Introduction   7 marks

What is Economics ?

Meaning: scope and importance of statistics in Economics

Unit 2: Collection, Organisation and Presentation of Data.   13 marks

- Collection of data- Sources of data- primary and secondary; how basic data is collected: Methods of collecting data; Some important sources of secondary data; Census of India and National Sample Survey Organization.

- Organisation of Data: Meaning and types of variables; Frequency Distribution.

- Presentation of Data:Tabular Presentation and Diagrammatic Presentation of data

  I)   Geometric forms (bar diagram and pie diagrams.

  ii)   Frequency diagrams (histogram, polygon and ogive) and

  iii) Arithmetic line graphs (time series graph).

Unit 3 : Statistical Tools and Interpretation   20 marks

(For all the numerical problems and solutions, the appropriate economic interpretation may be attempted. This means, the students need to solve the problems and provide interpretation for the results derived).

- Meaures of Central Tendency- mean (simple and weighted), median and mode.

- Measures of Dispersion- absolute dispersion (range, quartile deviation, mean deviation and standard deviation); relative dispersion (co-efficient of variation); Lorenz Curve: Meaning and its application.

- Correlation- meaning, scatter diagram; Measures of correlation- Karl Pearson's method (two variables ungrouped data), Spearman's rank correlation.

- Introduction to Index Numbers- meaning, types- wholesale price index, consumer price index and index of industrial production, uses of index numbers; Inflation and index numbers.

Unit 4 : Developing Projects in Economics   10 marks

The students may be encouraged to develop projects, which have primary data, secondary data or both. Case studies of a few organization/ outlets may also be encouraged. Some of the examples of the projects are as follows (they are not mandatory but suggestive);

i)   A report on demographic structure of your neighborhood;

ii)   Consumer awareness amongst households

iii) Changing prices of a few vegetables in your market

iv)   Study of a cooperative institution: milk cooperatives

The idea behind introducing this unit is to enable the students to develop the ways and means by which a project can be developed using the skills learned in the course. This includes all the steps involved in designing a project starting from choosing a title , exploring the information relating to the title collection of primary and secondary data, analyzing the data, presentation of the project and using various statistical tools and their interpretation and conclusion

Project Report = 5 marks

Viva-voce = 5 marks

TERM-II

Max: Marks: 50   Time: 2½ Hours

UNIT 5.   10 Marks

Indian Economic Development:

Development Policies and Experience (1947-90):

- A brief introduction of the state of Indian economy on the eve of independence.
- Common goals of Five Year Plans.

- Main features, problems ad policies of agriculture (institutional aspects and new agricultural strategy, etc.), industry (industrial licensing, etc,) and foreign trade

UNIT 6

Economic Reforms since 1991:   10 marks

- Need and main features- liberalization, globalisation and privatization;
- An appraisal of LPG policies

UNIT 7

Current Challenges Facing Indian Economy   20 marks

- Poverty- absolute and relative; Main programmes for poverty alleviation; A critical assessment
- Rural development: Key issues- credit and marketing – role of cooperatives, agricultural diversification ; alternative farming – organic farming
- Human Capital Formation; how people become resource; Role of human capital in economic development; Growth of Education Sector in India
- Employment: Growth, informalisation and other issues; Problems and policies
- Infrastructure: Meaning and types: Case Studies: Energy and Health: Problems and Policies- A critical assessment ;
- Sustainable Economic Development.

  Meaning: Effects of Economic Development on Resources and Environment

UNIT 8

Developing Experience of India: 10 marks

- A Comparison with neighbors
- India and Pakistan
- India and China

  Issues: growth, population, and other developmental indicators.

Code : 215

GEOGRAPHY

Theory: 70 marks   **Time: 2 ½ hrs.**

Practical /Assignments /Project work: **30 marks**

First Term Course

Weightage: **i.   Theory = 35 marks**

ii.   Practical = 15 marks

Total = 50 Marks

A. Fundamentals of Physical Geography

Unit I: Geography as a Discipline   5 marks

- Geography as an integrating discipline, as a science of spatial attributes ;
- Branches of geography, importance of physical geography

Unit II: The Earth   5 marks

- Origin and evolution of the earth; interior of the earth Wegener's continental drift theory and plate tectonics; Earthquakes and volcanoes;

Unit III: Land Forms   6 marks

- Rocks and minerals –major types of rocks and their characteristics;
- Land forms and their evolution
- Geomorphic processes-weathering, mass wasting, erosion and deposition; soils – formation

Unit IV: Climate   11 marks

- Atmosphere- compositions and structure, elements of weather and climate;
- Insolation-angle of incidence and distribution; heat budget of the earth – heating and cooling of atmosphere (conduction, convection, terrestrial radiation, advection): temperature – factors controlling temperature; distribution of temperature-horizontal and vertical; inversion of temperature

- Pressure- pressure belts; winds-planetary seasonal and local, air masses and fronts; tropical and extra tropical cyclones;

- Precipitation –evaporation ; condensation –dew, frost, fog, mist and cloud; rainfall –types and world distribution ;

- World climates–classification (Koeppen), greenhouse effect, global warming and climatic changes.

Unit V : Water (Oceans)   4 Marks

- Hydrological Cycle ;

- Oceans – submarine relief; distribution of temperature and salinity; movements of ocean water waves, tides and currents.

Unit VI :   Life on the Earth   4 Marks

- Biosphere - importance of plants and other organisms; biodiversity and conservation; ecosystems, bio-geochemical cycle, and ecological balance.

SECOND TERM COURSE

Weightage :- (i) Theory = 35 Marks

(ii) Practical = 15 Marks

Total = 50 Marks

B. India–Physical Environment

Unit I: Introduction   5 Marks

- Location – space relations and India's place in the world.

Unit II: Physiography   7 Marks

- Structure and Relief;

- Drainage systems: concept of water sheds; the Himalayan and the Peninsular ;

- Physiographic divisions.

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Unit III: Climate, Vegetation and Soil   14 Marks

- Weather and Climate – spatial and temporal distribution of temperature, pressure, winds and rainfall; Indian monsoons: mechanism, onset and variability – spatial and temporal; climatic types;

- Natural vegetation –forest types and distribution; wild life; conservation; biosphere reserves ;

- Soils – major types (ICAR's classification) and their distribution, soil degradation and conservation.

Unit IV: Natural Hazards and Disasters: Causes, Consequences and Management (One case study to be introduced for each tropic)   9 Marks

- Floods and droughts
- Earthquakes and Tsunami
- Cyclones
- Landslides

C Practical Work

Unit I: Fundamentals of Maps   15 Marks

- Maps – types ; scales –types ; construction of linear scales, measuring distance finding direction and use of symbols;

- Latitude, Longitude and time ;

- Map projection – typology, construction and properties of conical with one standard parallel and Mercator's projection.

Unit II: Topographic and Weather Maps   15 Marks

- Study of topographic maps (1:50,000 or !;25,000, Survey of India Maps) : contour cross section and identification of landforms – slopes hills,valleys, waterfalls, cliff; distribution of settlements;

- Aerial Photographs and Satellite Images ;

  Aerial Photographs: Types and Geometry – vertical aerial photographs; difference between maps and aerial photographs; photo scale determination.

  Satellite images: Stages in remote sensing data acquisition, platform and sensors and data products (photographic and digital)

  Interpretation of physical and cultural features from aerial photographs and satellite imageries.

- Use of weather instruments: thermometer, wet and dry – bulb thermometer, barometer wind vane, rainguage.

- *Use of weather charts:* describing pressure, wind and rainfall distribution .

Note: Term 1st shall comprise:

U_1 = 10 marks

T_1 = 25 marks

Term 2nd shall comprise:

U_2 = 10 marks

T_2 = 25 marks

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Code : 220

POLITICAL SCIENCE

M.Marks:50   **Time: 2 ½hrs.**

Term : 1ˢᵗ

Unit : I

Indian Constitution at work:

1. **Making of the constitution:** why do we need constitution? What does a constitution do? Who made our constitution? How did the country's partition affect the working of the constitution assembly? What were the sources of constitution?   **4 Marks**

2. **Fundamental Rights:** Why do we need for a bill of rights in the constitution? What are the fundamental rights provided by the constitution? Why was the right of the property removed from fundamental rights? How have the interpretation by the courts influenced Fundamental Rights? How has provision of Fundamental Rights provided the basis for civil liberties movement in India? What are the fundamental Duties?   **6 Marks**

3. **System of representational democracy:** What are the different methods of election? How do these methods affect parties and politics? Why was the post system chosen in India? What have been the effects of this system? Why is there a system of reserved seats? What are the provisions to ensure free and fair elections? What does the Election Commission do?   **6 Marks**

Unit II

4. Executive in a parliamentary system: Why was parliamentary system chosen over other forms of government? Why does the parliamentary system need a constitutional head? How are the Prime Minister and the Chief Ministers elected? What are the formal and real powers of the President of India? What are the powers of Prime Minister or the Chief Ministers and the Council of Ministers? What are the powers of the Governor?   **6 Marks**

5. **Legislature at the central and state level:** Why does the Parliament of India have two Houses? How are the parliament and the state Assemblies constituted? What are the 3 powers of the Rajya Sabha and Lok Sabha? How are the laws passed? How is the executive made accountable? What are the constitutional means to prevent defection? **4 Marks**

6. **Judiciary:** What is the rule of law? Why do we need an independent judiciary? What are the provisions that ensure the independence of judiciary in India? How are judges appointed? What are the powers of the Supreme Court and the High Courts? How do they use their powers for public interest? **5 Marks**

7. **Federalism:** What is Federalism? How does federalism ensure accommodation of diversities? In which ways is the Indian constitution federal? In which ways does the constitution strengthen the centre? Why are there special provision for some states and areas? **4 Marks**

8. **Local government:** Why do we need decentralization of powers? What has been the status of local government in the constitution? What are the basic features of rural and urban local governments? What has been the effect of giving constitutional status to local governments? **5 Marks**

9. **Political philosophy underlying the constitution:** What are the core provisions of the constitution? What are the visions underlying these core provisions? How are these shaped by modern Indian political thought? **5 Marks**

10. **Constitution as a living document:** How has the constitution changed since it inception? What further changes are being debated? What has the working of democracy done to the constitution? **5 Marks**

Term: IInd

Max: Marks:50   **Time: 2 ½ Hours**

1. **Introduction to Political Theory:** What is Politics? Do we find politics in seemingly non-political domain? Can political argument be resolved through reasoning? Why do we need political theory? **5 Marks**

2. **Freedom:** What is freedom? What are reasonable constrains on individual liberty? How are limits defined? **5 Marks**

3. **Equality:** Do all differences involve inequality? Does equality imply sameness? What are the major forms of inequality? How can equality be realized?   **5 Marks**

4. **Social Justice:** Is justice all about fairness? What is the relationship between justice and equality? What are the different forms of injustice? In which ways can justice be secured?   **5 Marks**

5. **Rights:** How is a right different from any claim? What are the major kinds of right claims? How do we resolve a conflict between individual and community rights. How does the state enable and obstruct rights?   **6 Marks**

6. **Citizenship:** Who is a citizen? What are relevant grounds for inclusion and exclusion? How are new claims to citizenship negotiated? Can we have a global citizenship?   **5 Marks**

7. **Nationalism:** How are the boundaries of a nation defined? Must every nation have a state? What demands can a nation make on its citizens? What is the basis of the right to self determination?   **5 Marks**

8. **Secularism:** What is secularism? Which domains of life does it relate to? What is a secular state? Why do we need secular state in modern life? Is secularism suitable for India?   **6 Marks**

9. **Peace:** What is peace? Does peace always require non-violence? Under what conditions is war justified? Can armament promote global peace?   **4 Marks**

10. **Development:** What is development? Is there a universally accepted model of development? How to balance the claims of present generation with claims of future generation?   **4 Marks**

Note: Term 1st shall comprise:

U_1 = 15 marks

T_1 = 35 marks

Term 2nd shall comprise:

U_2 = 15 marks

T_2 = 35 marks

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Code : 216

PHILOSOPHY

TERM-I

Maximum Marks: 50   **Time: 2½ Hrs**

Understanding Sociology

Units-I Methods of Natural and Social Sciences   10 Marks

- Value of Science, Nature and aim of Scientific Methods: Difference between Scientific induction, and Induction by simple enumeration.
- Difference between methods of Natural Science and Social Sciences.

UNIT-II   Observation and Experiment   10 Marks

- Their Differences,
- Fallacies of Observation.

UNIT-III Science and Hypothesis   10 Marks

- The Place of Hypothesis in scientific methods,
- Formulation of relevant hypothesis,
- Formal conditions of valid hypothesis.
- Hypothesis and crucial experiments.

Unit-IV Mill's methods of Experimental Inquiry   10 Marks

- The method of agreement.
- The method of difference.
- Joint method of agreement and difference.
- The method of Concomitant variation.
- The method of residue.

Unit-V Nyaya Theory of Knowledge   10 Marks

- General Survey: Prama, Pramana, Pramanya, Pratyaksa, Anumana, Upamana Sabda.

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TERM-II

Maximum Marks: 50   **Time: 2½ Hrs**

Unit-VI   The Nature of Scope of Logic   **06 Marks**

- What is Logic?
- Use and application of Logic.
- Difference between truth and validity.

Unit-VII Terms and Propositions   **15 Marks**

- Definitions of term.
- Denotation and Connotation of Terms.
- Definitions of propositions and traditional classification of Propositions.
- Distribution of Terms.

Relation between Propositions:

- Traditional Square of Propositions.

Unit-VIII Categorial Syllogism   **11 Marks**

- Definition: Rules of valid syllogism and fallacies

Unit-IX Elements of Symbolic logic   **06 Marks**

- Value of using symbols in Logic.
- Basic Truth-tables.

Unit-X   Buddhist Formal Logic   **12 Marks**

Code : 217

EDUCATION

Term : 1st

Maximum Marks: 50   **Time: 2½ Hrs**

Objective:

1.   To have complete conceptual clarity of Education and its role.

2.   To be familiar with various aims of education and their importance.

3.   To have a working knowledge of various agencies leading to education of children.

4.   To have current understanding of pre-primary system of education both in Theory and Practice.

5.   To have clear understanding of Educational Psychology.

Unit : I   Meaning and Concept of Education

1.1   Etymological meaning of education

1.2   Narrow and Broader meaning of education

1.3   Definitions-- Pestalozzi, Redden, M. K. Gandhi,

Dr. Zakir Hussain, Dr.Sir Muhammad Iqbal

1.4   Need and importance of education   **10 marks**

UNIT - 2   Understanding Aims of Education

2.1   Meaning of aims of education

2.2   Meaning and importance of following aims:-

**   individual aims

**   moral and spiritual aim

**   social aim

**   cultural aim

**   vocational aim

10 marks

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UNIT -3   Understanding Agencies of Education

3.1   Meaning of agencies of education

3.2   Types

    **   Formal..... School and religious institutions

    **   Informal.... Family and Society

    **   Non-formal…. Open school, Distance education and Mass Media.

10 marks

UNIT- 4   Organization & Structure of Education in India

4.1   Pre-primary education

4.2   Primary education

4.3   Secondary education

4.4   Higher education

(to be discussed with special reference to organization, structure and aims)

10 marks

UNIT-5   Universalisation of Elementary Education

5.1   Concept of universalization of elementary education

5.2   Problems of universalization

5.3   Initiatives of elementary education

    **   Non formal education

    **   Early childhood care and education

    **   Sarva Shiksha Abhiyan

    **   Right to Education Act (1997)

5.4   Wastage and Stagnation....causes and control   **10 marks**

Term : IInd

Maximum Marks: 50   **Time: 2½ Hrs**

Unit 6 :   Educational Psychology

6.1   Meaning and definition of Educational Psychology

         Stern ,Skinner, Judd, Crow & Crow

6.2   Need and scope of educational psychology

6.3   Methods of educational psychology

         **   Observation method

         **   Case-study method   **10 marks**

Unit 7 :   Emotions

7.1   Understanding the concept of emotions

7.2   Definitions : McDougall, Woodworth, Gates

7.3   Characteristics of emotions

7.4   Types of emotions—Fear, Anger, Jealousy

7.5   Classification proposed by McDougall

7.6   Training of emotions:-Sublimation and Catharsis

7.7   Importance of training of emotions   **10 Marks**

Unit 8 :   Value Education

8.1   Conceptual clarity of value education

8.2   Types of values (Social, Moral and Religious)

8.3   Need and importance of value education

8.4   Role of education in imbibing values   **10 Marks**

Unit 9 :   Elementary Statistics

9.1   Meaning of statistics

9.2   Tabulation of Data into frequency distribution

9.3   Graphic Representation of Data

         **   Frequency Polygon

      **   Histogram

      **   Pie-chart

      **   Ogive

9.4   Measures of central tendency ---Mean, Median and Mode (calculations only)   **10 marks**

Unit 10 :   Environmental Education

10.1   Concept of environmental education

10.2   Aims and objectives of environmental education

10.3   Need and importance of environmental education

10.4   Environmental Pollution....Air, Water and Noise

       (Meaning, Causes and Control)   **10 marks**

Books Suggested:

1.   A textbook of Education by Dr. G. Rasool and Dr. H.P. Mangotra.

2.   Education for Beginners by N.A. Nadeem. Fullbright Publishing Co., Karan Nagar, Srinagar.

3.   Principles & Techniques of Education by Safaya and B.D. Shida.

4.   Education Psychology by S.K. Mangal.

Note: Term 1st shall comprise:

U_1 = 15 marks
T_1 = 35 marks

Term 2nd shall comprise:

U_2 = 15 marks
T_2 = 35 marks

Code : 218

PSYCHOLOGY

Term-I

Maximum Marks: 50   **Time: 2 ½ Hrs**

Theory: 35 Marks   **Practical: 15 Marks**

UNIT-I INTRODUCTION TO PSYCHOLOGY

- Nature and scope of Psychology

- Brief historical background of Psychology

- Branches of Psychology: *Educational, Social, Abnormal, Experimental, Clinical, Industrial and Cognitive Psychology*

- Schools of thought in Psychology: *Structuralism, Functionalism, Behaviourism and Psychoanalysis*   **9 marks**

UNIT-II METHODS IN PSYCHOLOGY

- Observation, Experimental, Survey & Case Study method.

- Psychological Testing and its characteristics: Reliability & validity   **5 marks**

UNIT-III THE BASIS OF HUMAN BEHAVIOUR

- Biology of behaviour: *Structure and functions of Nervous system.*

- Locations and functions of endocrine systems & its effect on behaviour.

- Heredity and Behaviour: *Genes and Chromosomes*

- Socio-cultural basis of behaviour: Family, Neighbourhood and School   **7 marks**

UNIT-IV HUMAN DEVELOPMENT

- Meaning of growth and development.

- ◆ Factors influencing development.
- ◆ Overview of developmental stages: *Infancy, Childhood, Adolescence, Adulthood and Old Age.* **7 Marks**

UNIT-V SENSORY, ATTENTIONAL AND PERCEPTUAL PROCESSES

- ◆ Meaning of Sensation, Attention and Perception.
- ◆ Laws of perceptual organization.
- ◆ Attentional processes: *Selective and Sustained Attention, Illusions.*
- ◆ Sense Modalities: *Visual and Auditory Modalities.* **7 Marks**

Term-II

Maximum Marks: 50 **Theory: 35 Marks** **Practical: 15 Marks**
Time: 2 ½ Hrs

UNIT-I LEARNING

- ◆ Meaning and characteristics of Learning.
- ◆ Classical and Operant Learning, Observational Learning, Verbal Learning, Skill learning.
- ◆ Factors facilitating Learning, Transfer of Learning. **8 marks**

UNIT-II MEMORY AND FORGETTING

- ◆ Meaning of Memory & its components.
- ◆ Levels of processing: *Sensory memory, Short-term memory, Long-term memory.*
- ◆ Forgetting: *Nature of Forgetting, Theories of Forgetting (Trace decay, Interference, Retrieval failure*). **8 marks**

UNIT-III THINKING AND LANGUAGE

◆   Nature of thinking

◆   Process of thinking, Reasoning, Problem solving and Decision making.

◆   Nature and process of creative thinking.

◆   Thought and Language, Development of Language and Language use   **6 marks**

UNIT-IV MOTIVATION

◆   Meaning, Cycle of motivation.

◆   Biological Motives.

◆   Psycho-social motives: *Achievement, Affiliation and Power*.

◆   Maslow's Hierarchy of needs.   **7 marks**

UNIT-V EMOTIONS

◆   Meaning of emotion and its characteristics

◆   Theories of emotion: *James-Lange Theory, Cannon-Bard Theory*

◆   Emotional reactions: *Happiness, Optimism, Anger and Fear*.   **6 Marks**

PRACTICALS FOR TERM-I and Term-II respectively   30 Marks

◆   Memory and forgetting by using memory drum.

◆   Learning: (*Star shape)* Bilateral transfer of learning.

◆   Attention

Note: Term 1st shall comprise of:

U_1 = 10 marks

T_1 = 25 marks

Term 2nd shall comprise of:

U_2 = 10 marks

T_2 = 25 marks

Code : 219

SOCIOLOGY

TERM-I

MAXIMUM MARKS: 50   **Time: 2 ½ hrs.**

INTRODUCING SOCIOLOGY

Unit- I Society and Sociology   MARKS: 10

- Introducing Society: Individuals and collectives, plural perspectives.
- Introducing Sociology: Emergence, Nature and Scope, Relationship with other Disciplines.

Unit-II.Basic Concepts   MARKS: 10

- Social Groups.
- Status and Role.
- Social Stratification.
- Social Control.

Unit-III. Social Institutions   MARKS: 10

- Family and Kinship.
- Political and Economic Institutions.
- Religion as a Social Institution.
- Education as a Social Institution.

Unit-IV. Culture and Society   MARKS: 10

- Culture, Values and Norms: Shared, Plural, Contested.
- Socialization: Conformity, Conflict and the shaping of Personality

Unit-V. Doing Sociology: Method & Techniques   MARKS: 10

- Tools and Techniques: Observation, Survey, Interviews.
- The Significance of Field Work in Sociology.

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TERM-II

MAXIMUM MARKS: 50   **Time: 2 ½ hrs**

Understanding Sociology

Unit-I Structure, Process and Stratification   Marks: 10

- Social Structure.
- Social Process: Cooperation, Competition and Conflict.
- Social Stratification: Class, Caste, Race and Gender.

Unit-II Social Change   Marks: 10

- Social Change: Types and Dimensions; Causes and Consequences.
- Social Order: Domination, Authority, and Law of Contestation, crime and Violence
- Village, Town and City: Changes in Rural and Urban Society.

Unit-III. Environment and Society   Marks: 10

- Ecology and Society.
- Environmental Crisis and Social Responses.

Unit-IV. Western Social Thinkers   Marks: 10

- Karl Marx on Class Conflict.
- Emile Durkhiem on Division of Labour.
- Max Weber on Bureaucracy.

Unit-V. Indian Sociologist   Marks: 10

- G.S.Ghurye on Race and Caste.
- D.P.Mukerji on Tradition and Change.
- A.R. Desai on the state.
- M.N.Srinivasan on the village.

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BOOKS SUGGESTED:-

1.   Introducing Sociology: A Textbook for Class XI by NCERT, New Delhi

2.   Understanding Society: A Textbook for Class XI by NCERT, New Delhi

3.   Indian Society by NCERT, New Delhi

Note: Term 1st shall comprise:

$$U_1 = 15 \text{ marks}$$
$$T_1 = 35 \text{ marks}$$

Term 2nd shall comprise:

$$U_2 = 15 \text{ marks}$$
$$T_2 = 35 \text{ marks}$$

Code : 221

HOME SCIENCE

(ELECTIVE)

Home Science as a discipline aims to empower learners by developing understanding of four different areas, namely:

- Food and Nutrition

- Human Development

- Community Resource Management and Extension

- Fabric and Apparel Science

The subject helps students to understand changing needs of Indian society, academic principles as well as develop professional skills.

This would make them competent to meet challenges of becoming a responsible citizen.

Objectives:

The Syllabus at Senior Secondary level develops in the learners an understanding that the knowledge and skills acquired through Home Science facilitates development of self, family and community. It endeavors to -

1. Acquaint learners with the basics of human development with specific reference to self and child.

2. Help develop skills of judicious management of various resources.

3. Enable learners to become alert and aware consumers.

4. Impart knowledge of nutrition and lifestyles to enable prevention and management of disease.

5. Inculcate healthy food habits.

6. Help develop understanding of textiles for selection and care of clothes.

7. Develop skills of communication to assist in advocacy and dissemination of knowledge to community.

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TERM - I

Theory = 35 marks   **Practical = 15 marks**

                                                                  Time: 2 ½ hrs

Unit I: Concept of Home Science and its Scope   3 Marks

Home Science, its scope and inter-disciplinary approach.

Unit II: Know myself: Issues related to adolescents   12 Marks

Adolescence, meaning, early (12-15 years) and late (16 - 18 years) adolescence.

Characteristics: Cognitive Development: Transition from concrete to formal operations; physical development: Growth spurt, sexual development, accepting one's physique; Social and Emotional development; importance of peer group and relationships with other age mates, interest in the opposite sex and different social gender roles, varied and changing interests, concern about future. Role of heredity and environment (family, peers, school and neighborhood).

Important developmental tasks: Achieving emotional independence from parents; preparing for career; reproductive health and prevention of anemia.

Interpersonal Skills: with the family, peers and members of the community.

Unit III: Special needs of adolescents   9 Marks

(i)   Nutritional requirements: qualitative and quantitative;

(ii)   Exercise and entertainment; importance of physical activity in social development and prevention of obesity

(iii)   understanding with parents.

      Some problems of adolescence: awkwardness due to growth spurt; freedom and control; depression; alcohol, drugs and smoking; delinquency; problem related to sex; ignorance and increased curiosity; prevention of HIV / AIDS and other sexually transmitted

diseases; Adolescence a period of stress.

Population Education: problems of over population; neglect of girl child: causes, prevention, legal and social laws, government incentives to improve status of girl child, desire for male child; small family norms with reference to J&K.

Unit IV: My Apparel   11 Marks

Fibre Science: Types of fibres: (i) natural-cotton, silk and wool; (ii) man-made (pure rayon, nylon and polyester) and blend (terrycot, terrysilk, terrywool).

Fabric Construction: Basic procedure of any yarn making (spinning, mechanical spinning, chemical spinning, weaving) plain, twill & satin, other methods-knitting and non-woven, Handlooms of J&K.

Finishing: meaning and importance; types: (i) basic: cleaning, bleaching, stiffening, tantering; (ii) special: mercerisation, shrinkage control, water proofing; dyeing and printing, durability and maintenance of garment

Term II

Theory = 35 marks   **Practical = 15 marks**

Time: 2 ½ hrs

Unit I : Nutrition for Self and Family   9 Marks

Definition and relationship between food, nutrition, health: nutritional status; classification of foods on the basis of nutrients and functions; nutritional status and calorie intake as a basis of poverty line.

Functions of food: body building, energy giving, protective, regulatory; physiological, psychological and socio-cultural; signs of good health; physical status, psychological status, mental ability, mortality and longevity, Food habits of inhabitants of J&K.

Selection of foods for optimum nutrition and good health: basic knowledge of nutrients - sources, functions, deficiency and prevention; proteins, carbohydrates, fat,

dietary fibre, vitamins - A, D, B_1, B_2, niacin, folic acid, B_{12} and vitamin C; minerals-calcium, iron and iodine. Basic food groups (ICMR) and their contribution; concept of balanced diet; food and nutritional requirements for family (ICMR tables); factors influencing selection of food: culture, family food practices, media, peer group and availability of foods.

Unit II: 9 Marks

Maximum nutritive value from food by proper selection, preparation, cooking and storage:

Selection and storage of foods-perishable, semi-perishable, non-perishable; convenience foods; Reasons for spoilage; brief description of household methods of preservation-refrigeration, dehydration, use of chemicals and household preservatives. Cooking; principles of cooking; Methods of cooking-boiling, steaming, pressure cooking, deep and shallow frying, parboiling, sauteing, roasting and grilling; Effect of cooking on the nutritive value of food; Method of enhancing nutritive value-germination, fermentation, fortification and proper food combination.

Unit III: Resources & Management   9 Marks

Resources: meaning, types: (i) human-knowledge, skills, time, energy, attitudes; (ii) material: money, goods, property; (iii) community facilities; schools, parks, hospitals, roads, transport, water, electricity, fuel, fodder; need to manage the resources; methods of conservation of shared resources.

Management: meaning and need for management; steps in management: planning, organizing, controlling, implementing and evaluation; decision making and its role in management.

Unit IV: Time, Energy, Management & Work Ethics   8 Marks

Time and energy management: need and procedure for managing time for occupation and leisure; work simplification: meaning and methods; activities in the home: sleeping, studying, cooking, eating, bathing, washing, entertaining-need to organize space

for these activities; use of colours and accessories to make these centres attractive; role of different members of the family in efficient running of a home.

Work ethics: meaning and importance; discipline at work place; reaching on time, staying in seat, knowing the job, using polite language.

PRACTICALS

Marks: 30   **Time: 3 Hours**

UNIT MARKS

I.   Concept of Home Science

II.   Know myself -

III.   Nutrition for Self & Family   8 marks

IV.   My Resources   8 marks

V.   My Apparel   7 marks

VI.   Record   5 marks

VII.   Viva-voce   2 marks

Unit I : Concept of Home Science

Unit II : Know myself : issues related to adolescents

Activity: Observe and test your own strengths and weaknesses; Discuss about them in class with your teacher and fellow students; take decision about maximum utilization of strength and improvement upon weaknesses.

Activity: Report situations from your life to indicate your interaction within the family, with peers and with members of the community.

Unit III : Nutrition for Self and Family

Activity: Look for signs of good health within your family.

Activity: Make a list of foods available in the local market according to food groups.

Activity: Observe how different food stuffs are stored at home and evaluate the effectiveness of the method; practise skills to preserve and optimise nutrients by preparing meals and snacks.

Practical: Preparing meals and snacks

Practical: Household methods of food preservation - Jam, Squash / Syrup, Pickles / Chutney.

Unit IV : My Resources

Activity (Observation): Observe and list resources available at home and in neighbourhood. Make a detailed study on available community resource and its management, suggest Improvements.

Activity: Critically evaluate anyone activity centre of your house. Suggest improvements.

Activity: Suggest a work plan for yourself for a day and state where and why will you take help from others.

Practicals: Make flower and foliage arrangements, floor decorations, clean and polish brass, glass, iron, aluminium and plastic surfaces.

Unit V : My Apparel

Activity: Collect samples of fabrics and study characteristics for identification.

Activity: Collect samples of weaves and identify them.

Practicals: Carry out burning test, slippage test, tearing test and test for colour fastness.

Practical: Dyeing plain and tie dye printing: use blocks (available or make you own) on small sample.

Note: Term 1st shall comprise:

U_1 = 10 marks
T_1 = 25 marks

Term 2nd shall comprise:

U_2 = 10 marks
T_2 = 25 marks

Code : 235

MUSIC

M. Marks: 100　　　　　　　**Theory : 50**　　　　　　　**Practicals : 50**

Term 1ˢᵗ

Time:2½ hours

Unit-I　　　　　　　　　　　　　　　　　　　　　　　　　　**Marks: 25**

1.　　Writing Notation of Ragas of your course of the study

　　i) Bilawal　　　ii) Yaman

2.　　Writing Notation of Talas of your course in single and double laya Karies

　　i) Teental　　　ii) Dadra　　　iii) Kehrva

3　　Writing of Alankars in different Thaatas

　　i) Kalyan Thaat　　　　　　ii) Bilawal Thaat　　　　　　iii) Kafi Thaat

Unit-II

1　　Definition and explanation of the following musical terms:-

　　Sangeet, Naad, Shruti, Swar, Vadi, Samvadi, Anuvadi, Vivadi, Varjya Swar, Aaroh, Avroh, Pakad, Thaat, Raag, Taal, Laya, Awartan, Alankar.

2　　Classical : Sangeet - Northern and Southern Music Classical, light, light classical folk music (with example)

3　　Swar- Chal, Achal, Shudh, Komal, teevra (with examples)

4　　SAPTAK- Mandra, Madya and Taar Saptak (with examples)

Term1ˢᵗ is combination of Unit I and Unit II

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Term II

Time: 2 ½ hrs

Unit-III   **Marks: 25**

1.   Definition of Ragas of your course of study,

2.   Definition of Talas of your course of study

3.   Life History and Contribution of the following musicians

   i) Amir Khusro   ii) Tansen

Unit-IV

1.   Essay type

2,   Importance of Tanpura in Indian Classical music

3.   Importance of Taal and Laya in Music

4.   Importance of Music in life

   Term2nd is combination of unit III and IV.
   Note:- Unit I is Compulsory in Both Term-I and Term-II

PRACTICALS   **Time : 3 hrs.**   **50 Marks**

                                             Marks

Ist Test in Practicals   20

2nd Test in Practicals   20

Practical file and Impression   10

1st Term

1   Alankars in Bilawal Thaat

2   Raag Bilawal (Chota Khayal or Razakhani Gat with four Tanas or Todas)

3   Playing of Dadra and Keherwa of teen Taal with Single and Double Layakaris.

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4   Any folk song of your State / Different bols of Mizrab

2nd Term

1.   Practise of Alankars in Kalyan Thaatas   i) Kalyan   ii) Kafi

2.   Raga Yaman (Chota Khayal or Razakhani Gat with four Tanas or Todas)

3.   Playing of Dadra and Keharwa of teen taal with Single and Double Layakaris

4.   Any folk song of your state/ Different bols of Mizrab

BOOKS SUGGESTED:

1.   Sangeet Visharad (New Edition)

2.   Sangeet Shastra Darpan I and II.

3.   Kramik Pustak Malika Part-I and Part-II

SCHEME OF ASSESSMENT

U_1 = 10 marks, T_1 = 15 marks

U_2 = 10 marks, T_2 = 15 marks

Code : 222

STATISTICS

Maximum Marks: 100

Maximum Marks (Theory): 70   **Maximum Marks (Practical): 30**

Term – I

Unit I: Introduction to Statistics

- Origin, Definition and Meaning of Statistics. Importance and Scope of Statistics.

- Limitations of Statistics. Data and its types (Primary , Secondary, Qualitative and Quantitative data), Sources of secondary data.   **6 marks**

Unit II: Data Collection

Concept of Population and Sample. Methods of data collection (Questionnaire and Interview Method). Merits and Demits of these Methods. Presentation, Classification and Tabulation of data. Discrete and continuous data. Frequency and frequency distribution.   **6 marks**

Unit III: Graphical representation of data

Representation of data by Graph, its advantages. Construction of diagrams/Charts (Bar chart, Multiple Bar diagram, Pie chart). Frequency graphs (Histogram, Frequency Polygon, Frequency Curve, Ogive Curves)   **7 marks**

Unit IV: Measures of Location

Centre Tendency and its Measures (Mean, Median, Mode, Geometric Mean and Harmonic Mean). Essentials of good average. Merits and Demerits of Measures of Central Tendency. Combined and Weighted Mean.   **8 marks**

Unit V: Partitation Values

Graphical Location of Median, Concept of Quartiles, Deciles and Percentiles.

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Percentile Rank. Empirical relation between Mean, Median and Mode. Symmetrical and Asymmetrical data.   **8 marks**

Term – II

Unit VI: Dispersion

Dispersion and its absolute measures (Range, Quartile Deviation, Mean Deviation and Standard Deviation). Merits and Demerits of these measures. Relative measures of Dispersion (Co-efficient of Range, Co-efficient of Qartile deviation, Co-efficient of Standard deviation). Co-efficient of variation (C.V.).   **8 marks**

Unit VII: Moments

Define Moments, Types of Moments (Raw Moments and Centre Moments for discrete and continuous data). Relationship between Raw and Central Moments. Numerical illustration based on Moments.   **6 marks**

Unit VIII: Skewness and Kurtosis

Define Skewness and its types, Measures of Skewness (Karl Pearson, Bowleys and Moment based measure), Kurtosis and its types. Measures of Kurtosis.

7 marks

Unit IX:Correlation

Bivariate data, Scattered diagram, Concept of Correlation and its types. Methods of measuring Correlation (Product moment method, Graphical method). Properties of Correlation co-efficient. Rank correlation for simple and repeated Ranks.

8 marks

Unit X: Introduction to Computers

Basic idea about computers, Functional components (Input/Output Units, Hardware

and Software). Generation of Computers, Concept of flow charts, Classification of computers. **6 marks**

Practical Work (weightage 30 marks)

1. Practical's based on Baye's thermo.

2. Calculation of two Regression lines.

3. Practical's based on measures of fertility and mortality .

4. Estimates of Trend values by free hand and semi average method.

5. Drawing of Charts through Excel.

6. Measures of Central Tendency through Excel.

Note: Term 1st shall comprise:

U_1 = 10 marks
T_1 = 25 marks
Practical = 15 marks

Term 2nd shall comprise of:

U_2 = 10 marks
T_2 = 25 marks
Practical = 15 marks

<div align="center">

Code : 223

MATHEMATICS

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Max Marks: 50   **Time: 2½ hrs**

Term I	Course	Marks
1.	Sets, Relations and Functions	12
2.	Trigonometry	12
3.	Complex Numbers & Linear Inequations	10
4.	Sequences and Series	06
5.	Statistics	05
6.	Probability	05
		50

Term II	Course	

Maximum Mark: 50

7.	Permutation and Combinations	06
8.	Binomial Theorem	06
9.	Straight Lines	07
10.	Circles & Conic Section	12
11.	Three Dimensional Geometry	07
12.	Limits and Derivatives	12

Unit I:

Sets, Relations and Functions

Sets and their representation. Empty set. Finite and Infinite sets. Equal sets Subsets. Subsets of the set of real numbers especially intervals (with notations). Power set. Universal set. Venn diagrams. Union and Intersection of sets. Difference of sets. Compliment of a set.

Ordered pairs, Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the reals with itself (up to RxRxR).

Definition of relation, pictorial diagrams, domain, co- domain and range of relation. Function as a special kind of relation from one set to another. Pictorial representation of a function, domain and co- domain and range of a function. Real valued function of the real variable, domain and range of these functions. Constant, identity, polynomial, rational, modulus, signum and greatest integer functions with their graphics. Sum, difference, product and quotients of functions.

Unit-II   Trignometry

Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trignometric functions with the help of unit circle. Truth of the identity $\sin^2 x + \cos^2 x = 1$, for all x. Signs of trigonometric functions and sketch of their graphs. Expressing $\sin(x \pm y)$ and $\cos(x \pm y)$ in terms of $\sin x$, $\sin y$, $\cos x$ and $\cos y$. Deducing the following identities:

$$\tan(x \pm y) = \frac{\tan x \pm \tan y}{1 \mp \tan x \tan y}, \quad \cot(x \pm y) = \frac{\cot x \cot y \mp 1}{\cot y \pm \cot x},$$

$$\sin x + \sin y = 2\sin\frac{x+y}{2}\cos\frac{x-y}{2}, \quad \cos x + \cos y = 2\cos\frac{x+y}{2}\cos\frac{x-y}{2},$$

$$\sin x - \sin y = 2\cos\frac{x+y}{2}\sin\frac{x-y}{2}, \quad \cos x - \cos y = -2\sin\frac{x+y}{2}\sin\frac{x-y}{2}.$$

Identities related to $\sin 2x$, $\cos 2x$, $\tan 2x$, $\sin 3x$, $\cos 3x$ and $\tan 3x$. General solution of trigonometric equations of the type $\sin\theta = \sin\alpha$, $\cos\theta = \cos\alpha$ and $\tan\theta = \tan\alpha$ Proofs and simple applications of sine and cosine formulae.

Unit III:

Complex Numbers and Linear Inequations

Need for complex numbers, especially $\sqrt{-1},$ to be motivated by inability to solve every quadratic equation. Brief description of algebraic properties of complex numbers. Argand plane and polar representation of complex numbers. Statement of Fundamental Theorem of Algebra, solution of quadratic equation in the complex number system.

Linear inequalities. Algebraic solution of linear inequalities in one variable and their representation on the number line. Graphical solution of linear inequalities in two variables. Solution of system of linear inequalities in two variables - graphically.

Unit IV   Sequence and Series

Sequence and Series. Arithmetic Progression (A.P.), arithmetic mean (A.M.). Geometric progression (G.P.), general term of a G.P., sum of n terms of a G.P. and A.P., Geometric mean (G.M.), relation between A.M. and G.M. Sum to n terms of the special series: $\Sigma n, \Sigma n^2$ and Σn^3.

Unit V   Statistics

Measure of dispersion; mean deviation, variance and standard deviation of ungrouped/grouped data. Analysis of frequency distributions with equal means but different variances.

Unit VI   Probability

Random experiments: Outcomes, Sample spaces (set representation). Events: Occurrence of events, 'not', 'and' & 'or' events, mutually exclusive events. Axiomatic (set theoretic) probability, connections with the theories of earlier classes. Probability of an event, probability of 'not', 'and' & 'or' events.

Term 2nd

Unit VII   Permutation and Combinations

Fundamental principle of counting. Factorial *n*. Permutations and combinations, derivation of formulae and their connections, simple applications.

Unit VIII   Binomial Theorem

History, statement and proof of the binomial theorem for positive integral indices. Pascal's triangle, general and middle term in binomial expansion, simple applications.

Unit IX   Straight Lines

Brief recall of 2d from earlier classes. Slope of a line and angle between two lines. Various forms of equations of a parallel to axes, point-slope form, slope-intercept form, two-point form, intercepts form and normal form. General equation of a line. Distance of a point from a line.

Unit X   Circles and Conic Sections

Sections of a cone: Circles, ellipse, parabola, hyperbola, a point, a straight line and a pair of intersecting lines as a degenerated case of a conic section. Standard equations and simple properties of parabola, ellipse and hyperbola. Standard equation of a circle.

Unit XI   Three-dimensional Geometry

Coordinates axes and coordinate planes in three dimensions. Coordinates of a point. Distance between two points and section formula.

Unit XII   Limits and Derivates

Derivative introduced as rate of change both as that of distance function and geometrically, intuitive idea of limit. Definition of derivative, relate it to slope of tangent of the curve, derivative of sum, difference, product and quotient of functions. Derivatives of polynomial and trigonometric functions

Suggested Textbook: A Textbook of Mathematics for class XI published by NCERT, New Delhi

Note: Term 1st shall comprise:

| U_1 = 15 marks |
| T_1 = 35 marks |

Term 2nd shall comprise:

| U_2 = 15 marks |
| T_2 = 35 marks |

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 250

APPLIED MATHEMATICS

Max Marks :- 100   **Time: 2½ hrs**

Term 1st

1.	Sets, Relations and Functions	13
2.	Complex Numbers and Quadratic Equations	13
3.	Sequence and Series	13
4.	Trigonometry	11

Total : 50

Term 2nd

5.	Permutations and Combinations, Binomial theorem	15
6.	Coordinate Geometry	13
7.	Probability	12
8.	Vectors	10

Total : 50

Unit 1st. Sets, Relations and Functions

Sets and their representation . finite and infinite sets . empty sets. equality of sets. subset, powerset, universal set, venn diagram, compliment of a set. Algebra of sets (Union, intersection and difference of sets). Demorgan's laws, Cartesian product of sets.

Relations , types of relations (equivalence relation).

Definition of a function and its various types.   **13 marks**

Unit 2nd. Complex numbers and quadratic equations

Definition of a complex number, its representation. Conjugate of a complex number,

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modulus of a complex number, amplitude of a complex number. Square root of a complex number. Cube roots of unity and its properties. Quadratic Equations with complex coefficients and roots. **13 marks**

Unit 3rd. Sequences and Series

Geometric progression, general term sum to n terms, and sum to infinity of a geometric series. Geometric and arithmetic means, Evaluation of $\Sigma n, \Sigma n^2, \Sigma n^3$

13 marks

Unit 4th. Trigonometry

Trigonometric ratios of allied angles (without proof). sum, difference formulae and their applications. Solution of trigonometric equations. **11 marks**

Term 2nd

Unit 5th. Permutations, Combinations & Binomial theorem

Factorial notation, fundamental principle of counting. Meaning of P (n, r) & C (n, r) and their relations with simple applications.

Binomial theorem for any index. General term, middle term/s of a Binomial Expansion. Applications of binomial expansion. **15 marks**

Unit 6th. Co-ordinate Geometry

2-Dimensional Geometry: Applications of section formula (centriod, incentre and orthocenter of a triangle). Equation of straight line in various forms. condition of perpendicularity and parallelism.

Equation of a circle in general and standard form and in diametric form.

3-Dimensional Geometry: Distance formula, Section formula, direction cosines and direction ratios. Projection of a line with respect to another line. Angle between two lines. **13 marks**

Unit 7th. Probability

Random experiment and sample space. Event of a sample space and its various types. Axiomatic probability. **12 marks**

Unit 8th. Vectors

Definition of a vector & its representation, types of vectors, components of a vector, Addition of vectors, scalar (or dot) product of vectors, Vector (or cross) product of vectors, Scalar tripple product (Geometrical representation). **10 marks**

Note: Term 1st shall comprise:

U_1 = 15 marks

T_1 = 35 marks

Term 2nd shall comprise:

U_2 = 15 marks

T_2 = 35 marks

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Code : 224

ISLAMIC STUDIES

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Islamic education is divided into what is called individual and social education. Individual education aims at familiarizing the individual with:

a.   his relation with the Creator of the universe;

b.   his individual responsibilities in life;

c.   his responsibility towards the human community;

d.   his social relations;

e.   his relation to other creatures;

f.   his relationship to the universe and universal phenomena and exploration of nature's laws in order to utilize and exploit them for the welfare of mankind;

g.   His Masters creative wisdom apparent in His creation.

Islamic Studies curricula also aims at:

1.   Building a society of good, pious and God-fearing individuals where social justice prevails;

2.   Building a society where tolerence, co-existence, brotherhood, love, mercy, goodness and righteousness are predominant;

3.   Building a society based on mutual consultation and the maximum exploitation of the individual's intellectual capacities;

4.   Building a society where individuals enjoy freedom of thought and are competent to take responsibility;

5.   Building a society where individuals can live an ideal, pure and prosperous life.

ISLAMIC STUDIES

1st TERM COURSE

Total Marks: 50   **Time: 2:30 hours**

UNIT I: Islamic Studies: Definitions and Scope   10 Marks

a.   Islamic Studies: Definitions

b.   Nature of Islamic Studies

c.   Basic sources of Islamic Studies (The Qur'an and the Sunnah)

d.   Scope of Islamic Studies

UNIT II: Faith in Islam and its Articles   10 Marks

a.   Islam: the Divine Religion

b.   Faith (Iman): Definition

c.   Faith in Allah

d.   Faith in Divine Books

UNIT III: Prophethood (*Risalah*) in Islam   10 Marks

a.   Concept of prophethood (Necessity and divine sanction)

b.   Role of Prophets in human society:

        i. Educational and   ii. As Reformers

c.   Early Prophets and their universal message

d.   Introduction to some prominent prophets:

        i. Adam (AS)   ii. Ibrahim (AS)   iii. Yusuf (AS)

        iv. Musa (AS)   v. 'Isa(AS),

UNIT IV: Man in the Universe   10 Marks

a.   Allah, the Creator and the Master of universe.

b.   Creation of universe: purposes

c.   Status of man (Vicegerency)

UNIT V: Faith in Practice   10 Marks

a.   Impact of Faith upon the behavior of an individual

b.   Sense of responsibility and accountability (consciousness, dutifulness and sincerity)

c.   The social behavior of God-conscious persons (Piety, honesty, modesty and kindness).

SECOND TERM COURSE

Total Marks: 50   **Time: 2:30 hour**

Unit VI: Life of Prophet Muhammad (SAW) at Makkah   10 Marks

a.   Prior to *Nabuwwah*: birth, childhood, marriage and the construction of Ka'bah

b.   *Nabuwwah* and its proclamation

c.   Post-*Nabuwwah*: major events

d.   *Hijrah* of the Prophet (SAW)

Unit-VII: Life of Prophet Muhammad (SAW) at Madinah   10 Marks

a.   Emergence of Muslim community

b.   Characteristics of Muslim community:
    i.   Brotherhood (*muakhat*)
    ii.   Generosity (*sakhawat*)
    iii. Sincerity (*Ikhlas*)

Unit-VIII: Treatment Towards Other Communities   10 Marks

a.   Jews

b.   Christians

c.   Mushrikin

d.   Importance of the treaties with other communities

Unit-IX: Da'wah and other Developments   10 Marks

a.   Preaching of Islam at Madinah

b.   Treaty of *Hudaybiyah*

c.   Conquest of Makkah

d.   The sermon of *Hajjat-ul-Wida* and its significance

e.   Muhammad (SAW) the seal of Prophethood

Unit-X: The Day to Day Life of the Prophet (a brief account)   10 Marks

a.   Worship (*Salah and Sawm*)

b.   Family life

c.   Treatment towards the neighbours

d.   Treatment towards orphans and the weaker sections of the society

NOTE: The examination shall be conducted in two Terms i.e. Term I and Term II. Each term shall carry 35 Marks. However, 15 Marks shall be awarded to Unit test in each Term leaving only a Maximum Marks of 35 for each Term. U$_1$ shall be followed by Term I and U$_2$ shall be followed by Term II. Each Unit test shall carry 15 marks. T$_1$ shall also include U$_1$ and T$_2$ shall also include U$_2$.

Textbooks Suggested

1. *Introduction to Islam* by Dr. Hamidullah, Kitab Bhawan, Delhi.

2. *Islam at a Glance* by Sadruddin Islahi, Markazi Maktaba Islami, Delhi.

3. *The Noble Life of Muhammad (SAW)* by Muhammad Abdul Hai, Al-Hasanad Books, Delhi.

4. Muhammad Shaltut, "Islamic Beliefs and Code of Life", in *Islam: The Straight Path,* edited by Kenneth W. Morgan, Motilal Banarasidas, Delhi.

Code : 225

VEDIC STUDIES

Term First Course

Total Marks : 50

Unit	I	Vedic Studies - Definition and Scope	13 Marks
Unit	II	Origin of Vedas	13 Marks
Unit	III	Vedic gods and goddesses	11 Marks
Unit	IV	The Later Vedic Literature	13 Marks

Term Second Course

Total Marks : 50

Unit	V	Vedic Society	10 Marks
Unit	VI	Role and Status of Women	10 Marks
Unit	VII	Polity and Administration	10 Marks
Unit	VIII	Economic Life	10 Marks
Unit	IX	Vedic Values	10 Marks

Book Prescribed :

Vedic Studies Part-I

Published by Jammu and Kashmir State Board of School Education

TERM FIRST COURSE

Total Marks : 50   **Time : 2½ Hours**

Unit I :   **Vedic Studies : Definition and Scope**   **13 Marks**

      (i)   Definition and Scope of Vedic Studies

      (ii)   What is Veda?

      (iii)   Importance of Vedas

      (iv)   The Vedas - Rigveda, Yajurveda, Samveda and Atharva Veda

Unit II: **Origin of Vedas**   **13 Marks**

      (i)   Paurusheya or Apaurusheya

      (ii)   Rishis and Rishikas.

Unit III: **Vedic gods and goddesses**   **11 Marks**

      (i)   The nature and classification of the Vedic gods

            (a) Terrestrial

            (b) Aerial or Intermediate

            (c) Celestial

      (ii)   Pantheism and Monotheism

Unit IV :   **The Later Vedic Literature**   **13 Marks**

      (i)   The Brahmanas

      (ii)   The Aranyakas

      (iii)   The Upanishads

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TERM SECOND COURSE

Total : 50 marks   **Time : 2½ hours**

Unit V :   **Vedic Society**   **10 Marks**

(i)   Family, Vish (Clan), Jana (Tribe) Varnas.

(ii)   Education, Dress, Food and Drinks.

(iii)   Habits and customs, Manners and the four Ashramas.

Unit VI: **Role and Status of Women**   **10 Marks**

(i)   Right to Education.

(ii)   Institution of Marriage & Women.

(iii)   Position of Widow.

(iv)   Proprietary Rights.

Unit VII: **Polity and Administration**   **10 Marks**

(i)   The Nature of the State-Monarchical and Republican.

(ii)   The Vedic Kings and Chief Officials.

(iii)   Popular Assemblies.

Unit VIII: **Economic Life**   **10 Marks**

(i)   Agriculture and Cattle rearing.

(ii)   Occupations and Industries

(iii)   Trade and Commerce

Unit IX: **Vedic Values**   **10 Marks**

(i)   Social Values   (ii) Ethical Values

Note: Term 1st shall comprise:

U_1 = 15 marks
T_1 = 35 marks

Term 2nd shall comprise:

U_2 = 15 marks
T_2 = 35 marks

Code : 247

BUDDHIST STUDIES

FIRST TERM COURSE

Unit Wise Weightage

Unit		Marks
I	Life of Gautama Buddha	10
II	Buddhist Councils	10
III	Royal Patronage to Buddhism	10
IV	Introduction of Buddhism to J&K State	10
V	Buddhist Sites in J&K State	10

SECOND TERM COURSE

Unit Wise Weightage

Unit		Marks
I	Four Noble Truths	10
II	Eight Fold Path	10
III	Law of Dependent Origination	10
IV	Four Phenomena (Anitya, Duhkha, Anatma and Nirvana)	10
V	Four States of Sublime Living	10

First Term Course

Max. Marks: 50 Marks   **Time: 2 ½ hours**

Unit - I   **Life of Gautama Buddha**   **10 Marks**

i.   Birth

ii.   Renunciation

iii.   Enlightenment

iv.   Dharmachakraprarvartana

v.   Mahaparinirvana

Unit-II   **Buddhist Councils**   **10 Marks**

i.   First Buddhist Council

ii.   Second Buddhist Council

iii.   Third Buddhist Council

Unit - III   **Royal Patronage to Buddhism**   **10 Marks**

i.   Ashoka

ii.   Menander

iii.   Kanishka

iv.   Lalitaditya

Unit - IV   **Introduction of Buddhism to J&K State** **10 Marks**

i.   Introduction of Buddhism in Kashmir

ii.   Introduction of Buddhism in Jammu

iii.   Introduction of Buddhism in Ladakh

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Unit - V   Buddhist Sites of J & K State   10 Marks

    i.   Sites in Jammu Region: Ambaran (Akhnoor), Paddar (Kishtwar),

    ii.   Sites in Kashmir Valley: Parihaspur, Harwan, Pandrethan, Ushkur

    iii.   Sites in Ladakh: Alchi, Thiksay, Hemis, Matho, Dakthog.

SECOND TERM COURSE

Detailed Syllabus

Max. Marks: 50 Marks   **Time: 2 ½ hours**

Unit - I: Four Noble Truths   10 Marks

    i.   Suffering

    ii.   Cause of Suffering

    iii.   Cessation of Suffering

    iv.   Path Leading to the Cessation of Suffering

Unit-II   Eight Fold Path   10 Marks

    i.   Right View

    ii.   Right Determination

    iii.   Right Speech

    iv.   Right Action

    v.   Right Livelihood

    vi.   Right Effort

    vii.   Right Awareness

    viii.   Right Concentration

Unit- III   Law of Dependent Origination   10 Marks

      i.   Nature of Twelve Link

      ii.   Affliction

      iii.   Action

      iv.   Resultant of Karmic Forces

Unit - VI   Four Phenomena   10 Marks

      i.   Anitya (Impermanence)

      ii.   Duhkha (Suffering)

      iii.   Anatma (No Soul)

      iv.   Nirvana (Emancipation)

Unit - V   Four States of Sublime Living   10 Marks

      i.   Maitri (Friendliness)

      ii.   Karuna (Compassion)

      iii.   Mudita (Happiness)

      iv.   Upeksha (Equanimity)

Note: Term 1st shall comprise:

$$U_1 = 15 \text{ marks}$$
$$T_1 = 35 \text{ marks}$$

Term 2nd shall comprise:

$$U_2 = 15 \text{ marks}$$
$$T_2 = 35 \text{ marks}$$

Code : 226

COMPUTER SCIENCE

Max : Marks: 35   **Time: 2½ Hours**

TERM 1

UNIT 1: COMPUTER FUNDAMENTALS

Evolution of computers; Basics of computer and its operation: Functional Components and their interconnections, concept of Booting.

Software Concepts:

Types of Software - System Software, Utility Software and Application Software;

System Software: Operating System, Compilers, Interpreters and Assembler;

Utility Software : Anti-Virus, File Management tools, Compression tools and Disk Management tools (Disk Cleanup, Disk Defragmenter, Backup);

Application Software as a tool: Word Processor, Presentation tools, Spreadsheet Package, Database Management System; Business software (for example: School Management System, Inventory Management System, Payroll System, Financial Accounting, Hotel Management, and Reservation System);   **6 Marks**

UNIT 2: Operating System

Need for operating system, Functions of Operating System (Processor Management, Memory Management, File Management and Device Management), Types of operating system - Interactive (GUI based), Time Sharing, Real Time and Distributed; Commonly used operating systems:

LINUX, Windows, Bharti OO, Solaris, UNIX;

Illustration and practice of the following tasks using any one of the above Operating Systems:

◆ Opening / Closing Windows

- Creating / Moving / Deleting Files / Folders

- Renaming Files / Folders

- Switching between Tasks

Number System : Binary, Octal, Decimal, Hexadecimal and conversion between two different number systems;

Internal Storage encoding of Characters: ASCII, ISCII (Indian scripts Standard Code for Information Interchange), and UNICODE;

Microprocessor : Basic concepts, Clock speed (MHz, GHz), 16 bit, 32 bit, 64 bit processors; Types

- CISC, RISC;

Memory Concepts :

Units : Byte, Kilo Byte, Mega Byte, Giga Byte, Tera Byte, Peta Byte

Primary Memory : Cache, RAM, ROM,

Secondary Memory : Hard Disk Drive, CD / DVD Drive, Pen Drive, Blue Ray Disk;

Input Output Ports / Connections: Serial, Parallel and Universal Serial Bus, PS-2 Port, Infrared port, Bluetooth.   **6 Marks**

PROGRAMMING METHODOLOGY

General Concepts; Modular approach; Clarity and Simplicity of Expressions, Use of proper names for identifiers, Comments, Indentation; Documentation and Program Maintenance; Running and Debugging programs, Syntax Errors, Run-Time Errors, Logical Errors; Problem Solving Methodology and Techniques: Understanding of the problem, Identifying minimum number of inputs required for output, Step by step solution for the problem, breaking down solution into simple steps, Identification of arithmetic and logical operations required for solution, Using Control Structure: Conditional control and looping (finite and infinite)   **23 Marks**

TERM II

Max. Marks: 35   **Duration: 2½ Hours**

UNIT 3: INTRODUCTION TO C++

Getting Started:

C++ character set, C++ Tokens (Identifiers, Keywords, Constants, Operators), Structure of a C++ Program (include files, main function); Header files - iostream.h, iomanip.h; **cout, cin;** Use of I/O operators (<< and >>), Use of end and set w ( ), Cascading of I/O operators, Error Messages; Use of editor, basic commands of editor, compilation, linking and execution; standard input/ output operations from C language: gets(), puts() of stdio.h header file;

Data Types, Variables and Constants:

Concept of Data types; Built-in Data types: char, int, float and double; Constants: Integer Constants, Character Constants (Backslash character constants - \n, \t), Floating Point Constants, String Constants; Access modifier: const; Variables of built-in data types, Declaration/ Initialisation of variables, Assignment statement; Type modifier: signed, unsigned, long;

Operators and Expressions:

Operators: Arithmetic operators (–,+,*,/,%), Unary operator (-), Increment and Decrement Operators (–,++), Relational operators (>,>=,<,<=,==,!=), Logical operators (!, & ||), Conditional operator:<condition>?<if true>:<else>; Precedence of Operators; Expressions; Automatic type conversion in expressions, Type casting; C++ shorthand's (+=, -=, *=, /=,%=);   **6 Marks**

UNIT 4: PROGRAMMING IN C++

Flow of control:

Conditional statements: if-else, Nested if, switch..case..default, Nested switch..case, break statement (to be used in switch..case only); Loops: while, do - while , for and Nested loops;

String Functions:

Header File: string.h

Function: **isalnum(), isalpha(), isdigit(), islower(), isupper(), tolower(), toupper();**

Character Functions:

Header File: c type.h

Functions: **isalnum(), isalpha(), isdigit(), islower(), isupper(), tolower(), toupper(), strcpy(), strcat(), strlen(), strcmp(), strcmpi();**

Mathematical Functions:

Header File-math.h, stdlib.h;

Functions: fabs(), log(), log10(), pow(), sqrt(), sin(), cos(), abs(),

Other Functions:

Header File- stdlib.h;

Functions: **randomize(), random();**   **6 Marks**

UNIT 5 : USER DEFINED FUNCTIONS:

Defining a function; function prototype, Invoking/calling a function, passing arguments to function, specifying argument data types, default argument, constant argument, call by value, call by reference, returning values from a function, calling functions with arrays, scope rules of functions and variables; local and global variables;

Structured Data Type: Array

Declaration/initialization of One-dimensional array, Inputting array elements, Accessing array elements, Manipulation of Array elements (sum of elements, product of elements, average of elements, linear search, finding

maximum/minimum value); Declaration/Initialization of a String, string manipulations (counting vowels/consonants/digits/ special characters, case conversion, reversing a string, reversing each word of a string);

Two-dimensional Array :

Declaration/initialization of a two-dimensional array, inputting array elements Accessing array elements, Manipulation of Array elements (sum of row element, column elements, diagonal elements, finding maximum/minimum values);

User-defined Data Types

Need for User defined data type:

Defining a symbol name using type def keyword and defining a macro using #define directive.

Structures:

Defining a Structure, Declaring structure variables, Accessing structure elements, passing structure of Functions as value and reference argument/parameter, Function returning structure, Array of structures, passing an array of structure as an argument/ a parameter to a function.   **23 Marks**

(Practical)

Total Marks: 30   **Time: 2½ hours**

1. Programming in C++

One programming problem in C++ to be developed and tested in Computer during the examination. Marks are allotted on the basis of following:

Logic

Documentation/Indentation

Output presentation

2.   Project Work

Problems related to String, Number and Array manipulation;

General Guidelines: Initial Requirement, developing an interface for user (it is advised to use text based interface screen), developing logic for playing the game and developing logic for scoring points

1.   Memory Game : A number guessing game with application of 2 dimensional arrays containing randomly generated numbers in pairs hidden inside boxes.

2.   Cross 'N Knots Game : A regular tic-tac-toe game

3.   Hollywood/Hangman: A word guessing game

4.   Cows 'N Bulls : A word/number guessing game

Similar projects may be undertaken in other domains

3. Practical File

◆   **Must have minimum 15 programs from the topics covered in class XI course.**

- ◆   5 Programs on Control structures
- ◆   4 Programs on Array Manipulations
- ◆   4 Programs on String Manipulations
- ◆   2 Programs on structure manipulations

4. Viva-voce

Viva will be asked from syllabus covered in class XI and the project developed by student.

Code : 227

INFORMATICS PRACTICES

M: Marks= 35   **Time: 2½ Hours**

Term I

UNIT 1: COMPUTER SYSTEM AND BUSINESS APPLICATIONS

Evolution of computers; Basics of computer and its operation: Functional Components and their inter-connections, concept of Booting; Hardware concepts:

Diagram illustrating main parts of computers; Central Processing Unit (CPU): Arithmetic Logic Unit (ALU), Control Unit, Memory Unit (RAM - Random Access Memory & ROM - Read Only Memory)

Role of Input, Processing and Output Devices in a computer system

Input devices: Keyboard, Mouse, Light pen, Touch Screens, Graphics Tablets, Joystick, Mic, MICR, OCR, Scanner, Smart Card reader, Barcode reader, Biometric sensor, web camera, digital camera;

Output Devices: Monitor/Visual Display Unit (VDU), Printer (Dot Matrix Printer, Desk jet/ Ink jet/ Bubble jet Printer, Laser Printer), Plotter, Speaker,

Secondary Storage Devices: Floppy Disk, Hard Disk, Compact Disk, Magnetic Tape, Digital Video Disk (DVD), Zip Drive; Units of Memory: Bit (Binary Digit), Byte, Kilobyte, Megabyte, Gigabyte.

Software Concepts:

Types of Software: System Software, Utility Software and Application Software.

System Software: Operating System, Language Compilers, Interpreters and Assembler;

Operating System: Need of operating systems, Functions of Operating System Types of operating system. Utility Software: Compression tools, Anti Virus, File Management tools and Disk Management tools;

Application Software as a tool: Word Processor, Presentation Tool,

Spreadsheet Package,

Database Management System; Business software (for example: Inventory Management System,

Payroll System, Financial Accounting, Hotel Management, and Reservation System);

Development of programming languages - Machine Language, Assembly Language, High Level Language (BASIC, COBOL, FORTRAN, PASCAL, C++); GUI based languages - Visual Basic,

Visual C++; C#, Java, vb.net. **06 Marks**

Unit II   GUI Operating System

Important: Students/Teachers can also perform similar operation on any operating system. It is advised that the teacher while using any one operating system, give a demonstration of equivalent features for the other operating system.

Windows

General features, Elements of Desktop - Taskbar, Icon, Start button, Shortcuts, Folder, Recycle Bin, My Computer; Start Menu: Program, Documents, Settings, Find/Search, Help, Run, Shut Down/Logoff; Customization of Taskbar, start menu, Display properties (Wallpaper, Font Settings, Color Settings, Screen Savers);

Program Menu: Accessories - Calculator, Notepad, Paint, Word pad, Entertainments (CD Player, Sound Recorder, Media Player, Volume Controller); Internet Browsers - Mozilla Firefox, Internet Explorer, Netscape Navigator.

Control Panel: Add new hardware; Add new Software, Printer Installation, Date/Time, Mouse, and Regional Settings.

Documentation

Purpose of using word processing software, opening a new/existing document, closing a document, typing in a document, saving a document, print preview, printing a document, setting up of page as per the specifications, selecting a portion of document, copying selected text, cutting selected text, pasting selected text; changing font, size, style, color of text; Inserting symbol; Formatting: Alignment - Left, Right, Center; Justification; Industries and Business Computing: Types of Industries (Production, Shipping, Travel, Hotel, Insurance, Construction, Automobile), Applications of Business Computing in Industries.   **06 Marks**

INTRODUCTION TO PROGRAMMING

Programming Methodology:

General Concepts; Modular approach; Stylistic Guidelines: Clarity and Simplicity of Expressions, Names, Comments, Indentation; Documentation and Program Maintenance; Running and Debugging programs, Syntax Errors, Run-Time Errors, Logical Errors; Problem Solving Methodology and Techniques: Understanding of the problem, Identifying minimum number of inputs required for output, Step by step solution for the problem, breaking down solution into simple steps, Identification of arithmetic and logical operations required for solution, Using Control Structure: Conditional control and looping (finite and infinite);

Programming Tool: Visual Basic

Introduction to Programming - Modular Programming, Object Oriented Programming, Event Driven Programming; About Visual Basic (Object Based Programming Language), Rapid Application Development using Visual Basic; Concept of Project in Visual Basic, VB Project Options - Standard EXE, ActiveX DLL, ActiveX EXE, ActiveX Control, ActiveX Document DLL, ActiveX Document EXE, Addin, VB Application Wizard, IIS Application, DHTML Application; Getting Familiar with Visual Basic User Interface - Pull-Down menus, Toolbar, Toolbox,

Project Explorer, Properties Window, Form Layout window, Form, Immediate window; Opening and Closing windows, Resizing and moving windows, Docking windows; Quitting Visual Basic; Visual Basic Tool Box (Standard Window Controls) - Pointer, Picture Box, Label, Text Box, Frame, Command Button, Check Box, Option Button, Combo Box, List Box, Horizontal Scrollbar, Vertical Scrollbar, Timer, Drive List box, Directory List box, File List box, Shape, Line, Image, Data, OLE; Object Naming Conventions, Event Procedures

23 Marks

Term II

M: Marks= 35   **Time: 2½ Hours**

Unit III   Programming Fundamentals

Data Types: Integer, Long, Single, Double, Currency, String, Byte, Boolean, Date, Object, Variant; Variables: Need to use variable, Declaring Variables, Variable Naming Convention, Assigning value to Variables, Data Types of variable, Scope and lifetime of Variables (Public and Private);

Control Structures:

Decision Structure - IF, IF-THEN-ELSE, Select Case;

Looping Structure- Do While…Loop, Do…Loop While, For…Next, For Each…Next;

Menu Editor: Concept of Menus, Shortcut menus and Popup menus Designing Menu System, Menu Editor Dialog Box Options (Name, Index, Shortcut, HelpContextID, Negotiate Position, Checked, Enabled, Visible, WindowList, Right Arrow, Left Arrow, Up Arrow, Down Arrow, Menu List, Next, Insert, Delete, OK, Cancel), To Create Menu Controls in the Menu Editor, Menu Naming Conventions, Setting the Name Property, Creating a Menu Control Array, Creating Sub Menus, Separating Menu Controls, Assigning Access Keys and Shortcut Keys, Controlling Menus at Runtime-Enabling and Disabling Menu Commands, Displaying a Checkmark on a Menu Control, Making a Menu

Control Invisible, Adding Menu Control at Runtime, Displaying Pop-Up Menu; General Controls (Advance): Image List, Common Dialog Box, ADO DC, DB Combo, Media Player Control, DB Grid; Adding a Toolbar: Creating an Image List, Adding Images to the Toolbar, To Add Code for the Toolbar Buttons; Adding Status Bar: Adding Status Bar panels, Adding Time on the panel. Dialog Boxes: Pre-defined dialog box, Custom dialog box;   **06 Marks**

UNIT IV RELATIONAL DATABASE MANAGEMENT SYSTEM

Database Management System

Introduction to database concepts: relation/Table, attribute, Tuple / Rows, field, Data, Concept of String, Number and Date values, Data type and Data Integrity (Domain and Referential Integrity). Candidate key, Alternate key, Primary Key, Foreign Keys; Data Normalization-first, second, third, BCNF normal form; Examples of Commercially available Database Management System's (Back End) - Oracle, MSSQL Server, DB2, MySQL, Sybase, INGRES.

Examples of Front End Software's: Oracle Developer, Visual Basic, Visual C++, Power Builder, Delphi.   **06 Marks**

RDBMS Tool:

Interface with Oracle, Login Screen, Entering Name and Password; Classification of SQL

Statements : DML (SELECT, INSERT, UPDATE, DELETE), DDL (CREATE, DROP, ALTER, RENAME, TRUNCATE), DCL (GRANT, REVOKE), TCL (COMMIT, ROLLBACK); SQL SELECT Statement: SQL SELECT statement, Selecting All the Columns, Selecting Specific Column, Column Heading Default, Using Arithmetic Operators, Operator Precedence, Significance of NULL value, NULL values in Arithmetic Expressions, Defining and using Column Alias, Concatenation Operator (||), Duplicate rows and their Elimination (DISTINCT keyword), Role of SQL and SQL*Plus in interacting with RDBMS, Displaying Table Structure (DESC command); SELECT Statement Continued: Limiting Rows during selection (using WHERE clause), Working with Character Strings

and Dates, Using Comparison operators, BETWEEN Operator, IN Operator, LIKE Operator, IS NULL Comparison, Logical Operators, Use of Logical Operators (AND/OR/NOT Operators), Logical Operator Precedence, ORDER BY Clause, Sorting in Ascending/Descending Order, Sorting By Column Alias Name, Sorting On Multiple Columns; Functions: SQL Functions, Types of SQL Function (Single Row/Multiple Row), Single Row SQL Functions, Character Functions (Case Conversion/Character Manipulation), Case Conversion Functions (lower (), InitCap (), UPPER ()) Character Manipulation Function (CONCAT(), INSTR(), LENGTH(), TRIM(), SUBSTR(), LPAD()), Number Functions (ROUND(), TRUNC(), MOD()), Working with Dates (LAST_DAY(), MONTHS_BETWEEN(), NEXT_DAY(), ADD_MONTHS(), ROUND(), TRUNC()) Arithmetic Operation on Dates, Date Functions and their Usage, Data type Conversion Functions, Implicit and Explicit Conversion, TO_CHAR Function with Dates, TO_CHAR Function For Numbers, TO_NUMBER and TO_DATE Functions, NVL Function and its Usage, DECODE Function and its Usage; Grouping Records: Concept of Grouping Records and Nested Grouping, Nested Grouping of records, Group Functions, Types of group functions (MAX(), MIN(), AVG(), SUM(), COUNT()), Using AVG and SUM Functions, Using MIN and MAX Functions, Using the COUNT Function, using COUNT(*), DISTINCT clause with COUNT, Group Functions and Null Values, Using NVL Function with Group Functions, Grouping Records: Group By Clause, Grouping By More than One Column, Illegal Queries with Group By Clause, Excluding Group Results: Having Clause, Nesting Group Functions, Sub Queries: Concept of Sub-Query, Sub Query to Solve a Problem, Guidelines for Using Sub Queries, Types of Sub Queries (Single Row and Multiple Row) and (Single Column and Multiple Column); Single Row Sub-Query and its Execution; Displaying Data From Multiple Tables: Concept of Join, Result of Join, Cartesian Product and Generating Cartesian Product example using Mathematical Set), Types Of Joins (EQUI, SELF, NON-EQUI,OUTER (LEFT and RIGHT)), Equi-join: Retrieving Records with Equi-join, Additional Search Conditions using AND operator, Short Naming Convention for Tables (Table Aliases), Non-Equi join and its

Implementation, Outer-Join and Its Usage, Self-Join (Joining a table to Itself); Manipulating Data of A Table/Relation: Concept of DML (Data Manipulation Language), INSERT Statement, Inserting New Rows, Inserting New Rows with Null Values, Inserting Date Values, Use of Substitution Variable to Insert Values, Copying Rows From Another Table, Update Statement to Change Existing Data of a Table, Updating Rows In A Table, Updating Rows Based on Another Table, Delete statement/ Removing Row/Rows from a Table, Deleting Rows Based on condition from another Table; Making Data Manipulation Permanent (COMMIT). Undo Data Manipulation Changes (ROLLBACK) Database Objects: View, Table, Sequence, index, and Synonyms, DDL (Data Definition Language), Naming Convention, Creating Views, Creating Synonyms, Simple Views and Complex Views, Retrieving Data From a View, Querying a View, Modifying a View, Including Constraints: Constraints, Concept of using Constraints, Constraint Guidelines, Defining Constraints, NOT NULL, UNIQUE KEY, PRIMARY KEY, FOREIGN KEY, FOREIGN KEY Constraint Keywords, CHECK, Adding a Constraint, Dropping a Constraint, Disabling Constraints, Enabling Constraints, Viewing Constraints, Viewing The Columns, Associated with Constraints; Creation of a Table/Relation: CREATE TABLE Statement, Data types, The DEFAULT option, Creating Tables, Referencing Another User's Tables, Querying the Database Dictionary to view all tables in the Oracle Database, Creating a Table by Using a Sub-Query; Managing Existing Tables and other Database Objects: The ALTER TABLE Statement, Adding a New Column in a Table, Modifying Existing Column, Dropping a Column, Renaming an Object, Truncating a Table, Adding Comments to a Table, Dropping Views, Dropping Synonyms, Dropping Tables; giving permission to other users to work on Created Tables and Revoking it (GRANT and REVOKE statement).

23 Marks

Practical

Total Marks: 30   **Time: 3 Hours**

1.   Hands on Experience

A problem should be given covering the following

- Table definition (The table must include constraints)

- A form with Label, Text, Command Button control, List Box, Drive List Box,

Directory List Box, File List Box, Tool and Menu Bar (Any 4)

- DSN to access tables in the database

- For data connectivity (Activex Database Control)

- Change of Text box Control Properties to view Database fields

2.   Practical File

The practical file should contain print outs from each of the following topics.

1. Create an application using Visual Basic with a Text Box control to accept a name from the user and print "Hello <Name>" in a message box. E.g. when user types his name as "Kamal Kant" in the text box and clicks OK button, a message "Hello Kamal Kant should be displayed and if he clicks on Cancel button a message as "Bye Kamal Kant" should appear.

2. Create an Application having two Text Boxes on the Window. Get Title, First Name and Last Name in it. On clicking Ok button a message should appear by joining Title + First Name + Last Name. e.g. if user enters Prof. in Title, Rajyash in First Name, and Swami as Last Name then the message to be printed should be " Happy Deepawli Prof. Rajyash Swami".

3. Create an application to let user guess any number and click a Play button given on the form. On clicking the Play button the application will generate a random number. If the generated number is same as guessed by the user then display a message "You Win" otherwise display a message "You Lose".

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4. Create an application to Display Image files kept in different folders in the system. The application should allow the user to navigate in the folders and list all Image Files (*.BMP, *.JPG) when ever a image file is selected it should get that picture displayed in an Image control.

5. Create an application having menu bar and tool bar to create a text file, navigate and open text files, edit text file and save changes made by the user.

6. Create a small application working as a general purpose calculator.(+, -, x, ÷)

7. SQL assignments (based on Demo Tables present in the ORACLE database for example Emp table, Dept table and SalGrade table):

   ➢ Display all the records (all columns) from table Emp.

   ➢ Display EmpNo and EName of all employees from table Emp.

   ➢ Display Ename, Sal and Sal added with Comm from table Emp.

   ➢ Display EName joined with Job with heading "Employee", Sal*12 as "Total Salary" from table Emp.

   ➢ Display distinct Sal of employees from table Emp.

   ➢ Show the Structure of table Dept.

   ➢ Write a query to display EName and Sal of Employees whose salary is greater than or equal to 3000 from table Emp.

   ➢ Write a Query to display employee name, salary and department number who are not getting commission from table Emp.

   ➢ Write a Query to display employee Number, name, sal and sal*12 as Annual Salary whose commission is not NULL from table Emp.

   ➢ Write a Query to display employee name and salary of those employee who don't have their salary in the range of 1500 to 2000

   ➢ Write a Query to display name, job, salary, and Hire Date of employees who are hired between February 20, 1981, and May 1, 1981. Order the query in ascending order of Hire Date.

- Write a Query to display the name and hire date of all employees who were hired in 1982.

- Write a Query to display the name, job title and salary of employee who do not have manager.

- Write a Query to display the name of employee whose name contains 'A' as third alphabet.

- Write a Query to display the name of employee whose name contains 'T' as the last alphabet.

- Write a Query to display the name of employee whose name contains 'M' as first alphabet 'L' as third alphabet.

- Write a Query to display the name of employee who is having 'L' as any alphabet of the name.

- Write a query to display the current system date.

- Write a Query to display employee number, name, salary, salary increase by 15% expressed as a whole number. Label the column as New Salary.

- Write a Query to display the employee's name and salary review date, which is the date after six months of Hire Date.

- Write a Query to display the employee's name and salary review date, which is the date after six months of Hire Date in format of 'Sunday, 7 SEP, 1981'.

- For each employee display employee name and total number of weeks lapsed between Hire Date and Today.

- For each employee display employee name and total number of days lapsed between Hire Date and Today.

- Create a query that produces display in the following format <employee name> Earns $<salary> Monthly and working as <Job >

- Write a query which displays the employee name with the first letter capitalized and all other letters lower case and length of their name string.

> ➢ Write a Query to display the employee name and commission amount. If the employee does not earn commission, put "No Commission".

> ➢ Write a query to display the grade of all employees based on the value of the column job as per following scheme:

JOB GRADE

PRESIDENT A

MANAGER B

ANALYST C

SALESMAN D

CLERK E

NONE OF THE ABOVE

> ➢ Write a query to display the E Name and Dept No and D Name for all employees using tables Emp and Dept.

> ➢ Write a Query to display employee name, department name and location of all employees who have manager number between 7500 and 7900.

> ➢ Write a Query to display the employee name, department number and all the employees that worked in the same department as a given employee.

> ➢ Write a Query to display employee name and HireDate of employees who are employed after Employee 'BLAKE'.

> ➢ Write a Query to display employee number, name and manager's name with their manager number.

> ➢ Write a Query to Display the Sum, Average, Highest and Lowest salary of the employees.

> ➢ Write a Query to Display the Sum, Average, Highest and Lowest salary of the employees grouped by department number.

> ➢ Write a Query to Display the Sum, Average, Highest and Lowest salary of the employees grouped by department number and sub-grouped by job.

- Write a query to display the number of employee with same job.

- Write a query to display the average of Highest and lowest salary of each department.

- Write a query to display the difference of Highest and lowest salary of each department having maximum salary > 4000.

- Write a query to display the employee name and job for all employee in the same department as 'ALLEN'· Write a query to display employee name and salary of those who either work in department 10 or have salary greater than employee 7521.

- Before the following exercise please ensure that you are provided with a table Employee with following description

Table: Employee

Name of Column Type

ID NUMBER (4)

First_Name VARCHAR2 (30)

Last_Name VARCHAR2 (30)

User_ID VARCHAR2 (10)

Salary NUMBER (9,2)

- Use DESCRIBE command to ensure the table structure.

- Add the following data in the above Table as instructed ID First_Name Last_Name User_ID Salary

1   Dim Joseph J dim 5000

2   Kamal Mishra jkmishra 4000

3   Siddharth Mishra smishra 8000

4   Shankar Giri sgiri 7000

5   Gautam Buddha bgautam 2000

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- Populate table with first record mentioning the column list in the insert clause.

- Populate table with next two records without mentioning the column list in the insert clause.

- Populate table with 4th record and enter only ID and First_Name

- Populate table with 5th record and enter ID, User_ID, and Last_Name only.

- For record with ID = 4 update record with Last_Name User_ID and Salary.

- For record with ID = 5 update records with First_Name and Salary.

- Make the changes permanent.

- Modify the Last_Name, of the employee 3, to Adana.

- Modify the Salary and increase it by 1000, for all who get salary less then 5000.

- Delete the employee record having First_Name as Solomon.

- Make the changes permanent.

- Remove the entire contents of the table

- Undo the above step.

- Create a table Employee1 with columns ID, First_Name and Dept_ID from table Employee and also confirm the existence of table Employee1

- Create a view VU_Emp1 which should include column EmpNo, EName and Dept No from the table Emp.

- Create a view VU_Emp2 which should include column Emp No, E Name and Dept No from the table Emp and change the column headings as Emp Number, Employee, Department.

- Rename table Employee1 to Employee2.

- Drop table Employee2.

- Drop table Employee and Department

- Create table Customer as per following Table Instance Chart.

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- ➢ Select VIEW_NAME and TEXT from the data dictionary USER_VIEWS.
- ➢ Create the table Department table based on the following table instance chart.
- ➢ Populate the table Department with data from table dept. Including only required columns.
- ➢ Create the table Employee based on the following table instance chart.
- ➢ Add one column Email of data type VARCHAR2 and size 30 to the table Customer.
- ➢ Change the data type of column pin code to VARCHAR2(10) in the table Customer.
- ➢ Add one more column Customer Income Group of data type VARCHAR2(10).
- ➢ Insert few records with relevant information, in the table.
- ➢ Drop the column Customer Income Group from table Customer.
- ➢ Create table Department as per following Table Instance Chart.

Column Name ID Name

Data Type NUMBER VARCHAR2

Length 8 25

Column Name ID First_Name Last_Name Dept_ID

Data Type NUMBER VARCHAR2 VARCHAR2 NUMBER

Length 8 25 25 8

Column Name Cust_ID Cust_Name Cust_Add1 Cust_Add2 Pincode Cust_Phone

Key Type

Nulls/Unique

Fk Table

Fk Column

Datatype number varchar2 varchar2 varchar2 number varchar2

Length 7 30 20 30 6 10

Column Name DeptID DeptName DeptLocation

Key Type Primary

Nulls/Unique NOT NULL

Fk Table

Fk Column

Datatype NUMBER VARCHAR2 VARCHAR2

Length 2 20 20

> ➤ Create table Employee1 as per the above Table Instance Chart but now use table level primary key addition method.

> ➤ Create table Employee2 as per the above Table Instance Chart without any constraint while table creation.

> ➤ Add a PRIMARY KEY constraint to the table Employee2 using the EmpID column.

> ➤ Add a FOREIGN KEY reference on the Employee2 table that will ensure that employee records with nonexistent departments are to be prohibited.

> ➤ Confirm that constraints were added by querying Constraint_Name and Constraint from USER_CONSTRAINTS relation.

> ➤ Add a NOT NULL constraint to the table Emploee2 on column EmpName.

> ➤ Add a CHECK constraint to ensure, at the time of record insertion, that employee records with salary less than 2000 are to be prohibited.

> ➤ Disable NOT NULL Constraint on the column EmpName from the table Employee2

> ➤ Drop UNIQUE constraint from the column DeptName in table Department.

8. Create an application to list all the contents of a database table using a data

control object in visual basic.

➢ Create table Employee as per following Table Instance Chart.

Column Name EmpID EmpName EmpAdd Phone EmpSal DeptID

Key Type Primary Foreign

Nulls/Unique NOT NULL

Fk Table Department

Fk Column Dept_ID

Datatype number varchar2 varchar2 varchar2 number varchar2

Length 6 20 30 10 9,2 2

9.   Create an Application in Visual basic having Menu Bar tool bar and other controls to View, Add and Modify records present in the Database Tables.

3.   Project

The following case study is to be used to develop a team project.

A cable company in Delhi is working since 1998. They have about 2 Lac customers in different zones (North, South, East, and West). Company wants to to computerize its working, which involves Customer Registration, Customer Billing, and Bill Collection on monthly basis.

Develop a Database Handling Software for the company. The software should have option to enter customer data and information of bill collection. The data entry form should also have option to navigate through the records.

The software should allow to store following information of customer and billing (Normalize this to store data in tabular form).

Customer Name

Customer Address

Customer City

Customer Zone

Customer Pin Code

Customer Phone

Customer Interest (Movies, Games etc)

Customer Monthly Income

Customer Monthly Installment

Customer Joining Date

Bill Cycle

Bill Collection Date

(Suitable assumptions can be made)

The user interfaces should be designed in visual basic and must be user friendly with correct tab order.

Note: Similar type of cases can also be encouraged, provided it should include almost every aspect of course undertaken.

4.   Viva-voce

Five questions from topics covered in the curriculum.

Code : 233

BIOTECHNOLOGY

OBJECTIVES

The broad objectives of teaching Biotechnology at higher secondary level are:

(i)   To help the learners know and understand basic facts and concepts of the subject at elementary stage.

(ii)   To expose the students to different basic processes and basic techniques used in Biotechnology.

(iii)   To familiarize the learners to understand the relationship of the subject to health, nutrition, environment, agriculture and industry etc.

(iv)   To develop conceptual competence in the learners so as to cope up with professional courses in future career.

(v)   To acquaint students with different applications of Biotechnology in everyday life.

(vi)   To develop an interest in students to study Biotechnology as a discipline.

COURSE STRUCTURE

Term I :	35 marks	Practicals :	15 marks
Term II :	35 marks	Practicals :	15 marks

Term I

Time : 2½ hours   **50 marks**

Unit I :   Introduction to Biotechnology   17 marks

Chapter 1 :	Introduction	04 marks
Chapter 11 :	Biochemical Engineering and Fundamentals	10 marks
Chapter III :	Biotechnology and Society	03 marks

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Unit II	:	**Biomolecules**	**18 marks**
Chapter IV	:	Biomolecules: Structure and design	7 marks
Chapter V	:	Metabolism of Biomolecules	7 marks
Chapter VI	:	Biochemical Techniques	4 marks

Term II

Time : 2½ hours			**50 marks**
Unit III	:	**Cell and Development**	**17 Marks**
Chapter VII	:	Introduction to cell as a basic unit of life.	7 marks
Chapter VII	:	Cell growth and development	7 mark
Chapter IX	:	Cellular Techniques	3 marks
Unit IV	:	**Genetics and Molecular Biology**	**18 Marks**
Chapter X	:	Principles of Genetics	10 marks
Chapter XI	:	Genome Function	5 marks
Chapter XII	:	Genetical Techniques	3 marks

PRACTICALS = 30 MARKS

Note: Every student is required to do the following experiments during the academic session.

LIST OF EXPERIMENTS

Term 1ˢᵗ : Max. Marks 15

1. Personal safety and precautions.
2. Emergency treatment for Laboratory accidents.
3. Care and cleaning of glassware's, apparatus.
4. Operation of Autoclave, Incubator, Water Bath, pH meter, Vacuum pump, Centrifuge etc.

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5. Sterilization principle and methods - moist heat - dry heat and filtration methods.

6. Media preparation: Liquid media, solid media, Agar slants and plates.

Term 2nd: Max Marks 15

1. Preparation of buffers

2. pH determination

3. slide preparation of bacterial strains

4. Protein estimation methods

        a. Lowrey's

        b. Biurrete

5. Molish test for estimation of carbohydrates.

NOTE: - Besides the above experiments the students are required to have field work and visit Indian Institute of Integrative Medicine (Formerly RRL) of Jammu / Sanatnagar, Srinagar, Biotechnology Laboratories J&K Universities.

Book Prescribed: A Textbook of Biotechnology for class XI by K. Kanan, published by J&K State BOSE in Collaboration with Foundation Books Pvt Ltd., New Delhi.

Note: Term 1st shall comprise:

U_1 = 10 marks
T_1 = 25 marks

Term 2nd shall comprise:

U_2 = 10 marks
T_2 = 25 marks

Code : 228

ENVIRONMENTAL SCIENCE

Term 1st

Theory: 35 Marks   **Time : 2½ hours**

Project Work: 15 Marks

UNIT I

Chapter 1 : Understanding Environment   **4 Marks**

(a)   Environment

(b)   Environment Science

(c)   Global perspective of environment problems

(d)   The route of environment problems.

(e)   A sustainable world.

Chapter 2 : Living beings in Eco-Systems: **7 Marks**

(a)   Ecosystem

(b)   Habitat

(c)   Ecological Niche (Types)

(d)   Interactions between members of a species

(e)   Adapting to the environment.

Chapter 3 : Ecosystem under threat-I   **7 Marks**

(a)   Ecosystem (Types and structure)

(b)   Habitat(Micro and Macro)

(c)   Relationship among organisms.

(d)   Food Chain

(e)   Food web

UNIT II

Chapter 4 : Ecosystem under Threat-II   **04 Marks**

     (a)   Overpopulation

     (b)   Disruption of Food chains

     (c)   Genetic erosion.

     (d)   Habitat destruction.

     (e)   Loss of water bodies

     (f)   Biodiversity

Chapter 5 : Conservation of the Ecosystem   **13 Marks**

     (a)   Conservation

     (b)   Classification of species

     (c)   Why species become endangered.

     (d)   Extinction types

     (e)   Wildlife conservation.

     (f)   Genetic problems of endangered species.

     (g)   India's wildlife.

     (h)   Approaches of wildlife management.

     (i)   Concept of alternative technology

     (j)   What you can do to conserve wildlife.

Term 2nd

Theory: 35 Marks   **Time : 2½ hours**

Project Work: 15 Marks

Chapter 6 : Atmosphere at Risk   **7 Marks**

(a)   The Atmosphere

(b)   The Importance of atmosphere

(c)   Pollution and types

(d)   Causes of atmospheric pollution

(e)   Pollution load from Non-renewable-Coal and Petroleum.

(f)   Major atmospheric pollutants.

(g)   Noise pollution.

Chapter 7 : Land under Threat   **04 Marks**

(a)   Forest

(b)   Soil

(c)   Land Pollution

Chapter 8 : Managing the Land   **6 Marks**

(a)   Land Management.

(b)   Alternatives to deforestation

(c)   Alternative use of timber

(d)   Recycling

(e)   Paper Industry

(f)   Waste management Technology in India

Chapter 9 : Agriculture under Threat   8 Marks

 (a) Modern agriculture

 (b) Monoculture

 (c) Pesticides

 (d) Fertilizers.

 (e) Irrigation

 (f) Disappearance of Traditional Crops

 (g) Surplus and waste (Food mountains in developed world)

 (h) Large Farm units: Environmental Damage.

 (i) Green Revolution

Chapter 10 : Managing Agriculture   10 Marks

 (a) Agriculture

 (b) Sustainable agriculture

 (c) Important aspects of crop improvement

 (d) Integrated pest control

 (e) New crop strains/varieties

 (f) Conservation Tillage

 (g) Trickle drip irrigation

 (h) New organic Fertilizers.

 (i) Gene bank.

Internal Assesment/Practical Examination

Marks : 30

The minimum number of assignments: Two (One assignment during each term carrying 15 marks need to be completed).

The Project Work is to be evaluated as part of internal assessment and record to be maintained by the teacher concerned.

- Project work should be a current environmental problem.

- Systematic monitoring of any aspect of local environment.

- Study the density and population of Plants growing in a particular area using a quadrat method. Field study, monitoring and preparation of report are the requisite for the project work.

Book Prescribed :

A Textbook of Environmental Science for Class XI, Published by J&K BOSE in Collaboration with Foundation Books Pvt. Ltd., New Delhi

Code : 251

MICROBIOLOGY

OBJECTIVES

The broad objectives of teaching Microbiology at higher secondary level are:

(i)   To help the learners know and understand basic facts and concepts of the subject at elementary stage.

(ii)   To expose the students to different basic processes and basic techniques used in Microbiology.

(iii)   To familiarize the learners to understand the relationship of the subject to health, nutrition, environment, agriculture and industry etc.

(iv)   To develop conceptual competence in the learners so as to cope up with professional courses in future career.

(v)   Studying, preventing and controlling infectious disease.

(vi)   To develop an interest in students to study Microbiology as a discipline.

COURSE STRUCTURE

Term I   :   35 marks   Practicals :   15 marks

Term II   :   35 marks   Practicals :   15 marks

Project Work: 10 Marks

TERM I

Theory : 35 Marks   **Time : 2½ hours**

UNIT 1   :   General Microbiology   **12 marks**

Chapter I :   History and importance of microbiology. Koch's postulates, Difference between prokaryotes and eukaryotes. Introduction to microbial world: bacteria, virus, fungi and protozoa. Scope of microbiology (medical, agricultural veterinary, sanitary, environmental, industrial and food microbiology).

Chapter II :   Introduction to microscopy: Simple, Compound, Fluorescent, Phase Contrast, Dark Field, Electron Microscope.

Chapter III: Five kingdom and three domain classification of organisms: Bacteria, Eucarya and Archaea.

Unit II   :   Bacterial structure   12 marks

Chapter IV: Morphology of bacteria: Shape, size and arrangement. Motility. Fine structure of bacteria: cell wall, cell membrane, outer membrane, flagella , pilli, capsule, cytoplasmic inclusions, ribosomes and nuclear material. Structure of bacterial spore. Bacterial stains: simple, Grams (gram positive Gram negative), Ziehl-Neelson (Acidfast and non acidfast), capsule and spore stain.

Unit III   :   Bacterial Physiology   11 Marks

Chapter V :   Bacterial nutrition, Physical growth parameters (Temperature, pH, oxygen tension). Bacterial growth curve, Bacterial reproduction, Bacterial count: total and viable. Autotrophic, heterotrophic, thermophilic, mesophilic, psychrophilic organisms .

Chapter VI: Cultivation of bacteria. Colony characteristics, growth media liquid, solid, general, differential, selective, enrichment, transport) and their preparation. Cultivation methods: aerobic and anaerobic. Isolation, identification and preservation of pure culture. Lyophilization.

TERM II

Theory : 35 Marks   Time : 2½ hours

Unit IV   :   Virus   9 Marks

Chapter VII: Definition: virus, virion, viriods, prions and bacteriophage Historical background of virus. General characteristics of viruses. Structure of virus: capsid, nucleocapsid, envelope. Viral symmetry: icosahedral (polio virus), helical (Tobacco Mosaic Virus) and complex (pox virus). Replication of viruses.

Unit V : Protozoa, Algae and Fungi   12 Marks

Chapter VIII: Protozoa, Definition, general characters classification structure and reproduction: asexual and sexual

Chapter IX: Fungus: Definition, general characters classification structure and reproduction.

Chapter X : Algae: Definition, general characters, classification and reproduction.

Unit VI : Sterilization and Disinfection   14 Marks

Chapter XI: Definition: sterilization, disinfection, antisepsis, pasteurization and tyndalization. Physical agents: heat (moist/dry), desiccation, radiation, filtration and centrifugation. Chemical agents: phenol and phenolic compounds, alcohol, halogens, detergents, aldehydes. Radial walker coefficient (phenol coefficient). Segregation and disposal of contaminated waste.

ChapterXII: Antimicrobial and chemotherapeutic agents: general properties and drug resistance. Antimicrobial agents: antibacterial, antiviral, antifungal, antiprotozoal. Bactericidal and bacteriostatic agents.

PRACTICALS & PROJECT = 30 MARKS

Note: Every student is required to do the following experiments during the Academic Session.

LIST OF EXPERIMENTS

Term I :   Marks: 10

1. Standard laboratory safety practices.

2. Washing of glassware.

3. Microscope: Parts, description, care, handling and procedures.

4. Gram staining.

Term II.   Marks 10

5. Demonstration of Gram positive, Gram negative bacteria in prepared slides.

6. Visit to govt. institutions (microbiology laboratories) for demonstration and working of autoclave, hot air oven, laminar flow, centrifuge, glassware used in microbiology laboratory etc.

Project work with ten page write up on any one like: Gram staining, preparation of any bacteriological growth medium, streaking of plates, isolation of any microorganism.

Marks : 10

Code : 229

PHYSICS

The Class XI theory as well as practical course is divided into two terms. 25% of the maximum marks is allotted to numerical problems.

Maximum Marks: 100

TERM 1st

MARKS : 35   **Time : 2½ Hrs**

Unit - I : Mathematical Tools   Marks 04

Functions, limits of function, simple ideas of differentiation integration, differentiation of x^n, e^{ax}, sin x by ab-initio method, integration of x^n, $1/x$, e^{ax}, sin x and cos x. Simple Idea of definite integral.

Unit - II : Physical world and measurement   Marks 5

Physics - Scope and excitement, physics in relation to science, society and technology. Need for measurement, units of measurement, system of units, SI Units, fundamental and derived units, length, mass and time measurement. Accuracy and precision of measuring instruments; errors in measurement, significant figures.

Dimensions of physical quantities, dimensional analysis, its applications.

Unit III : Kinematics   Marks 7

Motion in a straight line, position time graph, speed and velocity.

Uniform and non uniform motion, average speed and instantaneous velocity. Uniformly accelerated motion, velocity time graph, position time graphs, relations for uniformly accelerated motion. (graphical treatment and calculus approach).

Scalar and vector quantities, position and displacement vectors, general vector and notation, equality of vectors, multiplication of vectors by a real number, addition and subtraction of vectors, Relative velocity.

Unit vector, Resolution of a vector in a plane rectangular components, Scalar and vector product of two vectors with properties, Motion in a plane, cases of uniform velocity and uniform acceleration. Projectile motion.

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Unit- IV :   Laws of Motion   Marks 7

Concept of force and inertia, Newton's first law of motion, Momentum and Newton's second law of motion, impulse, Newton's Third Law of Motion. Law of conservation of linear momentum and its applications, Equilibrium of concurrent forces.

Friction, static and kinetic friction, laws of friction, rolling friction. Dynamics of uniform circular motion, centripetal force, examples of circular motion (vehicle on level circular road, vehicle on banked road).

Unit- V   :   Work, Energy and Power   Marks 6

Concept of scalar product of vectors, Work done by a constant force and a variable force, Kinetic Energy, Work energy theorem, Power.

Motion of potential energy, potential energy of spring, conservative forces, conservation of mechanical energy (K. E. and P. E's), non conservative forces, elastic and inelastic collision in one and two dimensions.

Unit- VI :   Motion of system of particles and Rigid body.   Marks 6

Centre of mass of a two particle system, momentum, conservation and centre of mass motion, centre of mass of a rigid body, centre of mass of circular ring, disc, rod and sphere.

Concept of vector product of vectors: Moment of a force, torque, angular momentum, conservation of angular momentum with some examples.

Equilibrium of rigid bodies, rigid body rotation and equations of rotational motion, Comparison of linear and rotational motions, moment of inertia, radius of gyration.

Values of moment of inertia for simple geometrical objects (no derivation), statement of parallel and perpendicular axes theorem and their applications.

TERM II

Marks: 35   **Time 2½ hrs.**

Unit VII: Gravitation   Marks 6

Kepler's laws of planetary motion, The universal law of gravitation. Acceleration due to gravity and its variation with altitude, depth and shape, Gravitational potential, gravitational

potential energy, escape velocity, orbital velocity of a satellite, geo-stationary satellite. Inertial and gravitational mass.

Unit VIII :   Properties of Bulk matter   Marks 7

Elastic behaviour, stress-strain relationship, Hooke's law, young's modulus, bulk modulus, shear modulus of rigidity.

Pressure due to fluid column, Pascal's law and its applications (hydraulic lift and hydraulic brakes). Effect of gravity on fluid pressure.

Viscosity, stoke's law, terminal velocity, streamline and turbulent flow, Critical velocity, Reynold number, Bernoulli's theorem and its applications.

Surface energy and surface tension, angle of contact, applications of surface tension, ideas to drops, bubbles and capillary rise, action of detergents.

Heat, temperature, thermal expansion, specific heat, calorimetry, change of state-latent heat. Heat transfer-conduction, convection and radiation, thermal conductivity, Newton's law of cooling.

Unit IX   :   Thermodynamics   Marks 6

Thermal equilibrium and definition of temperature (Zeroth law of thermodynamics). Heat, work and internal energy. First law of thermodynamics. Second law of thermodynamics, reversible and irreversible processes. Heat engines and refrigerators (concept only).

Unit X   :   Behavior of perfect gas and Kinetic theory   Marks 6

Equation of state of perfect gas, work done on compressing a gas.

Kinetic theory of gases-assumptions, concept of pressure, expression for pressure exerted by a gas, Kinetic energy and temperature, rms speed of gas molecules, degrees of freedom, law of equipartition of energy (statement only) and application to specific heat capacities of gases, concept of mean free path, Avogadro's number.

Unit XI   :   Oscillation and waves   Marks 10

Periodic motion - period, frequency, displacement as a function of time. Periodic functions, simple harmonic motion (S.H.M) and its equation, phase, oscillation of a spring-restoring

force and force constant, energy in S.H.M-Kinetic and potential energies, simple pendulum- derivation of expression for its time period, free forced and damped oscillations (qualitative ideas only), resonance.

Wave motion - Longitudinal and transverse waves, speed of wave motion, Displacement relation for a progressive wave, Principle of super position of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics. Beats, Doppler effect.

PRACTICALS

TERM I   MARKS = 15

NOTE :-   Every student is required to perform minimum of 5 experiments and 4 activities.

EXPERIMENTS :

1. Use of vernier calipers

    i)   To measure diameter of a small spherical/ cylindrical body.

    ii) To measure internal diameter and depth of a given beaker/ calorimeter and hence find its volume.

2   Use of screw gauge.

    i.   To measure diameter of given wire.

    ii. to measure thickness of a given sheet.

    iii. to measure volume of an irregular lamina.

3. To determine radius of curvature of a given spherical surface by a spherometer.

4. To find the weight of a given body using parallelogram law of vectors.

5. Using a simple pendulum plot L-T graph hence find acceleration due to gravity (g).

6. To study the relation between force of limiting friction and normal relation force find coefficient of friction between a block and a horizontal pull of the earth and study in relationship with the angle of inclination by plotting a graph between force and sin 0.

ACTIVITIES/Project work

1. To make a paper scale of a given least count e.g. 0.2 cm, 0.5 cm.

2. To determine mass of given body using a meter scale by principle of moments.

3. To plot a graph for a given set of data, with proper choice of scales and error bars.

4. To measure the force of limiting friction for rolling of a roller on a horizontal plane.

5. To study the variation in range of jet of water with angle of projection.

6. To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.

7. To study collision of two balls in two dimensions.

PRACTICALS

TERM II   Marks = 15

NOTE : Every student is required to perform of 5 experiments and 4 activities.

EXPERIMENTS

1. To determine young modulus of elasticity of the material of a given wire.

2. To find the force constant of a helical spring by plotting a graph between load and extension.

3. To determine the surface tension of water by capillary rise method.

4. To determine the coefficient of velocity of a given viscous fluid by measuring the terminal velocity of a given spherical body.

5. To find the speed of sound in air at room temperature using a resonance tube by two resonance position method.

6. To study relation between the length of a given wire and tension for constant frequently using sonometer.

7. To determine specific heat of a given solid and liquid, by method of mixtures.

ACTIVITIES/PROJECT WORK

1. To observe change of state and plot a cooling curve for melted wax.

2. To observe and explain the effect of heating on a bi-metallic strip.

3. To study the effect of detergent on surface tension by observing capillary rise.

4. To study the factors effecting the rate of loss of heat of a liquid.

5. To study the effect of nature of surface on emission and absorption of radiation.

Suggested Textbook: Textbook of Physics for class XI published by NCERT, New Delhi.

Note: Term 1st shall comprise:

U_1 = 10 marks
T_1 = 25 marks

Term 2nd shall comprise:

U_2 = 10 marks
T_2 = 25 marks

Code : 230

CHEMISTRY

Maximum Marks:100

TERM I

Marks: 35   **Time 2½ hrs.**

UNIT-I: SOME BASIC CONCEPTS OF CHEMISTRY   **Marks : 05**

General Introduction: Importance of studying chemistry, Historical approach to particulate nature of matter, Laws of Chemical combination (numerical), Dalton's Atomic Theory, Concept of elements, atoms & molecules. Atomic and molecular masses, Mole concept and molar mass, percentage composition, empirical and molecular formula; chemical reactions, stoichiometry and calculation based on stoichiometry.

Unit-II: STRUCTURE OF ATOM   **Marks : 05**

Discovery of electron, proton and neutron, atomic number, isotopes and isobars. Thompson's model and its limitations, Rutherford's model and its limitations, Bohr's model & its limitations, concept of shells and sub-shells. Dual nature of matter and light, de-Broglie's relationship. Heisenberg's uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p and d- orbitals. Rules for filling electrons in orbitals- Aufbau's principle, Pauli's exclusion principle and Hund's rule . Electronic configuration of atoms, stability of half filled and completely filled orbitals.

Unit-III: CLASSIFICATION OF ELEMENT AND PERIODICITY IN PROPERTIES   **Marks : 05**

Significance of classification, brief history of the development of periodic table , modern periodic law and the present form of the periodic table, periodic trends in properties of elements: atomic radii, ionic radii, inert gas radii, ionization enthalpy, electron gain enthalpy, electronegativity, valence.

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Unit-IV: CHEMICAL BONDING AND MOLECULAR STRUCTURE

Marks : 05

Valence electrons, Ionic bond, covalent bond, bond parameters, Lewis structure, polar character of covalent bond, valence bond theory, resonance, geometry of covalent molecules, VSEPR theory, concept of hybridization involving s, p and d- orbitals and shapes of some simple molecules, molecular orbital theory of homonuclear molecules (Qualitative idea only), hydrogen bond.

Unit-V: STATES OF MATTER: GASES AND LIQUIDS   Marks : 06

Three states of matter: intermolecular interactions, type of bonding, melting and boiling points, role of gas laws in elucidating the concept of the molecule, Boyle's law, Gay- Lussac's law, Avogado's law, ideal behavior, empirical derivation of gas equation. Avogadro's number, ideal gas equation, deviation of real gases from ideal behavior; Liquefaction of gases, critical temperature.

Liquid state- Vapor pressure, surface tension, viscosity (Qualitative idea only, no mathematical derivation).

Unit-VI: THERMODYNAMICS   Marks : 04

Concepts of system, types of systems, surrounding, work, heat, energy, intensive and extensive properties, state functions. First Law of Thermodynamics, internal energy, enthalpy, heat capacity, specific heat, molar heat capacity, measurement of ΔE and ΔH, Hess's law of constant heat summation, enthalpy of bond dissociation, combustion, formation, atomization, sublimation, phase transition ionization and dilution.

Introduction of entropy as a state function, free energy change for spontaneous and non- spontaneous process and equilibrium.

Unit-VII: EQUILIBRIUM   Marks: 05

Equilibrium in physical and chemical processes, dynamic nature of equilibrium, law of mass action, equilibrium constant, factors affecting equilibrium: Le-Chatelier's principle; ionic equilibrium- ionization of acids and bases, strong and weak electrolytes,

degree of ionization, Concept of pH. Hydrolysis of salts (elementary idea), buffer solutions, solubility product, common ion effect (with suitable examples).

TERM II

Marks: 35   **Time 2½ hrs.**

Unit-VIII: REDOX REACTIONS   Marks: 02

Concept of oxidation and reduction, redox reactions, oxidation number, balancing of chemical equations in redox reactions, applications of redox reactions.

Unit-IX: HYDROGEN   Marks: 02

Position of hydrogen in periodic table, occurrence, isotopes, preparation, properties and uses of hydrogen, hydrides-ionic, covalent and interstitial. Physical and chemical properties of water; heavy water; hydrogen peroxide-preparation, reactions and structure, hydrogen as a fuel,

Unit-X: s-BLOCK ELEMENTS (ALKALI AND ALKALINE EARTH METALS)   Marks: 06

Group 1 and Group 2 elements;

General introduction, electronic configuration, occurrence, uses, anomalous properties of the first elements in each group, diagonal relationship; trends in the variation of properties (such as ionization enthalpy, atomic and ionic radii). Trends in chemical reactivity with oxygen, hydrogen, water and halogens; uses.

Preparation and properties of some important compounds: Sodium carbonate, Sodium chloride, sodium hydroxide and sodium hydrogen carbonate. Biological importance of sodium and potassium; CaO, $CaCO_3$ and industrial uses of lime and limestone, biological importance of Mg and Ca.

Unit-XI: SOME p-BLOCK ELEMENTS   Marks: 05

General introduction to p-Block Elements

Group 13 elements: General introduction, electronic configuration, occurrence,

variation of properties, oxidation states, trends in chemical reactivity, anomalous properties of the first element in group. Boron - physical and chemical properties; some important compounds: borax, boric acids, boron hydrides.

Aluminium: uses, reactions with acids and alkalis.

Group 14 elements: General introduction, electronic configuration, occurrence, anomalous properties of the first element in group, trends in physical properties, trends in chemical properties. Carbon - catenation, allotropic forms, physical and chemical properties, trends in chemical properties, uses of oxides of carbon, important compounds of silicon and their uses: silicon tetrachloride, silicones, silicates and zeolites.

Unit-XII: ORGANIC CHEMISTRY- SOME BASIC PRINCIPLES AND TECHNIQUES   Marks: 09

General introduction to organic chemistry, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds.

Electronic displacement in a covalent bond: inductive effect, electromeric effect, resonance and hyper- conjugation. Homolytic and heterolytic fission of a covalent bond, free radicals, electrophiles, nucleophiles, carbocations and carbanions. Types of organic reactions.

Unit-XIII: HYDROCARBONS   Marks: 09

Classification of hydrocarbons

Alkanes: Nomenclature, isomerism, conformations (ethane only), physical properties, chemical reactions including free radical mechanism of halogenation, combustion and pyrolysis.

Alkenes: Nomenclature, structure of double bond (ethene), geometrical isomerism, methods of preparation, physical properties, chemical reactions- addition of hydrogen, halogen, water, hydrogen halides (Markownikov's addition and peroxide effect), ozonolysis, oxidation, mechanism of electrophilic addition.

Alkynes: Nomenclature, structure of triple bond (ethyne), physical properties, methods of preparation, chemical reactions: acidic character of alkynes, addition reaction of-

hydrogen, halogens, hydrogen halides and water, **Aromatic hydrocarbons:** Introduction, IUPAC nomenclature; Benzene: resonance, aromaticity; chemical properties; mechanism of electrophilic substitution - nitration, sulphonation, halogenation, Friedel Craft's alkylation and acylation; directive influence of functional group in monosubstituted benzene.

Unit-XIV: ENVIRONMENTAL CHEMISTRY   Marks: 02

Environmental pollutions: soil, water and air pollution, acid rain, effects of the depletion of ozone layer, Green house effect and global warming- pollution due to industrial wastes. Lake water pollution: sources of pollutants in lake water, sources of pollution in Dal lake, Wullar lake and Mansar lake in J&K state. Green chemistry as an alternative tool for reducing pollution, strategy for control of environmental pollution.

PRACTICALS

Marks: 30   Time: 3 hrs.

A)   Organic Preparations:

  i)   Preparation of acetylene and study of its acidic character.

  ii)   Preparation of Acetanilide

  iii)   Preparation of p-Nitroacetanilide

B)   Characterization and Purification of Chemical Substance:

  i)   Determination of melting point of an organic compound (below 100°C)

  ii)   Determination of boiling point of an organic liquid.

  iii)   Crystallization involving impure sample of any one of the following: Alum, Copper sulfate, Benzoic acid.

C)   Experiments Related to pH Change

Any one of the following experiments:

  i)   Determination of pH of some solutions obtained from juices and solutions of

known and varied concentrations of acids, bases and salts using pH paper/ universal indicator.

ii) Comparing the pH of solutions of strong and weak acid of same concentration.

iii) Study the pH change in the titration of a strong acid with a strong base using universal indicator.

iv) Study of pH change by common-ion effect in case of weak acids and weak bases.

D) Chemical Equilibrium:

One of the following experiments:

i) Study the shift in equilibrium between ferric ions and thiocyanate ions by increasing/ decreasing the concentration of either ions.

ii) Study the shift in equilibrium between $[Co(H_2O)_6]$ and Cl^- ions by changing the concentration of either ions.

E) Quantitative Estimation:

i) Setting of a chemical balance and preparation of a standard solution of oxalic acid.

ii) Determination of strength of a given sodium hydroxide solution by titrating it against a standard solution of oxalic acid.

iii) Preparation of standard solution of sodium carbonate.

iv) Determination of strength of given solution of dilute hydrochloric acid by titrating it against a standard solution of sodium carbonate.

F) Qualitative Analysis
Determination of one cation and one anion in a given salt (insoluble salts to be excluded):

Cations: $Pb^{2+}, Cu^{2+}, As^{3+}, Al^{3+}, Fe^{3+}, Mn^{2+}, Zn^{2+}, Ni^{2+}, Co^{2+}, Ca^{2+}, Sr^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+$

Anions: $CO_3^{2-}, S^{2-}, SO_3^{2-}, SO_4^{2-}, NO_2^-, NO_3^-, Cl^-, Br^-, PO_4^{3-}, C_2O_4^{2-}, CH_3COO^-$

G)   PROJECT

Scientific investigation involving laboratory testing and collecting information from other sources.

* Determination of BOD/ COD of locally available water sample.

* Analysis of fruit and vegetable juices for their acidity.

* Preparation of a sample of soap from available oils (Groundnut /Coconut oil).

* To dye wool and cotton clothes with any marked available dye.

* Study of the the effect of acids and bases on the tensile strength of fibres.

* Silvering of mirrors

* Compare the contents of tannic/ caffeine in various samples of tea and hence their flavor.

Note: Collaboration to sought from nearby institutions with regard to the performing of practicals/project work.

Suggested Textbook: A textbook of Chemistry for class XI published by NCERT, New Delhi

Note: Term 1st shall comprise:

U_1 = 10 marks
T_1 = 25 marks

Term 2nd shall comprise:

U_2 = 10 marks
T_2 = 25 marks

SYLLABUS CLASS XI

Code : 231

BIOLOGY

TERM - I

Max. Marks: 100

Marks: 35   **Time: 2½hrs.**

SECTION A: (Botany)

Unit-I   Diversity of Life   8 marks

Variety of living organism Systematics, need, history and classification (Artificial, natural and Phylogenetic). **Biosystematics,** Binomial nomenclature, Two kingdom system, five kingdom system, their merits and demerits. (Detailed study of kingdom,: Monera Protista and fungi), status of some acellular organisms/Slime moulds like: viruses and viroids. Lichens taxonomic aids i.e. Botanical garden, herbaria, museum & keys.

Unit-II   Kingdom Plantae   9 marks

Salient features of various plant groups for identification and their classes(Algae, Bryophytes, Pteridophytes, Gymnosperms and angiosperms). **Morphology of flowering plants and their function**. Morphology of root, stem, leaves, inflorescence, flowers, fruits and seed. Description of flowering plants of families Fabaceae, Solanaceae and Liliaceae.

SECTION B: (ZOOLOGY)

Unit-III Diversity in Living world.   8 Marks

i)   Characteristic features of living organisms.

ii)   Salient features of animals (non chordates upto phylum level, chordates upto class level), Animal kingdom

iii) Zoological parks, Natural museums (with special reference to local Zoos/National Parks (Manda, Mahamaya, Dachigam, Hemis)

Unit-IV   Cell-Structure and Function   10 Marks

i)   **Cell-** Brief description of cell, Cell theory; Prokaryotic and eukaryotic cell,

cell wall, cell membrane and cell organelles (Plastids, Mitochondria, Endoplasmic reticulum, Golgi bodies/dictyosomes, Ribosomes, Lysosomes, Nucleus, Vacoules, Centrioles), Cillia and flagella, and nuclear organization.

ii) **Cell Division:-** Cell cycle, Mitosis, Meiosis.

iii) Basic chemical constituents of living bodies.

iv) **Biomolecules:** Structure and functions of :- carbohydrates, proteins, lipids and nucleic acids, Metabolites (Pry and Secondary, Meltabolism (elementary idea)

v) **Enzymes:** Types, Properties and Functions.

PRACTICALS

TERM-I   **M.Marks- 15**

Time: 3 hrs.

SECTION A: (BOTANY)

Marks: 7½

1. Study of different parts of a Compound Microscope.

2. Study of specimens and identification with reasons- Bacteria, Oscillatoria, Spirogyra, Rhizopus, Mushroom, Yeast, Liverwort (Marchantia/Moss (Funaria), Pinus (Male & female cone), Lichens.

3. Study of different modifications in

     a. Roots (Tap & Adventitious)

     b. Stems (Herbaceous & Woody)

     c. Leaves (Leaf arrangement, shape, venation, simple & Compound leaves)

4. Description of 3 locally available flowers from the families- Fabaceae, Solanaceae and Liliaceae (1 from each family)

SECTION-B (ZOOLOGY)

Marks: 7½

1. Study and handling of compound Microscope.

2. Study of sailent features of specimen and identification with reasons; Amoeba, Paramoecium, Hydra, Liver fluke, Ascaris, Leech, Earth worm, Honeybee, Snail, Star fish, Shark, Labeo, Frog, Lizard and Pigeon.

3. Study of preserved specimens of at least one representative of each group to understand co-relations between characteristics of organisms and systematic position.

4. Study of animal cell and its organelles with the help of chart/slides.

5. Study of Mitosis and Meiosis from prepared slides.

6. Preparation of temporary mounts of mammalian squamous epithelium stripped muscles, fibres and mammalian blood film.

7. Study of different types of mammalian connective tissues, muscle fibres and nerve cells through prepared permanent slides.

TERM-II

Marks: 35   **Time: 2½ hrs.**

SECTION-A (BOTANY)

Unit-V   Anatomy of flowering plants   Marks 8

Tissues and tissue system, Types of Tissues, Meristematic and Permanent and their classification and functions.

Anatomy of Dicot and Monocot Root, Stem and Leaves, Secondary. Growth in Dicot stems and roots.

Plant Physiology:

Transport in plants: means of transport, (diffusion, facilitated diffusion, Passive symports and anti ports, Active transport)

Plant water relations: water potential, osmosis, plasmolysis, imbibition, long distance transport of water- apoplast, symplast, pathways ascent of sap, Root pressure theory and transpirational pull theory (cohesion - tension theory).

Tranpiration: types & significance, mechanism of opening and closing of stomata, guttation, Phloem transport, flow from source to sink, (mass flow hypothesis)

Unit IV   Mineral Nutrition   Marks 10

Methods to study mineral requirement (Hydrophonics). Essential mineral, elements criteria for essentiality of nutrients. Essential elements. Micro and Macro nutrients, their role and deficiency symptoms. Mechanism of absorption of elements, translocation of solutes, soil and reservoir of essential elements. **Nitrogen metabolism,** Nitrogen cycle- Biological nitrogen fixation, 'Photosynthesis, Historical background, site of photosynthesis. Various photosynthetic pigments, Mechanism, Light reaction including PS I, PS II and photophosphorylation (Cyclic and non-cyclic). Dark reaction or Biosynthetic phase, Calvin (C_3) cycle, C_4 cycle, factors effecting photosynthesis. Photorespiration.

Respiration:- Introduction mechanism- gycolysis, Kreb's cycle. Electron transport system,Aerobic and anaerobic respiration. Respiratory quotient.

Growth and Development:- Characteristics of plant growth, phases of growth, growth curve and its components- differentiation, dedifferentiation and redifferentation, **Development,** sequence of developmental processes in a plant cell, **plant growth regulators,** discovery and physiological effects (Auxins, Gibberellins, cytokinins, ethylene and IBA, Photoperiodism and vernalisation.

SECTION-B (ZOOLOGY)

Unit-III   Histology and Morphology   7 marks

i)   **Animal tissues:-** Epithelial, Connective, Muscular & Nervous, Organ and Organ system

ii) **Elementary Knowledge of** :-Morphology and Anatomy of Frog, Earthworm & Cockroach.

Unit IV   Human Physiology   10 Marks

i)   Digestion and Absorption

ii)   Breathing and Respiration

iii)   Body fluids and circulation

iv)   Excretory products and elimination

v)   Locomotion and Movement

vi)   Neural control and coordination

vii)   Chemical coordination and integration.

PRACTICALS

TERM-II   M.Marks: 15

SECTION-A (BOTANY)

Marks: 7½

i)   Study of plant tissues from permanent slides (Parenchyma, Collenchyma, Sclerenchyma, Xylem and Phloem)

ii)   Study of T.S. of Dicot & Monocot Root, Stem and leaf from permanent slides.

iii)   Study of osmosis by Potato osmoscope.

iv)   Study of Plasmolysis in epidermal peels(e.g. Rhoeo leaves)

v)   Study of distribution of stomato in upper and lower surface of leaves

vi)   To make comparative study of the rates of transpiration in upper and lower surface of leaves by cobalt chloride method

vii) Study of imbibition in seeds/ raisins

viii) Observation and comment on the experimental set up on phototropism.

ix) To separate plant pigments through paper chromatography.

SECTION-B (ZOOLOGY)

Marks: 7½

4) Study of different systems with the help of charts/dissections-Earthworm, Cockroach.

5) Testing for the presence of carbohydrate and protein.

6) Preparation and study of human blood smear.

Project work:

1. Collection of animal specimen for school museum.

2. Visit to a zoological /National park and preparation of report.

3. Study of cyclosis in Paramoecium.

4. Study of Mitosis by using root tips of onion.

5. Study of Meiosis from flower buds.

6. Study of external morphology of earthworm, cockroach and frog.

Textbook Suggested: A Textbook of Biology for class XI published by NCERT, New Delhi.

Note: Term 1st shall comprise:

U_1 = 10 marks

T_1 = 25 marks

Term 2nd shall comprise:

U_2 = 10 marks

T_2 = 25 marks

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 232

ELECTRONICS

First Term Course

Marks : 35   **Time: 2½ hours**

FIRST TERM

I: AC Signals   6 Marks

Definitions of amplitude, frequency, time period, phase, Sinusoidal signals, phasor representation, Non-sinusoidal signals; Triangular wave, Square wave, saw tooth wave, spike, Pulses. Periodic and Non-Periodic signals. RMS value, average value and form factor for sinusoidal signals only.

II: Passive Components   9 Marks

Resistors- types of resistors, capacitors- types of capacitors, Inductors- types of Inductors, Color coding of Resistors and capacitors, Behaviour of resistor, capacitor and Inductor in frequency and time domain along with waveforms.

III: Network Theorems &Filters   11 Marks

Voltage and current sources (Ideal Practical). KVL and KCL (with numericals). Voltage Division theorem, Current Division theorem. Thevenin's theorem, Norton's theorem, Superposition theorem and Maximum Power transfer theorem.

Filters; RC and LR filters (LOW PASS, HIGH PASS AND BAND PASS)

IV: Semiconductors   9 Marks

Electronic configuration of atoms, crystalline structure of solids, Band theory of solids, Classification of metals, semiconductors, and conductors on the basis of band theory. Types of Semiconductor; Intrinsic and Extrinsic (p and n-type) Semiconductors. Drift and diffusion, Temperature Coefficient of Semiconductors & Metals.

SECOND TERM

Marks : 35   **Time: 2½ hours**

I: PN junction   9 Marks

PN junction: concept of depletion region & potential barrier. PN junction diode; operation and V-I characteristics (Forward and Reverse bias), Diode as half wave and full wave rectifier (qualitative treatment). Ripple factor and efficiency in half wave and full wave rectifier, Zener as voltage regulator.

II: Bipolar junction transistor (BJT)   14 Marks

PNP and NPN Transistor, circuit symbols, construction and V-I characteristics. Different transistor configurations (CB& CE) current gain α and β of a transistor, Relation between α and β, Comparison of different configuration. Transistor as an amplifier.

III: Field Effect Transistor   6 Marks

Construction and working of FET (N & P channel), V-I characteristics of FET, MOSFET (Depletion & Enhancement type) construction and V-I characteristics for N-channel only.

IV: Feedback & oscillators   6 Marks

Principle of Feedback, Types of Feedback; Positive and Negative, Advantages of negative feedback, Negative Feedback in amplifiers, Oscillators & Positive Feedback-Barkhausen's Criteria for sustained oscillations. Sinusoidal oscillator, RC and LC Oscillators (Qualitative treatment).

LIST OF RECOMMENDED PRACTICALS

Term 1st   **Marks = 15**

Time: 2½ hrs.

1.   Identification of Electronics components.

2.   To find the value of a carbon resistance using color code and verify.

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

3. To measure current & voltage and resistance using Multimeter.

4. To find the frequency and amplitude of a.c signal using CRO.

5. Verification of current division principle.

6. Verification of Voltage division principle.

7. Verification of Thevenin's Theorem.

8. Verification of superposition Theorem.

9. Verification of Maximum Power Transfer Theorem.

10. To study RC low pass filter.

11. To study RC high pass filter.

Term 2nd   Marks = 15
                                                     Time: 2½ hrs.

1. To study characteristics of PN junction diode.

2. To study characteristics of Zener diode.

3. To study Diode as a half wave rectifier.

4. To study Diode as full wave rectifier.

5. To study characteristics of NPN CE transistor configuration.

6. To study characteristics of PNP CE transistor configuration.

7. To study characteristics of PNP CB transistor configuration.

8. To study Characteristics of NPN CB transistor configuration.

9. To study Transistor as an amplifier.

10. To study Transistor as an Oscillator.

Code : 234

BIOCHEMISTRY

THEORY COURSES

Term-I

Marks: 35   **Time: 2½ hours**

Note :   Each unit comprises of 10 lectures and 10 marks.

Unit-I : Biophysical Chemistry   05 marks

Water, pH, pKa, buffers, Hydrophilicity, hydrophobicity. Hydrogen-bonding, vander Waal and ionic interactions. Osmosis, diffusion, dialysis.

Unit-II : Cell and subcellular Organeller Structure and Function - Part I

06 marks

Plasma membrane: fluid mosaic model, extrinsic, intrinsic and transmembrane proteins. Transport: uniport, antiport and symport. Endoplasmic reticulum, Golgi apparatus, lysosomes and vacuoles.

Unit-III : Cell and subcellular Organeller Structure and Function - Part II

06 marks

Nucleus, Ribosomes, Mitochondrion, Chloroplasts: Nucleolus/nucleolo-nucleosomal region, Inner-mitochondrial membrane and matrix, organization of chloroplast and ribosome.

Unit-IV : Digestion and Absorption of Food   06 marks

Digestion and absorption of carbohydrates, proteins and lipids. Role of enzymes in digestion, bile salts in emulsification of lipids and other factors in absorption. Role of non-digestable dietry constituents.

Unit-V : Chemistry of Carbohydrates   06 marks

Classification of carbohydrates, Isomerism in monosaccharides: Spatial/stereo-

isomerism: Epimerism and anomerism. Optical isomerism. Important disaccharides: Sucrose, lactose, maltose etc. Important polysaccharides: Starch/glycogen, cellulose, chitin and glycosamine, glycans.

Unit-VI : Chemistry of Amino Acids and Proteins   06 marks

Amino acids of proteins. Essential and non-essential amino acids. Classification of amino acids based on R group, charge, hydrophobicity, aromatic, heterocyclic and sulfur-containing. Peptide bond. Classification of proteins based on function e.g. Structural, transport, catalytic, regulatory, hormones, antibodies and chromoproteins.

Term-II

Marks : 35   Time: 2½ hrs.

Note :   Each unit comprises of 10 lectures and 10 marks.

Unit-I :   Chemistry of Lipids   06 marks

Classification : Fatty acids (Odd and even C; saturated, usaturated, branched), glycerides. Phospholipids (phosphoglycerides: Lecithins, cephalins, phosphoionisitides and phosphosphingolipids). Glycolipids and Lipoproteins.

Unit-II :   Chemistry of Nucleic Acids   06 marks

Introduction to nucleotides and deoxyribonucleotides.

Organization of nucleotides in DNA and RNA

Structure of B-DNA. Types of RNA : mRNA, tRNA, rRNA.

Unit-III : Water-soluble Vitamins   06 marks

Structure, physiological and biochemical (coenzyme) role of : Thiamine, Riboflavin, Niacin, Pyridoxine, Coenzyme A, Biotin; Cyanocobalamine, Folic acid, Vitamin-C.

Unit-IV : Fat-soluble Vitamins   06 marks

Structure, physiological and biochemical/hormonal role of : Vitamin A (with

emphasis on Visual cycle), Vitamin D (and its role in bone formation), Vitamin E (with emphasis on its role as biological antioxidant) and Vitamin K (with stress on its role in blood coagulation).

Unit-V : Nutrition : Macro and Micro   06 marks

Introduction, calorific values of carbohydrates, proteins and lipids. Class A and Class B proteins/Essential amino acids. Essential fatty acids. Protein-/calorie malnutrition. Importance of minerals, iron, calcium, phosphorus, Iodine, Copper, Na^+, K^+, Zinc. Brief introduction to anaemia, rickets and Goiter.

Unit-VI : Instrumentation   05 marks

Introduction to : pH metry, colorimetry, centrifugation, electrophoresis, chromatography (adsorption, Ion-exchange, gel-filtration).

LABORATORY COURSE

Term- I

Marks: 15   **Time: 2½ hrs.**

1.   Preparation of Molar and Normal solutions.

2.   Buffers, Henderson-Hasselbalch equation, pH, pka.

3.   Sterilization/Autoclaving

4.   Colour reactions of carbohydrates: Molisch, Iodine, Benedict's, Barfoed's, Salivanoff's and inversion tests.

5   Microscopy, principle use, gram staining.

Term-II

Marks: 15   **Time: 2½ hrs.**

6.   Colour reactions of proteins : Ninhydrin, Biuret, Xanthoproteic and Sulphur Tests.

7.   Precipitation of proteins with acids (H_2SO_4, HCl, CH_3COOH, Trichloro acetate or perchloric acid), alcohols, Salting out, Heat denaturation.

8.   Qualitative test for cholesterol.

9.   Salivary Amylase : Enzymatic hydrolysis of soluble starch to achro-dextrin (I_2-based reaction).

10. Thin-layer chromatography : separation of pigments using silica gel G (on glass slides using stoppered bottles).

Book Prescribed:

A Textbook of Biochemistry for Class XI by Diwarka Sharma and Dr. Rafat Aeyesha Published by BOSE in Collaboration with Rahul enterprises, Jammu.

<div align="center">

Code : 246

GEOLOGY

</div>

Theory   =   70 Marks

Practicals   =   30 Marks

Time   =   2½ hours

<div align="center">

First Term Course

</div>

Weightage: I. Theory   =   35 Marks

II. Practicals   =   15 Marks

Unit-I :   Introduction   12 Marks

(A)   Definition of Geology and its various branches viz; Physical Geology, Mineralogy Petrology, Palaeontology, Stratigraphy, Structural Geology, Geomorphology, Economic Geology and Engineering Geology.

(B)   Physical Geology

(i)   Weathering - Definition, Types of weathering viz. Mechanical, Chemical and biological Weathering.

(ii)   Soil formation through weathering.

(iii) Weathering in relation to environment.

(C)   Rivers

(i)   Definition of river

(ii)   Three stages of river with example from any Indian river.

(iii) The work of rivers with special reference to the study of V-Shaped valley, Canyon & Gorges, Water falls, River terraces. Meanders, Ox-bow lakes and formation of deltas and river capture.

Unit-II : Underground Water   14 Marks

(A) (i) Definition of underground water, Juvenile water and connate water.

(ii) Description of various Zones of underground water, viz, Zone of aeration, Zone of saturation, water table.

(iii) Importance of porosity and permeability in rocks in relation to groundwater.

(iv) Geological work of underground water.

(v) Springs-Definition. Types of Springs.

(B) Glaciers

(i) Definition. Formation and movement of a Glacier.

(ii) Types of Glaciers with examples.

(iii) Geological work of a Glacier. Study of the following features produced by a Glacier, Viz. Cirque, and Roches-Montonees. Moraines, Drumlins, V-Shaped Valley and Fiords

Unit-III : Lakes   9 Marks

(A) Lakes

(i) Definition

(ii) Types of Indian lakes.

(iii) Lake deposits.

(B) Sea

(i) Definition of sea

(ii) Bathymetric Sub-Division of the Sea floor

(iii) Geological work of sea.

(C)   Wind

   (i)   Definition of wind

   (ii)   Geological work of wind.

   (iii) Important features produced by Wind Erosion and deposition.

Second Term Course

Weightage : I. Theory =   35 Marks

         II. Practical =   15 Marks

Unit-I : Mineralogy   14 Marks

Time: 2½ hrs.

(i)   Definition of a Mineral

(iii)   Study of the following physical properties of a Mineral viz. Form, Colour, Cleavage, Fracture, Hardness, Specific gravity, Lustre and streak.

(iii)   Moh's scale of hardness

(iv)   Methods for determining specific gravity of a mineral with Walker's steel yard balance and Jolly's spring balance,

(v)   Physical properties of the following minerals: - Talc, Gypsum, Calcite, Fluorites, and Appetite. Orthoclase, Quartz, Topaz, Corrundum, Diamond, Muscovite and Biotitic, Graphite, Augite and Hornblende.

       Ores: Chalcopyrite, Galena, Hematite, Bauxite, Graphite and sphalecite Gem Stones-Beryl, Garnet and Tourmaline

Unit-II : Petrology   9 Marks

(i)   Definition of a Rock

(ii)   Three main types of rocks

(iii)   Elementary knowledge of texture and structure of rocks as seen Magascopically.

(iv)   Description of the following rock types: -

   (a)   Granite, Diorite, Gobbro and Basalt

   (b)   Shale. Limestone, Sandstone, Conglomerate and Breccia.

   (c)   Marble, Schist, Gneiss and Slate.

Unit-III : Paleontology, Stratigraphy and Structural Geology   12 Marks

(A)   (i)   Definition of Stratigraphy

       (ii)   Study of Geological Column viz, Standard Stratographical Scale and Indian Stratigraphical Scale.

(B)   (i)   Definition of structural Geology,

       (ii)   Elementary knowledge of Dip & Strike,

       (iii)   Construction and working of a Clinometer Compass and its uses.

       (iv)   Definition of a fold and a fault.

       (v)   Description of various parts of fold and a fault.

       (vi)   Description with sketches of the following structures. Anticline, Syncline, Normal fault and Reverse fault.

(C)   (i)   Definition of Palaeontology

               Definition of a Fossil,

               Preservation of Fossil,

               Use of Fossils

Books Suggested:

   1.   A Textbook of Geology by P.K. Mukherji

   2.   Physical Geology by A.K. Dutta

   3.   A Textbook of palaeontology by S.K.Chadha

   4.   Ruttleys Elements of Mineralogy by H.H. Read

PRACTICALS

Marks: 30   **Time: 2½ hrs.**

Term-I: 15 marks

Term-II: 15 marks

1. Megascopic description and identification of the following minerals: -
    Talc, Gypsum, Calcite, Fluorite, Appetite, Orthoclase, Quartz, Topaz, Corrundum, Muscovite, Biotitic, Augite, Hornblende, Hematite, Galena, Chalcopyrite, Bauxite, Graphite, Garnet, Beryl and tourmaline.

2. Megascopic description of the following rock types: -
    (i)   Igneous: Granite, Diorite, Gabbro, Basalt.
    (ii)   Sedimentary: Shale, Sandstone, Conglomerate, Breccias and limestone.
    (iii)   Metamorphic: Gneiss, Schist, Slate and Marble.

3. Determination of specific gravity of a mineral specimen by Walker's steel yard Balance/Jolly's spring balance.

4. Sketches and description of the following structural features.
    Anticline, Syncline, Normal default and Reverse fault

5. Field work and Viva-voce.
    The fieldwork should include collection of mineral/rock specimens and study/identification of different geomorphological features.

Note: Term 1st shall comprise of:

> U_1 = 10 marks
> T_1 = 25 marks
> Practicals = 15 marks

Term 2nd shall comprise of:

> U_2 = 10 marks
> T_2 = 25 marks
> Practicals = 15 marks

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 239

BUSINESS STUDIES

Term 1ˢᵗ

M.Marks: 50   **Time: 2½ hours**

Part A: Foundations of Business

Unit I

Chapter 1: Nature and Purpose of Business   8 Marks

➢   Concept and characteristics of business

➢   Business, profession and employment - distinctive features

➢   Objectives of business - economic and social, role of profit in business

➢   Classification of business activities: Industry and Commerce

➢   Industry - types: primary, secondary, tertiary

➢   Commerce: Trade and Auxiliaries

➢   Business risks - nature and causes,

Chapter 2: Forms of Business Organisations   12 Marks

➢   Sole Proprietorship; Joint Family Business-meaning, features, merits and limitations;

➢   Partnership- meaning, types, registration, merits, limitations, types of partners;

➢   Cooperative Societies-types, merits and limitations

➢   Company: Private Ltd., Public Ltd. - merits, limitations;

➢   Choice of form of business organizations

➢   Starting a business - Basic factors.

Unit II.

Chapter 3: Private, Public & Global Enterprises   10 Marks

- ➢ Private Sector and Public Sector
- ➢ Forms of organising public sector enterprises
- ➢ Departmental Undertaking
- ➢ Statutory Corporation .
- ➢ Government Company
- ➢ Changing role of public sector
- ➢ Global Enterprises : meaning and features, joint ventures- meaning, benefits

Chapter 4: Business Services   8 Marks

- ➢ Nature and types of Business services - Banking, Insurance, Transportation, Ware housing, Communication.
- ➢ Banking - Types of Banks, Functions of Commercial banks, E- banking
- ➢ Insurance - principles, types: life, fire and marine
- ➢ Postal and Telecom services
- ➢ Warehousing: types and functions.

Chapter 5: Emerging Modes of Business   6 Marks

- ➢ E-Business - Meaning, scope and benefits, Resources required for successful e-business implementation, On-line transactions, payment mechanism, security and safety of business transactions;
- ➢ Outsourcing- concept, need and scope

Chapter 6: Social Responsibility of Business and Business Ethics

                                                        6 Marks

- ➢ Concept of social responsibility.

> ➢ Case for social responsibility;

> ➢ Responsibility towards owners, investors, employees, consumers, government and community

> ➢ Environmental protection and business

> ➢ Business ethics: concept and elements.

Term 2nd

M.Marks: 50   **Time: 2½ hours**

Unit III.

Part B: Organisation, Finance and Trade

Chapter 7: Formation of a Company   **7 Marks**

> ➢ Stages in the formation of a company;

> ➢ Promotion,

> ➢ Incorporation, and

> ➢ Commencement of business

Chapter 8: Sources of Business Finance   **10 Marks**

> ➢ Nature and significance of business finance

> ➢ Owner's funds and borrowed funds

> ➢ Sources of raising Finance:

> - Equity and Preference shares

> - Debentures and Bonds

> - Loan from Financial Institutions

> - Retained Profits

> - Global Depository Receipt, American Depository Receipt

> - Loans from commercial Banks

- Public deposits

- Trade Credit

Unit IV

Chapter 9: Small Business   6 Marks

- ➢ Small Scale Industry; Tiny Sector; cottage and rural industry; ,

- ➢ Role of small business in rural India;

- ➢ Problems of small business in India.

- ➢ Government Assistance and Special Schemes for Industries in rural, backward and hilly areas.

Chapter 10: Internal Trade   10 Marks

- ➢ Meaning and types of internal trade: wholesale and retail.

- ➢ Services of a wholesaler and a retailer

- ➢ Types of Retail Trade:

  - Itinerant retailers and fixed shops.

  - Departmental store, super market, malls, chain store, mail order business, consumer's cooperative store.

  - Automatic Vending Machine

- ➢ Role of Chamber of Commerce and Industry in promotion of internal trade.

Chapter 11:   International Business   7 Marks

- ➢ Nature, Importance and complexities involved in International Business;

- ➢ Ways of entering into international Business. Export-Import Procedures and documentation. Foreign Trade Promotion. Organizational support and incentives; Nature and importance of Export Processing

Zone/Special Economic Zone; International Trade Institutions and Agreement: WTO, UNCTAD, World Bank, IMF.

Project Work   10 Marks

Suggestive/Illustrative Projects

Any one of the following:-

(i)   Find out from local sample business unit (s) the various objectives they pursue.

(ii)   Problems of setting up and running business units.

(iii)   Enquiry into the ethics of running business through questionnaires.

(iv)   Survey of quality of bank services in the local branch office.

(v)   Study of postal and courier mail services.

(vi)   Availability and use of agency services, advertising, packaging, investments in savings schemes, etc.

(vii)   Survey of the popularity of credit cards issued by different banks.

(viii) Study the profile of a sole trader/partnership commenting on the nature and working of business.

(ix)   Study of a Joint family business.

(x)   Study of the working of any cooperative society.

(xi)   Study of a small business unit regarding source of finance.

(xii)   Study of nature of small traders (like hawkers and peddlers in a specific locality) with reference to types of goods, capital investment, turnover.

(xiii) Study of weekly bazaar in a locality.

(xiv)   Study of franchise retail store.

(xv)   Study of export/import procedure of any article.

(xvi)   Problems of women entrepreneurs in business.

(xvii)   Survey of waste/garbage disposal by a hospitals/PrivateNursing Homes

(xviii) Study of pavement trade.

(xix)   Prepare a scrapbook and collect articles on the changing role of public sector and any other topics related to the syllabus.

Marks may be suitably distributed over the different parts of the Project Report-

1. Objectives   2. Methodology   3. Conclusions - findings and suggestions

Suggested Textbook :

1.   Business Studies, published by NCERT, New Delhi

Note: Term 1st shall comprise:

$$U_1 = 15 \text{ marks}$$
$$T_1 = 35 \text{ marks}$$

Term 2nd shall comprise:

$$U_2 = 15 \text{ marks}$$
$$T_2 = 35 \text{ marks}$$

Code : 241

ACCOUNTANCY

Term 1ˢᵗ

M. Marks: 50

Time: 2½ hrs

Financial Accounting - I

Unit 1:   Introduction to Accounting   06 Marks

(i) Accounting- meaning, objectives, Accounting as source of information, internal and external users of Accounting information and their needs.

(ii) Qualitative characteristics of Accounting information-reliability, relevance, understandability and comparability.

(iii) Basic Accounting Terms - Asset, Liability, Capital, Expense, Income, Expenditure, Revenue, Debtors, Creditors, Goods, Cost, Gain, Stock, Purchase, Sales, Loss, Profit, Voucher, Discount, Transaction, Drawings.

Unit 2:   Theory Base of Accounting   06 Marks

(i)   Accounting Principles - meaning and nature

(ii)   Accounting Concepts: Entity, Money Measurement, Going Concern, Accounting Period, Cost Concept, Dual Aspect, Revenue Recognition (Realisation), Matching, Accrual, Full Disclosure, Consistency, Conservatism, Materiality

(iii)   Accounting Standards- Concept Process of accounting-from recording of business transactions to preparation of trial balance.

(iv)   Bases of Accounting - Cash Basis, Accrual Basis

Unit 3: Recording of Business Transactions   13 Marks

    (i)   Voucher and Transactions: Origin of Transactions-Source Documents and Vouchers,

    (ii)   Preparation of Accounting vouchers; Accounting Equation Approach - Meaning and Analysis of transactions using Accounting Equation: Rules of Debit and Credit.

    (iii)   Recording of Transactions: Books of original entry - Journal, Special Purpose Books: i) Cash Book - Simple, Cashbook with Bank column and Petty Cashbook, ii) Purchases Book, Sales Book, Purchase Returns Book, Sales Returns Book; Ledger-meaning, utility, format; posting from Journal and Subsidiary books; Balancing of Accounts.

    (iv)   Bank Reconciliation Statement: Meaning, Need and Preparation, Corrected Cash Book Balance

Unit 4: Trial Balance and Rectification of Errors   7 Marks

    (i)   Trial Balance: meaning, objectives and preparation.

    (ii)   Errors: Types of Errors: Errors of omission, commission, principles and compensating errors affecting Trial Balance; errors not affecting Trial Balance.

    (iii)   Detection and Rectification of Errors (One Sided and Two Sided); use of Suspense Account.

Unit 5: Depreciation, Provisions and Reserves   10 Marks

    (i)   Depreciation: Meaning and need for charging depreciation, factors affecting depreciation, methods of depreciation-Straight Line method, Written Down Value method (excluding change in method), Method of recording depreciation-charging to asset account, creating provision for depreciation/accumulated depreciation account; Treatment of disposal of asset.

(ii) Provisions and Reserves: meaning, importance, difference between Provisions and Reserves, types of Reserves: Revenue Reserve, Capital Reserve, General Reserve, Specific Reserve and Secret Reserves.

Unit 6: Accounting for Bills of Exchange Transactions   8 Marks

(i) Bills of exchange and Promissory Note: definition, features, parties, specimen and distinction.

(ii) Important Terms: Term of Bill, Accommodation Bill, Days of Grace, Date of Maturity, Bill at Sight, Negotiation, Endorsement, Discounting of Bill, Dishonour, Retirement and Renewal of a Bill.

(iii) Accounting treatment of trade bills and accommodation bills.

Term 2nd

M.Marks:50   **Time:2½ hrs**

Financial Accounting - II

Unit 7: Financial Statements   32 Marks

(i) Financial statements: meaning and users.

(ii) Capital Expenditure and Deferred Revenue Expenditure

(iii) Trading and Profit and Loss Account: Gross Profit, Operating and net profit.

(iv) Balance Sheet: need, grouping and marshalling of Assets and Liabilities. Vertical and Horizontal

(v) Presentation of Financial Statements.

(vi) Adjustments in preparation of financial statements with respect to closing stock, outstanding expenses, prepaid expenses, accrued Income, Income received In advance, depreciation and bad debts, provision for doubtful debts, provision for discount on debtors, manager's commission.

(vii) Preparation of Trading and Profit & Loss Account and Balance Sheet of sole proprietorship.

Unit 8: Accounts from incomplete records   6 Marks

(i) Incomplete records : meaning, uses and limitations. Ascertainment of profit/loss by statement of affairs method, conversion method.

Unit 9: Computers in Accounting   8 Marks

(i) Introduction to Computer and Accounting Information System (AIS)

(ii) Applications of computers in accounting:

(iii) Automation of accounting process, designing accounting reports, MIS

(iv) reporting, data exchange with other information systems

(v) Comparison of accounting processes in manual and computerized accounting,

(vi) highlighting advantages and limitations of automation

(vii) Sourcing of accounting system: readymade and customized and tailor-made accounting system. Advantages and disadvantages of each option.

Unit 10: Accounting and Database System   4 Marks

(i) Accounting and Database Management System

(ii) Concept of entity and relationship: entities and relationships in an Accounting System:

(iii)　designing and creating simple tables, forms, queries and reports in the context of Accounting

(iv)　System.

Textbooks Suggested

1.　Accountancy Part - I, published by NCERT

2.　Accountancy Part - II - do -

Note: Term 1st shall comprise:

$$U_1 = 15 \text{ marks}$$
$$T_1 = 35 \text{ marks}$$

Term 2nd shall comprise:

$$U_2 = 15 \text{ marks}$$
$$T_2 = 35 \text{ marks}$$

Code : 242

ENTREPRENEURSHIP

Term I

M.Marks: 35   **Time 2 ½ Hours**

Unit Ist :   Entrepreneurship   **6 Marks**

(i)   Concept of Entrepreneurship: - Meaning, Definitions & Characteristics.

(ii)   Growth of Entrepreneurship in India.

(iii) Role of Entrepreneurship in Economic Development.

(iv)   Women Entrepreneurship: - Growth and Development.

(v)   Rural Entrepreneurship :- Meaning(Concept), Need/Objective

Unit 2nd : Entrepreneur   **6 Marks**

(i)   Evolution and concept of Entrepreneur.

(ii)   Characteristics of Entrepreneur.

(iii) Types of Entrepreneur.

(iv)   Entrepreneur: - Meaning & Characteristics.

Unit 3rd   : Entrepreneurship and Growth   **5 Marks**

(i)   Factors effecting Entrepreneurial Growth :-

[a]   Economic Factors (Study of Class)

[b]   Non-Economic Factors (With reference to Class study).

[c]   Government Action:- (With reference to special Legislations & Court Cases)

Unit 4th   : Entrepreneurial Motivation Competencies   **6 Marks**

(i)   Entrepreneurial Motivation: - Meaning

(ii)   Motivation factors and Theories.

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(iii)   Objectives and Achievements of Motivation.

(iv)   Entrepreneurial Competencies: - Meaning.

(v)   Developing and Major Competencies in Indian Entrepreneurial World.

Unit 5th   : Introduction to Market Dynamics   6 Marks

(i)   Understanding a Market.

(ii)   Competitive Analysis of Market.

(iii)   Patents, Trademarks & Copyright.

Unit 6th   : Entrepreneurship Development Programme(EDPs):

6 Marks

(i)   Meaning of EDPs

(ii)   Need of EDPs

(iii)   Course Concepts and Curriculum of EDPs

(iv)   Phase of EDPs

(v)   Evaluation of EDPs

Term II

Maximum Marks : 35   Time Allotted :- 2 ½ Hours

Unit 1st :   Small Enterprises [Introduction]   6 Marks

(i)   Meaning and Definition.

(ii)   Essentials, Features, Characteristics.

(iii)   Micro & Macro Unit. [Relationship].

(iv)   Scope and objectives of Micro Enterprises.

(v)   Role of Micro Enterprises in Economic Development.

Unit 2nd : Project Identification & Selection   5 Marks

(i)   Meaning of Project.

(ii)   Project Identification.

(iii)   Project Selection.

Unit 3rd : Project Formulation   6 Marks

(i)   Meaning of Project Report.

(ii)   Concepts of Project Report.

(iii)   Significance of Project Report.

(iv)   Formulation of Project Report.

(v)   Planning Commissions Guidelines for formulation a Project Report

Unit 4th : Project Appraisal   6 Marks

(i)   Meaning/Concept of Project Appraisal.

(ii)   Method of Project Appraisal.

       [a]   Economic Analysis

       [b]   Financial Analysis.

       [c]   Market Analysis.

       [d]   Technical Feasibility.

       [e]   Managerial Competence.

Unit 5th : Financing of Enterprises   6 Marks

(i)   Meaning and Need for Financial Planning.

(ii)   Source of Finance.

(iii)   Term Loans.

(iv) Source of short Term Finance.

(v) Capital Structure.

(vi) Capitalization.

(vii) Venture Capital.

Unit 6th : Ownership Structures   6 Marks

(i) Proprietorship.

(ii) Partnership.

(iii) Company

(iv) Co-operative.

(v) Selection of an appropriate form of Ownership Structure.

(vi) Ownership Pattern in Micro Scale Enterprises in India.

PROJECT   Marks: 30

Introduction:

The Main objective of the course in Entrepreneurship is to generate in the students initiative, self reliance and enthusiasm so as to empower them to become entrepreneurs both in spirit and performance.

A number of skills such as observation, evaluation, communication, resource mobilization and management, risk assessment ,team building etc. are also to be developed in the students. Leadership qualities, sensitivity to business ethics and adherance to a positive value system are the core issues that the course highlights while presenting different concepts related to entrepreneurship.

Such a course should necessarily have a strong experiential component in the form of practical work. The objectives of the practical work are:

1. To introduce the students to the world of business by developing in them the core skills and competencies required for an entrepreneur.

2. To develop in the students qualities such as leadership, self-confidence, initiative, facing uncertainties, commitment, creativity, people and team building, integrity and reliability.

3. To enable the students to acquire the skills and knowledge needed for conducting surveys, collecting, recording and interpreting data and preparing simple estimates of demand for products and services.

4. To guide the students to prepare a Project Report.

5. To equip the students with knowledge and skills needed to plan and manage an enterprise through case studies conducted and recorded by the students in different fields such as resource assessment, market dynamics, finance management, cost determination, calculation of profit and loss etc.

6. To instill in the students important values and entrepreneurial discipline.

FORMAT OF PROJECT

Total marks: 30 Marks

1. **Project Report/Survey Report**   **10 marks**

2. **Viva-Voce on PW /SR**   **5 marks**

3. **Case Study**   **10 marks**

4. **Problem Solving**   **5 marks**

1. **Project Report/Market Survey Report**

a) **Project Report:**

Preparation of a Project Report for an enterprise involving products/services. Students may be provided adequate guidance to choose a project based on their interests and availability of information and authentic inputs in the locality. The specimen proforma of project report given in the textbook may be used for preparing the report. However, mechanical preparation of the

report by filling in the information in the proforma should be discouraged.

Further, as the students will be required to appear for a Viva-voce on the basis of their projects, sufficient care should be taken by the students to prepare the report after studying the various aspects involved thoroughly. In a nutshell, the project report should lead to viable enterprise.

b) Market Survey Report

Market research is the process and technique of finding out who your potential customers are and what they want. The survey may be on products and services already available in the market or students may also conduct surveys for new products and services. The report of the survey should be organised under the following broad headings:

1. Objectives.

2. Methods and tools (interviews, questionnaires etc.) to be used to collect information.

3. Records of data and information.

4. Analysis of data and information.

5. Interpretation and conclusion.

For example, a survey may be conducted to find out the choice of households in toiletry soap, tooth paste etc. The data may be analysed to establish a pattern that may be useful to an entrepreneur.

Guidelines for assessment of Project Report / Survey Report

For purpose of assessment the same pattern shall be adopted for Term II also.

1. Presentation: Format, Clarity, Use of graphs, tables and other visuals, organisation, methodical recording of data and information and general neatness of execution.

2. Originality and Creativity

3. Authenticity of information and correctness of calculations and general

feasibility of the project/ sustainability of conclusion drawn in the survey.

4.   Viva Voce on the Project /Market Survey Report

The questions should establish that the report is the original work of the student and that the student has a reasonably clear understanding of the work carried out by him/her. Entrepreneurial qualities such as leadership, self-belief, creativity, originality, initiative etc. may also be assessed by asking a variety of questions related to the report.

2.   Viva-voce

3.   Case Study

A case study is a focused research on an organisation, enterprise, practice, behaviour or person undertaken to highlight an aspect that the study attempts to examine. For instance, a case study may be conducted on the pollution control methods being employed by an industry. Or a successful industrialist may be chosen as a subject of a case study to analyze and understand the strategies that the industrialist adopted :to achieve success. Ideally, a case study should be conducted on subjects with the objectives of bringing to the fore beliefs, practices, strategies, values etc. that have made them what they are. Such studies help us to understand the way in which great minds think and operate. We may also conduct case studies on failures; why a company collapsed, how a service lost its market etc. From both the types of case study, we learn lessons; how to do something or how not to do something. They also provide valuable insight into the processes involved in an enterprise. A few topics are suggested for carrying out case studies:

i)   Drawing a profile of a successful entrepreneur. ii) Studying a public sector undertaking and highlighting its success/failure, by analyzing the factors responsible.

iii)   Studying a small scale unit in the locality to bring out the procedures and processes adopted by the unit to become a feasible business venture.

iv)   A study of competition in business by choosing two or more rivals in the market and analyzing their strengths and weaknesses.

v)   Take the school itself for a case study and analyze any two aspects of the school plant for chalking out a plan of action: infrastructure, academics, co-curricular activities etc.

vi)   A case study on a thriving fast food shop/restaurant in your locality. What makes it so popular?

vii)   A case study on the ways in which a business unit has mobilised its financial resources.

viii)   A case study on the enterprise management techniques adopted by a business house.

ix)   A case study on the marketing strategies of a successful consumer durable company.

x)   A case study on the financial management of a Public Limited Company.

xi)   A case study on any Specialized Institution that supports and guides the establishment of a small scale unit.

xii)   Studying the balance sheets of two big private companies to assess their trade and credit worthiness.

xiii)   Studying the inventory management of a large manufacturing industry to ascertain the processes involved for optimizing cost.

xiv)   Carrying out a case study on an established industrial house/company to find out the value system of the company and how it fulfils its social commitment/ obligations.

xv)   Carrying out a case study on an established industry to ascertain the processes followed to reduce/prevent pollution.

xvi)   Study on environment friendly companies and their contribution to preservation.

Assessment of Case Studies

      i)   Presentation: Format, accuracy, clarity, authenticity and general neatness

      ii)   Analysis and Conclusions

4.   Problem Solving

In this session, the students will be required to solve a problem in the form of a written test. The examiner may choose any problem related to the units in class XI Text Book and set it for the class. The problem may be in the following areas:

a.   How to scan the environment to establish the feasibility of a project.

b.   Given certain figures showing the consumption pattern of a product, drawing conclusions that have a bearing on similar products.

c.   Carrying out market assessment for a given product/service to ascertain the feasibility factor.

d.   Assessment of Working Capital.

e.   Calculation of total cost of production.

f.   Calculation of break-even point.

g.   Determining location of a manufacturing unit.

h.   Problems in inventory control (calculation of the Economic Order Quantity and carrying out ABC analysis).

i.   Applying Pricing methods to determine the price of a product or service.

j.   Applying promotion mix to plan a sales campaign for a product or service.

k.   Working out a simple budget for a given task or job.

Assessment of Answers

The examiner may prepare five problems which are solved by him/her before they are presented to the students. The student may choose anyone of the problems and solve it, showing the different steps/different reasons involved in the solution. If the problem does not involve actual calculations, it may not have anyone correct answer. So weightage

should be given not only to the final answer but to the entire process of problem solving that the student has followed.

Originality and innovative spirit should be rewarded. The students should not be penalized for spelling errors, grammatical mistakes etc. as long as the answer is coherent. Where definite formulas are involved, accuracy should be given due weightage.

Note: Term 1st shall comprise:

U_1 = 10 marks
T_1 = 25 marks

Term 2nd shall comprise:

U_2 = 10 marks
T_2 = 25 marks

Code : 244

TYPE WRITING& SHORTHAND

Marks: 100

TERM I

Weightage: 50 Marks

Time: 3 hrs

25 Marks

A.   Typewriting

There shall be one practical paper of 25 Marks. The paper shall contain the following exercises.

i.	Passage of 350-400 words (prose)	7 Marks
ii	A business letter	6 Marks
iii.	A tabular statement	7 Marks
iv.	Viva- voce.	5 Marks

In viva- voce knowledge of

(a)   Key Board

(b)   Function of different parts of machine (typewriter)

(c)   Type setting and

(d)   Maintenance of typewriter shall be tested

The length of the above material will be in accordance with the time allowed. Accuracy and arrangement shall be given paramount importance. The speed expected of the examinees shall be 25 words/minute. Actual time taken by the examinees in typing out the passage- shall be noted on the answer sheet.

B.   Shorthand   25 Marks

There shall be one practical paper of 25 marks, the candidate shall be required to taken down dictation in shorthand at speed of 50 words/ minute. The material for shorthand may be a passage of 600-800 words.

After taking down dictation students shall be required to transcribe the same in their own handwriting in longhand.

The outline of the shorthand shall have to be attached by the candidate with the answer sheet. Distribution of marks shall be as under :

(a)	Outline	6 Marks
(b)	Transcription in Long hand	14 Marks
(c)	Viva- voce	5 Marks

In viva-voce knowledge of consonants and vowels, Grammon logues, Contractions, abbreviations, suffixes and prefixes, etc shall be tested.

TERM II

Weightage: 50

Time: 3 hrs

A. Typewriting   Marks: 25

There shall-be one practical paper of 25 marks. The paper shall contain the following exercise

(a)	Passage of 350-400 words	7 Marks
(b)	A business letter	7 Marks
(c)	A tabular statement	6 Marks
(d)	Vice-voce	5 Marks

B. Shorthand   Marks: 25

There shall be one practical paper of 25 marks. The candidate shall be required to take down dictation in shorthand at speed 50 words/minute. The material for shorthand may be a passage of 600-800 words.

After taking down dictation students shall be required to transcribe the same in their own hand writing in long hand.

The out line of the short hand shall have to be attached by the candidate with the answer sheet Distribution of marks of different exercise shall be as under:

(a)   Outline   6 Marks

(b)   Transcription in long hand   14 Marks

(c)   Viva-voce   5 Marks

Books Suggested:

Shorthand by pitman.

Note: Term 1st shall comprise:

U_1 = 15 marks
T_1 = 35 marks

Term 2nd shall comprise:

U_2 = 15 marks
T_2 = 35 marks

$$\boxed{\textbf{Code : 245}}$$

BUSINESS MATHEMATICS

Max Marks :- 100

Term 1st

Marks: 50	**Time: 2½ hours**
1. Sets, Relations and Functions	13
2. Sequence and Series	13
3. Trigonometry	13
4. Permutations and combinations	11
	Total :- 50

Term 2nd

Marks: 50	**Time: 2½ hours**
5. Binomial Theorem	10
6. Statistics	16
7. Probability	14
8. Linear Inequations	10
	Total :- 50

Term 1st   Marks: 50

Unit 1st: Sets, Relations and Functions   13 Marks

Sets and their representation, various types of sets ,compliment of a set . Algebra of sets (Union, intersection and difference of sets). Demorgan's laws, Cartesian product of sets .

Relations: Various types of relations, Equivalence relation simple examples

Definition of a function and its various types (Into, onto, one-one, many-one, polynomial function, rational, modulus, constant , signum, greatest integer function, composite function) .

Unit 2nd: Sequences and Series   13 Marks

Geometric progression, general term sum to n terms, and sum to infinity of a geometric series . Geometric and arithmetic means , Evaluation of Σn , Σn^2 , Σn^3

Unit 3rd: Trigonometry   13 Marks

Trigonometric ratios of allied angles (without proof). sum, difference formulae and their applications . solution of trigonometric equations .

Unit 4th : Permutations and combinations   11 Marks

Factorial notation, fundamental principle of counting. Meaning of $P(n,r)$ and $C(n,r)$ and their relations with simple applications.

Term 2nd   Marks: 50

Unit 5th: Binomial theorem   10 Marks

Binomial theorem for any index. General term, middle term/s of a Binomial Expansion. Applications of binomial expansion.

Unit 6th: Statistics   16 Marks

Measures of dispersion, Mean Deviation from mean and median.

Standard deviation and variance of a grouped and ungrouped data.

Quartile deviation.

Unit 7th: Probability   14 Marks

Random experiment and sample space (set representation). Events and their occurrence. various types of events. Mutually exclusive and Exhaustive events . Axiomatic probability with applications.

Unit 8th: Linear Inequations   10 Marks

Algebraic solution of an inequation in one variable and the representation on a number line. Graphical solution of linear inequations in two variables.

Note: Unit Test in each term is of 15 marks & each term test is of 35 marks.

i.e.
| U_1 = 15 marks | U_2 = 15 marks |
| T_1 = 35 marks | T_2 = 35 marks |

Total = 100 Marks

Books Suggested:

1. A Textbook of Mathematics for Class XI published by NCERT, New Delhi

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TRAVEL AND TOURISM MANAGEMENT (Basic)

Term I

Max Marks : 50   **Time : 2½ Hours**

Unit I   10 Marks

Meaning, History and Importance of Travel and Tourism, Meaning of Tourist, Traveller, Transient & Excursionist, Types and Forms of Tourism, Concept of Mass Tourism/Eco-tourism and Sustainable tourism.

Unit II   10 Marks

Meaning, Features and Elements of Tourism Product,. Difference between Tourism and Consumer Product. Tourism Products of J&K - Fairs & Festivals (Kheer Bhawani,Chrar-e- Sharief, Sindhu Darshan , Jhari mela, Eid in J&K, Navaratra in Jammu, Losar in Ladakh region).

Unit III   10 Marks

Tourism destinations:- Srinagar- Pahalgam & Gulmarg, Jammu-Patnitop & Mansar, Ladakh- Leh & Zanskar, Shrines: Hazartbal, Hemis, Amarnath and Vaishno Devi.

Unit IV   10 Marks

Flora and Fauna of J&K - Parks/Wildlife Sanctuaries, Physiographic Divisions and Climate, Handicrafts of J&K, Craft Mela-Jammu and Kashmir Haat, Cuisine-Wazwan.

Unit V   10 Marks

Role of Ministry of Tourism (Govt. of India), ITDC, J K TDC, Hill Development Council of Ladakh in promoting Tourism .

HOTEL MANAGEMENT

Term II

Max Marks : 50   **Time : 2½ Hours**

Unit I   **10 Marks**

Meaning, Concept, Origin and Development of Hospitality Industry, Current Development and future scope. Importance of Customer Care in Hospitality

Unit II   **10 Marks**

Accommodation: Meaning & Scope, Types of Accommodation. Types of Hotels on the basis of their Size, Location, Comfort, Price and Ownership, Difference between Hotels, Motels and Resorts.

Unit III   **10 Marks**

The important Functional Departments of the Hotel, their functions and Organizational Structure.

Unit IV   **10 Marks**

Registration and Gradation of Hotels, Understanding Hotel functioning and Preparing report by visiting Star category Hotels- like Grand Palace, Hotel Broadway, Hotel Asia, Hotel K.C. Residency etc.

Unit V   **10 Marks**

Meaning and Definition of Hospitality Distribution Channels, Functions and Levels of Distribution Channels, Basics of Major Hospitality Distribution Channels- Travel Agents, Tour operators, Consortia and Reservation System.

References:

1.   Hotel Management - S. Chand and Co. Ltd. New Delhi in collaboration with J&K State Bose

Code : 247

PHYSICAL EDUCATION

Max. Marks: 100

THEORY = 70, Practical = 30

Term 1. Theory 35, Practical : 15

Term I

UNIT- I   **Time :2½Hrs**

1.   CONCEPT OF PHYSICAL EDUCATION   **Marks 7**

    1.1)   Meaning and definition of Physical Education.

    1.2)   Aims and objectives of Physical Education.

    1.3)   Need and importance of Physical Education.

UNIT-II

2.   PHYSIOLOGICAL ASPECTS OF PHYSICAL EDUCATION

Marks 7

Effects of exercise on:

   a.   Muscular system.

   b.   Circulatory system.

   c.   Respiratory system.

   d.   Digestive system.

Unit-III

3.   PSYCHOLOGICAL ASPECTS OF PHYSICAL EDUCATION

Marks 7

    3.1)   Definition of psychology and sports psychology.

    3.2)   Achievement and motivation in sports.

Unit IV

4. CAREER ASPECT IN PHYSICAL EDUCATION   Marks 7

1.1) Career options in physical education.

1.2) Avenues for career preparations.

UNIT V

5. HEALTH AND FAMILY EDUCATION   Marks 7

5.1) Concept and importance of health Education.

5.2) Effect of alcohol, tobacco and drugs and & abuse on individual, family, Community and sports person.

Term-II

Marks 50 (Theory = 35, Practical = 15)   **Time : 2 ½ hrs**

UNIT VI

6. CONCEPT OF MAJOR GAMES/SPORTS: Marks 7

KHO-KHO, BADMINTON, KABADDI, HANDBALL, ARCHERY, HOCKEY.

1.1) History of games (Above Games)

1.2) Rules, measurement of the field. (Above Games)

1.3) Fundamental skills and Sports Terminology .

UNIT VII

7. Nation Games   Marks 7

1.1 National Events.

1.2 Nation awards.

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UNIT-VIII

OLYMPIC GAMES   Marks 7

2.1)   History of Olympic Games.

2.2)   Olympic Village.

2.3)   Olympic Rings and Torch

UNIT- IX

9.   DIET AND ITS IMPORTANTANCE IN PHYSICAL DEVELOPMENT

Marks 7

1.1)   Diet and physical fitness.

1.2)   Obesity and its causes.

1.3)   Balanced diet.

UNIT-X

10.   COMMON SPORTS INJURIES & REHABILITATION   Marks 7

1.1)   Muscle pull, sprain and strain.

1.2)   Dislocation, Fracture.

Practical   Marks: 30

TERM-I

1.	Camping and nature study	6 marks
2.	Track & field (Three events)	6 marks
3.	Project work.	3 marks

TERM-II

4.	Physical fitness test	6 marks
5.	Skill test of game/ sports	6 marks
	(Any two games/sports)	
6.	Viva-voce	3 marks

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HOME SCIENCE

(FULL STREAM)

FAMILY HEALTH CARE & PREVENTION

Code : 236

Max. Marks: 100

Marks : 70 (Theory)

Practicals: 30 Marks

First Term course

Theory: 35 Marks   **Time: 2½ hrs.**

Unit I   **12 marks**

Physiology: Brief Introduction of Body Systems.

- The digestive system & its functions.

- The endocrine systems & functions of various glands in the body.

Unit II   **12 marks**

The inter relationship of various systems and their importance to good physical and mental health.

Impact of stress & strain on mental health: in today's scenario

Unit III   **11 marks**

Diseases: Water/Air/Other common diseases.

Typhoid, cholera, birdflu measles, mumps, plague, chicken pox, polio - causes/symptoms & prevention.

Incidents of diseases as an indication of health of the environment.

Practicals   **15 marks**

Identifying parts of the various systems on a model and chart. Marking posters and charts emphasizing the need for personal and environmental hygiene.

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Talk by a PHE person on various methods, types of effective sanitation.

Visit of a water filtration plant.

Second Term course

Theory: 35 Marks   **Time: 2½ hrs.**

Unit I : Hygiene & Environment.   12 marks

- Personal hygiene & it's importance

- House hold hygiene

- Human environment interaction: quality of life vs quality of environment, environment Issues & problems. Role of belief & value associated with environment, inter-relation of variables - values, ecological, human behaviours.

Unit II: First Aid & Home Nursing   12 marks

- How to handle sample emergencies in the home. (Cuts/burns/scalds/sprains/ choking of food. Insect & snake bite & allergies to food & medicine)

- First aid kit - its contents

- The sick room, its furniture, ventilation and lighting.

- Disinfections of the room/clothing/utensils

- The role of traditional and local systems of medicine.

Unit III: Family Life Education   11 marks

- Population education, problems of over population.

- Girl child: Causes of neglect, prevention legal & social laws.

- Govt. incentives to improve the status of Girl Child. (with reference to state)

- Status of women: family planning, and economic growth

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Practicals: 15 marks

- Taking & recording Body temperature, pulse rate, respiration rate

- Preparing of first Aid Kit

- Making posters & charts, emphasizing the need for personal & environmental hygiene.

- Identifying parts of the various systems on a model & model & chart.

- Prepare a list of 10 traditional home remedies available in your area of residence.

Note: Term 1st shall comprise:

U_1 = 10 marks
T_1 = 25 marks
Practicals = 15 marks

Term 2nd shall comprise:

U_2 = 10 marks
T_2 = 25 marks
Practicals = 15 marks

Code : 237

FOOD SCIENCE

Max. Marks: 100   **Time: 2½ hrs.**

Marks :70

Practicals:30

First term course

Unit I   **11 marks**

Food in relation to Good Health

Good health-external characteristics of a healthy person. Height-Weight, norms for different age groups. Definitions: food nutrients, Nutrition, optimum nutrition, Malnutrition.

Unit II   **13 marks**

Use of food in body:

(Digestion, absorption, transport and utilization: brief review) functions of food, specific functions of Nutrients, sources of Nutrients Classification of Foods. Cheap nutritional supplements (fish, flour, soyabean products, multi-purpose foods prepared indigenously).

Unit III   **11 marks**

Food Preservation:

Importance of food preservation, causes of food spoilage, Principles of food preservation, methods of food preservation.

Practicals   **Marks 15**

Checking their own heights and weights to determine whether they conform to norms for Indian conditions. Talk by a general physician on the signs of good and poor health.

Observations of children in a pediatric ward of a local hospital to note signs and symptoms of different conditions of malnutrition.

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Prepare charts showing:

1. Essential constituents of a good diet.
2. Food groups
3. Sources of food nutrients (seasonal variations)
4. Cheap nutritional supplements.
5. Preparation of fruit squashes and syrups;
6. Preparation of Jams, murrabhas;
7. Preparation of Pickles. Sundrying of food and vegetables.

Second Term course

Theory: 35 Marks

Practical:15 Marks

Unit I   15 marks

Planning a balanced diet:

(i) Definition of Kilocalorie, calorie, Requirements for various age groups, Audlts. School Children, Pregnancy, Lactation; (ii) Nutrition of infants, Toddlers (Weaving foods) nutrition for invalids and convalescents. (iii) Balanced diet: requirements of various essential nutrients for different categories mentioned above.

Unit II   13 marks

Food selection & preparation:

(i) Food selection purchase and storage of perishable, semi-perishable and non-perishable foods.

(ii) Standards, weights and measures for foods. Reasons for cooling, Methods of cooking food; moist heat: Boiling, steam-stewing, Dry heat: Roasting, grilling, baking, shallow and deep Action of heat on various nutrients and changes in nutritional values, colour.

Unit III

Food Sanitation   7 marks

  (i) Rules of safety and food hygiene. Disease Transmitted through foods. Food infection, intoxication, food adulteration.

 (ii) Food Law, Food Standards

(iii) EPO, PFA, ISI and Agmark.

Practicals   Marks 15

  (i) Practical experience in planning a day's meal for:

      1.   Different income groups

      2.   Vegetarians;

      3.   Non-vegetarians;

      4.   Different age groups;

      5.   Pregnancy and lactation

 (ii) Surveys of local and regional dietary patterns (Starting with their own homes, relatives and neighbor-hood) to determine whether diets are well balanced.

(iii) Effective storage techniques and equipment.

(iv) Market surveys of cost and availability of foods in general use. Weighing and measuring of foods.

 (v) Practical experience in preparing different daily meal including preparation of:

(vi) (i) Cereals (ii) Pulses and Legumes (iii) Fruits (iv) Meat, fish and eggs (v) Milk and Milk products (vi) Snacks (viii) Simple desserts

(vii) Show slides of micro-organism causing food infection, charts showing rules of food hygiene.

Note: Term 1st shall comprise:

| U_1 = 10 marks |
| T_1 = 25 marks |
| Practicals = 15 marks |

Term 2nd shall comprise:

| U_2 = 10 marks |
| T_2 = 25 marks |
| Practicals = 15 marks |

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 238

MANAGEMENT OF RESOURCES

Theory: Marks : 70   Time: 2½ hrs

Practicals:30 Marks

First Term course

Unit I   14 marks

Theory

Definition of Resource management, classification of family resources. Human resources; Time, energy, knowledge, skills and abilities. Material Resources. All physical material resources, natural & man made money. Management process. Planning, Organising, Implementing.

Unit II   7 marks

Housing minimum needs for satisfactory. Living: space, furniture and furnishings and equipment.

Unit III   14 marks

Environmental aesthetics, cleanliness and sanitation. Arrangement of furniture and functional activity and aesthetic considerations. Disinfections and pest control.

Practicals

(i) Listing resources available, comparing efficient housewife's daily routine with that of an inefficient one. (ii) Study of characteristics of a good housewife and an inefficient one. (iii) Study of the Characteristics of the family that manages its resources well. (iv) Planning a multipurpose room. Making floor plans on graph paper. (v) Cleaning of the house, maintenance and decoration of the house. (vi) Storage of household equipment and good market survey of furniture and furnishing quality, design and cost.

Second Term course

Unit I   12 marks

Planning for use of resources on short term, long term basis. Determining priority in short and long term planning. A family's philosophy, values and priority.

Unit II   Work Ethics   11 marks

Meaning & importance, discipline at workplace reaching on time, staying in seat, knowing the job, using polite language.

Unit III   Consumer Education   12 marks

(i) Consumer behaviour & demand.
(ii) Consumer equilibrium, its meaning
(iii) Demand: Market demand, its determinants, demand schedule, demand curve.
Concept of price elasticity.

PRACTICALS & RELATED EXPERIENCES

(i) Planning students daily & weekly activities
(ii) Study of Mother's daily routine
(iii) Student's own budged
(iv) Family budget
(v) Market price study

Note: Term 1st shall comprise of:

U_1 = 10 marks
T_1 = 25 marks
Practicals = 15 marks

Term 2nd shall comprise of:

U_2 = 10 marks
T_2 = 25 marks
Practicals = 15 marks

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JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 202

ENGLISH LITERATURE

Objectives:

◆ To introduce students to various genres of literature.

◆ To familiarize student with different eras of literature.

◆ To develop the sense of aesthetics amongst students.

◆ To enable the students to appreciate great literary work.

◆ To nourish the creative faculties of students.

◆ To enrich the imagination of students.

◆ To widen the mental horizon and vision of students.

◆ To encourage self study and self learning amongst students.

◆ To enable the students to think, write and question in an artistic way.

◆ To encourage students to become independent learners and thinkers.

Each Term Examination shall have 50 marks of 2 ½ hours duration.

Term I   **Marks: 50**

Unit I

Sonnet XVIII	Shakespeare	Poem
Death, Be not Proud	Donne	Poem
What Men Live By	Tolstoy	Short Story
On Books	Ruskin	Essay
The Solitary Reaper	Wordsworth	Poem
The Walks in Beauty	Byron	Poem
The Mourners	Hari Krishnan koul	Short Essay
All about a Dog	A.G. Gardiner	Essay

Term 1st

On First Looking into Chapman's Homer	Keats	Poem	
From In Memoriam	Tennyson	Poem	
Cabulliwalah	Tagore	Short Story	
What I Believe	E.M.Forster	Essay	**35 Marks**

Term II   50 Marks

Unit II

Success is Counted Sweetest	Emily Dickenson	Poem	
Silver	Walter De La Mare	Poem	
The Night the Ghost Got In	Thurber	Short Story	
Back to the Desk	Lynd	Essay	
Daisy	Fancis Thompson	Poem	
Stopping by the Woods	Frost	Poem	
The wrath of the Heaven	Translated From Arabic by Prof. G.R. Malik	Short Story	
First Show	Priestley	Essay	
			15 Marks

Term 2nd

The Journey Of Magi	Eliot	Poem
Mirror	Sylvia Plath	Poem

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The Autumnal Leaf	Narendra Khajuria	Short Story
Dream Children	Charles Lamb	Essay

35 Marks

Note: Term 1st and Term 2nd will also include Unit I and Unit II respectively.

SCHEME OF ASSESMENT OF ENGLISH LITERATURE

1. This question shall be based on the poems comprising of reference to context. The Candidate shall have to attempt three references out of six. Each reference shall carry 4 marks. **3 x 4 =12 marks**

2. This question shall be short answer type based on the poems. Emphasis shall be laid on genres and poetic techniques. The examiner may ask about metaphors, simile, personification, paradox etc. from the prescribed poems and also about ode, sonnet, ballad, lyric etc. Emphasis shall be laid on imagery, pictorial quality, musical hormony etc. The candidate shall attempt three questions out of five. Each question shall carry three marks. **3x3 = 9 marks**

3. This question shall be based on short stories. It shall comprise of short answer type question. The candidate shall have to attempt one question out of two.

    1×4=4 marks

4. This question shall also be based on short stories. It shall be a long answer type question based on theme, plot, character sketch, etc. of the story. The candidates shall have to attempt one question out of two. **1×5=5 marks**

5. This question shall be based on essay carrying five marks, of two parts. The Examiner may ask about the theme, plot character sketch, style of language etc. The student shall have to attempt one question out of two. **1×5= 5 marks**

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

<div style="text-align:center">

Code : 203

FUNCTIONAL ENGLISH

</div>

Aims and Objectives of the Functional English Courses

(i) To enable the learner to acquire competence with special emphasis on different linguistic functions.

(ii) To reinforce the various sub skills acquired in classes IX and X with reference to reading, writing, listening and speaking.

(iii) To equip the learner with language skills that will enable him/ her to achieve his/ her Academic and career goals.

(iv) To broaden the language base that will empower the learner to use language for creative purposes.

(v) To promote personal growth and development..

The Approach to Functional English Curriculum

(i) A skill based communicative approach recommended in Functional English, with graded texts followed by learner centered and teacher- friendly activities.

(ii) It is recommended that teachers consciously take a back seat, playing the role of a manager, co-ordinator and facilitator.

(iii) Texts used are varied, authentic and represent various authors to help the learner discover the various aspects of language in use.

The following skills and their objectives are spelt out in detail: -

1. **Reading**

   (i) Variety in text type rather than having only short stories and prose pieces.

   (ii) Activities in built with enough guidance to the teacher and learners towards acquisition of reading skills.

(iii)   Vocabulary developed through word building skills.

(iv)   Reading inputs cater to the needs of the students and help to prepare them for professional courses as well as vocational courses.

(v)   Ten core objectives of the National Policy kept in mind while looking for reading inputs and working on the materials.

2. Specific objectives of Reading

(a)   To develop specific study skills such as follows:

(i)   To refer to dictionaries, encyclopedia, thesaurus and academic reference material.

(ii)   To select and extract relevant information, using reading skills of skimming and scanning.

(iii)   To transcode information from one form to another.

(iv)   To be able to read and comprehend a given text (for example advertisements, posters, newspaper articles, reports, write- ups, extracts etc. specifically.

(v)   To understand the writer's attitude and bias.

(vi)   To comprehend the difference between what is said and what is implied.

(vii)   To understand the language of propaganda and persuasion.

(viii)   To develop the ability to differentiate between claims and realities, facts and opinion.

(ix)   To develop the ability to form business opinion on the basis of latest trends available.

(x)   To develop the ability to comprehend technical language as required in computer related fields.

(xi)   To arrive at personal conclusion and comment on a given text specifically.

(xii) To develop the ability to be original and creative in interpreting opinion.

(xiiI) To develop the ability to be logically persuasive in defending one's opinion.

(b) To develop literary skills as enumerated below

(i) To personally respond to literary text.

(ii) To appreciate and analyze special features of language that differentiates literary texts from non- literary ones.

(iii) To explore and evaluate features of character, plot, setting etc.

(iv) To understand and appreciate the oral, mobile and visual elements of drama

(v) To identify the elements of style such as humour, pathos, satire and irony etc.

(c) Speaking and Listening

(i) Skills overtly built into the materials. (Language skills book)

(ii) Teachers need special guidance in the actualization of the skills.

(iii) Speaking needs a very strong emphasis and is an important objective leading to professional competence.

(iv) Testing of oral skills to be made an important component of the overall testing pattern.

(d) Specific objectives of Listening and Speaking Conversation Skills (Aural/ Oral)

To develop the ability

(i) To listen to lectures and talks and to be able to extract relevant and useful information for a specific purpose.

(ii) To listen to news bulletins and develop the ability to discuss informally on wide ranging issues like current national and international affairs,

sports, business etc.

(iii)   To appear for interviews and participate in formal group discussions.

(iv)   To make enquiries meaningfully and adequately respond to enquiries for the purpose of travelling within the country and even abroad.

(v)   To listen to business news and be able to extract relevant/important information.

(vi)   To develop the art of formal public speaking.

(e)   Writing Skills

(i)   Teaching skills and sub skills of writing focused on the process of writing.

(ii)   Writing skills integrated with the other skills and not compartmentalized.

(iii)   Sub skills of writing are taught in a context.

(iv)   Courses for two years graded in such a way that it leads the students towards acquire advanced writing skills.

(v)   Writing tasks move from less linguistically challenging to more linguistically challenging ones.

Specific objectives of Writing

To develop the ability:

(i)   To write letters to friends, pen friends, relatives etc.

(ii)   To write business letters and official ones.

(iii)   To send telegrams, faxes, e-mails.

(iv)   To open accounts in post offices and banks.

(v)   To fill in railway reservation slips.

(vi)   To write to various issues or institutions seeking relevant information,

lodge complaints, express thanks or tender apology.

(vii)   To write applications, fill in application forms, prepare personal bio-data for admission in college, universities, entrance tests and jobs.

(viii)   To write informal reports as part of personal letters on functions , programmes and activities held in school (morning assembly, annual day, sports day etc.)

(ix)   To write formal reports for school magazines or in local newspapers on the above events or occasions.

(x)   To write presentation of opinions, facts arguments in the form of set speeches for debates.

(xi)   To present papers for taking part in symposia.

(xii)   To take down notes from talks, lectures, and make notes from various resources for the purpose of developing ideas into sustained pieces of writing.

(xiii) To write examination answers according to the requirement of the various subjects.

EXAMINATION SPECIFICATION

Max. Marks : 100

Term First

Maximum Marks : 50   **Time allowed : 2½ hours**

1.   Life on Mars   Literature Reader
2.   Messages   Language Skills
3.   Notices   Language Skills
4.   Wings of Fire
5.   How to prevent Early aging of Brain
6.   Tsunami…. where Next.
7.   Electronic mail
8.   Speech writing
9.   To Sir, with love
10.   A Devoted Son
11.   Article writing
12.   Pattern of Poster writing   **50 Marks**

Note: The pattern of question paper for Term 1st of 35 marks will be as under: -

(A)   (Three questions of 1 mark each and one question on vocabulary test of 3 marks) on the comprehension of two prose passages of the (Literature Reader I) from the following chapter: -   **06 marks**

1.   Life on Mars.

2.   How to prevent early aging of Brain.

3.   Tsunami…. Where Next.

(B)   One question with alternative based on the character, event or theme from the following chapters of the *Literature* Reader:-   **05 marks**

1.   Wings of Fire.

2.　　　To Sir, with Love

3.　　　Education

4.　　　A Devoted Son.

(C)　　One question based on writing a message to a friend or Relative　**04 marks**

(D)　　One question on Notice writing　**04 marks**

(E)　　One question based on E. mail writing　**02 marks**

(F)　　One question on writing a speech on the given topics…(only one to be attempted)　**05 marks**

(G)　　One question on the Article writing on the　given topics… (Only one to be attempted)　**05 marks**

(H)　　One question on poster writing on the given captions…(only one to be attempted)　**04 marks**

Term Second

Maximum : 50 Marks　　　　　　　　　　**Time : 2 ½ hours**

1.　　　Education

2.　　　Note taking and Note making

3.　　　Introducing conversation

4.　　　Islamic Art….

5.　　　English for the Telephone…

6.　　　Recent actions and Activities

7.　　　Nobody Here but Us Chickens…

8.　　　Prepositions

9.　　　The passives

Note:　The format of question paper of T$_2$ of 35 marks will be as under:

(A)　　Testing the comprehension based on the two prose passages from the

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

following chapters of the Literature Reader, which shall consist of three short Answers type questions of 2 marks each and vocabulary test of 2 marks.

1. Education

2. Islamic Art **08 marks**

(B) One question describing the character or event of the theme from the Drama…. Nobody Here but Us Chickens **06 marks**

(C) One question based on the note taking of the given prose passage. **03 marks**

(D) One question on conversation on the given topics with choice… (to be Solved only One) **03 marks**

(E) One question on Report writing on the given topics… with choice. **03 marks**

(F) One question on the Telephonic conversation on the given topics… with a choice. **03 marks**

(G) One question on the Recent Actions and Activities with a … Choice. **03 marks**

(H) One grammatical question based on the use of prepositions. **03 marks**

(I) One Grammatical question on the passives. **03 marks**

Books Prescribed:

1. Functional English Language Skills Book- Class XI

2. Functional English Literature Reader- Class XI *Published by Goyal Brother Prakashan in cooperation with J&K State Board of School Education.*

Code : 204

HINDI

निर्धारित पाठ्य-क्रम

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प्रथम सत्र की परीक्षा का आधार अब मात्र एक इकाई तथा परीक्षाकाल तक पढ़ा हुआ पाठ्यक्रम होगा। इकाई एक 15 अंक की तथा प्रथम सत्र परीक्षा 35 अंक की होगी। इसी प्रकार द्वितीय सत्र की परीक्षा का आधार अब इकाई दो तथा परीक्षाकाल तक पढ़ा हुआ पाठ्यक्रम होगा। अंक क्रम ः इकाई दो 15 अंक तथा परीक्षा काल तक पढ़ा हुआ पाठ्यक्रम 35 अंक का होगा।

पाठ्यक्रम सत्रों में विभाजित करते हुए पाठों की कठिनाई का स्तर ध्यान में रखा गया है । अध्यापकों से निवेदन है कि सांकेतिक क्रम के अनुसार ही पाठों को लें तथा पढ़ाएं ।

निर्धारित ः पुस्तकें ः

1. बोर्ड द्वारा निर्धारित तथा प्रकाशित पुस्तक 'मानसर'

2. हिन्दी साहित्य का इतिहास–भागीरथ मिश्र

3. सम्प्रेषण मूलक हिन्दी

   लेखक ः डॉ राम प्रकाश तथा डॉ दिनेश गुप्त

   प्रकाशक ः राधाकृष्ण प्राइवेट लिमिटेड नई दिल्ली

प्रथम सत्र (1st Term) का पाठ्यक्रम

अंक ः 35   समय ः 2½ घण्टे

काव्य भाग – (क)

साखी – कबीरदास मानसर पाठ्य पुस्तक में से संकलित

सूरदास – बाललीला मानसर पाठ्य पुस्तक में से संकलित

हिन्दी साहित्य का इतिहास – भाग (ख)

वीरगाथा काल की परिस्थितियाँ और विशेषताएं

निबन्ध : – भाग – (ग)

चारु–चरित्र : – बाल कृष्ण भटट्

सच्ची वीरता : – सरदार पूर्ण सिहँ

कहानियाँ : – भाग (घ)

कहानी की परिभाषा तथा तत्व

ईदगााह : – (मुन्शी–प्रेमचन्द) निर्धारित

अभाव : – विष्णु प्रभाकर की कहानियाँ

व्याकरण : – पत्र लेखन – भाग (ङ)

निजी–पत्र, आवेदन–पत्र तथा व्यावसायिक–पत्र ।

प्रथम इकाई (1ˢᵗ Unit) का पाठ्यक्रम

कुल अंकः 15

कबीर : – साखी अंक 2½

बाल कृष्ण भटट् चारु–चरित्र–निबन्ध अंक 2½

प्रेमचन्द : – ईदगाह–कहानी अंक 2½

नोट : – अध्यापकों से निवेदन है कि निर्धारित अंकों के आधार पर प्रथम इकाई का व्यापक परीक्षण पद्धति के आधार पर प्रश्न–पत्र तैयार करें ।

सूरदास – बाललीला अंक 2½

विष्णुप्रभाकर – अभाव कहानी अंक 2½

सरदार पूर्ण सिँह – सच्ची वीरता निबन्ध अंक 2½

नोट : – पाठों के आधार पर विषयगत विस्तृत परीक्षण पद्धति के आधार पर प्रश्न–पत्र तैयार करें ।

द्वितीय–सत्र (2nd Term)

अंक: 35

समयः 2½ घण्टे

काव्य भाग–क

बिहारीलाल　　：–　　नीति के दोहे (केवल छः दोहे)　　मानसर पाठ्य पुस्तक

देव　　：–　　हँसी की चोट, सपना और दरबार　पुस्तक में से

हिन्दी साहित्य का इतिहास　：　भाग–ख

भक्तिकाल की परिस्थितियाँ और विशेषताएँ (संक्षेप में)

ललित निबन्ध　：　भाग–ग

मित्रता　：– आचार्य रामचन्द्र शुक्ल

टार्च बेचने वाले (व्यंग्य)　：– हरिशंकर परसाई　　'मानसर' में से

कहानियाँ　：　भाग–घ

उसकी माँ　：– पांडेय बेचन शर्मा 'उग्र'

वापसी　：– उषा प्रियंवदा

व्याकरण　：　भाग 5

निबन्ध–लेखक　：–　सामाजिक, उत्सव, वैज्ञानिक, खेलों से सम्बन्धित

अलंकार　：–　अनुप्रास, उपमा, अतिश्योक्ति तथा उत्प्रेक्षा के लक्षण और उदाहरण ।

द्वितीय इकाई (Unit 2ᵈⁿ) का पाठ्यक्रम

समयः 2½ घण्टे

बिहारी लाल—नीति के दोहे (मात्र छः)	अंक 2½
आ० राम चन्द्र शुक्ल—मित्रता—निबन्ध	अंक 2½
पांड्रेय बेचन शर्मा 'उग्र'—उसकी माँ—कहानी	अंक 2½

नोट : – अध्यापक निर्धारित पाठों के आधार पर व्यापन परीक्षण पद्धति अनुसार विषयगत प्रश्न पूछें ।

देव	: –	हँसी की चोट, सपना और दरवार—कविताएँ	अंक 2½
हरि शंकर परसाई	: –	टार्च बेचने वाले—व्यंग्य	अंक 2½
उषा प्रियवंदा	: –	वापसी—कहानी	अंक 2½

नोट : – अध्यापक निर्धारित पाठों के आधार पर व्यापन परीक्षण पद्धति अनुसार विषयगत प्रश्न पूछें ।

Code : 205

डोगरी (DOGRI)

पैह्ले सत्र दी परीक्षा दा अधार इकाई इक : परीक्षा तक पढ़े' दा पाठ्यक्रम होग। इकाई इक 15 नम्बर दीं होग ते पैह्ला सत्र 35 नम्बरें दा होग। इस्सै चाल्ली दुए सत्र दी परीक्षा दा अधार इकाई दो + परीक्षा तक पढ़े' दा पाठ्यक्रम होग। इकाई दो 15 नम्बर दी होग ते दुआ सत्र 35 नम्बरें दा होग।

पैह्ले सत्र ते दुए सत्र दा टेस्ट पूरे पाठ्यक्रम पर अधारत होग। पूरा परीक्षण पाठ्यक्रम ते पाठ्य पुस्तकें दे अधार पर होग ते सारियां परीक्षां 'निरंतर व्यापक परीक्षण योजना' (सी० सी० ई०) दे तैह्त होङन।

पैह्ला सत्र (फस्ट टर्म) दा पाठ्यक्रम

50 Marks

(क)   पद्य भाग ते गद्य भाग : 'रि   मां' भाग – XI जाहरमीं जमातै आस्तै

संपादक : चम्पा भार्मा, ललित मगोत्रा, ओम–गोस्वामी, वीणा गुप्ता,

 ा ा पठानिया ते सु   मा रानी

(ख)   व्याकरण

पद्य भाग : (क)   कविता   :   नमां जुग, सरगम।

गजलां   :   रामनाथ भाास्त्री ते वेदपालदीप।

गीत   :   य   ा भार्मा।

चमुखे   :   मोहन लाल सपोलिया।

गद्य भाग : (ख)   कहानियां   :   पागल, कफर्यू।

निबंध   :   भोरसिंह बनाम पंजूराम, क्षमा करना धन्यवाद।

एकांकी   :   नीलकंठ।

(ग) व्याकरण   :   गद्य ते पद्य भाग चा व्याकरण सरबन्धी सुआल।

दुआ सत्र (सैकंड टर्म) दा पाठ्यक्रम

(क)   पद्य भाग (ख) गद्य भाग : 'रि मां' भाग – XI जाहरमीं जमातै आस्तै

संपादक : चम्पा शर्मा, ललित मगोत्रा, ओम–गोस्वामी, वीणा गुप्ता,

भाि ा पठानिया ते सुशमा रानी।

(ख)   व्याकरण :

पद्य भाग : (क)   कविता   :   भाव–छुआले, इक दिन गि'ल्लुए जदूं मठोना

गजलां   :   वेदपाल 'दीप ते ि व राम 'दीप'।

गीत   :   य ा भार्मा।

चमुखे   :   मोहन लाल सपोलिया।

गद्य भाग : (ख)   कहानियां   :   संगलां, अजब सा ओह् आदमी।

निबंध   :   म्हिसदियां लीकरां, जीवन केह् ऐ ?

एकांकी   :   नीलकंठ।

(ग)   व्याकरण   :   गद्य ते पद्य भाग चा व्याकरण सरबन्धी सुआल।

Book Prescribed

A Textbook of Dogri 'Rishman' for Class XI published by J&K State BOSE

Note: Term 1st shall comprise:

U_1 = 15 marks
T_1 = 35 marks

Term 2nd shall comprise:

U_2 = 15 marks
T_2 = 35 marks

Code : 206

संस्कृत (SANSKRIT)

प्रथम सत्र की परीक्षा का आधार इकाई एक + परीक्षाकाल तक पढ़ा हुआ पाठ्यक्रम होगा । इकाई एक, तथा प्रथम सत्र परीक्षा क्रमशः 15 अंक, तथा 35 अंक की होगी । इसी प्रकार द्वितीय सत्र की परीक्षा का आधार इकाई दो + परीक्षाकाल तक पढ़ा हुआ पाठ्यक्रम होगा । पूरा परीक्षण पाठ्यक्रम पाठ्यपुस्तकों व निरंतर व्यापक परीक्षण योजना (सी.सी.ई) के आधार पर होगा । पाठ्यक्रम सत्रों में विभाजित करते हुए पाठों की कठिनाई का स्तर ध्यान में रखा गया है।अध्यापकों से निवेदन है कि संकेतिक क्रम के अनुसार ही पाठों को लें तथा पढ़ाएं ।

प्रथम सत्र (फस्ट टर्म) का पाठ्यक्रम

(क)	गद्य भाग तथा		रङ्गिणी : एन० सी० ई० आर टी द्वारा संकलित एवं संपादित पाठ उदयनस्य पत्नी प्रीति
(ख)	पद्य भाग (काव्य)		कालिदास कृत कुमारसंभवम् (केवल पांचवां सर्ग)
			पहले श्लोक से 45 वें श्लोक तक
(ग)	व्याकरण	1.	स्वर संधि भेद सहित
		2.	स्वरान्त शब्दों में से अकारान्त पुल्लिंग, आकारान्त स्त्रीलिंग
			उकारांत पुं० शब्द
		3.	भ्वादि गण में से भू, गम्, पठ्, स्म्, और दृश धातु (लट्, लोट्, लृट् तथा विधिलिंग लकारों में)
		4.	समास – कर्मध्धरय तथा तत्पुरुष
		5.	प्रत्यय – शतृ, शानच्

व्याकरण के लिये निर्धारित पुस्तक :–

संस्कृत व्याकरण प्रदीप या सुबोध संस्कृत व्याकरण या संस्कृत व्याकरण प्रबोध

(घ)	साहित्य	1.	रामायण का महत्त्व
		2.	कालिदास कवि के रूप में

निर्धारित पुस्तक :

संस्कृत साहित्य की रूपरेखा

लेखक :– चन्द्रशेखर पाण्डेय व व्यास ।

द्वितीय सत्र (सैकंड टर्म) का पाठ्यक्रम

(क) गद्य एवं पद्य भाग रङ्गिणी : एन० सी० ई० आर टी

     पाठ (1) शकुन्तलायाः पतिगृहगमनम्

          (2) सीता परित्राणम्

(ख) पद्य भाग (काव्य) कालिदात कृत कुमारसंभवम्

          पांचवा सर्ग 46वें श्लोक से लेकर अन्त तक

(ग) व्याकरण 1. सर्वनाम शब्द :– युष्मद्, तत्, अस्मद्, किम्, इदम्

          2. धातुः– सी, चल्, पा, रक्ष, हस

          3. प्रत्ययः– क्त, क्तवतु, तव्यत्

          4. समासः– द्वन्द्व, द्विगु

            अनुवादः– सामान्य वाक्य

(घ) साहित्य 1. महाभारत का सामान्य परिचय एवं काल निर्धारण

          2. नाटकों का उद्भव और विकास

          3. भासः नाटककार के रूप में

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 208

འཛིན་གྲྭ་བཅུ་གཅིག་པའི་སློབ་ཚན།

BHOTI

Marks 100

སློབ་དེབ་གཞོན་ནུའི་མཁས་རྒྱན་ཁག་དང་པོ

(J&K Board of School Education)

(Ist Term)   50 Marks

ཁག་དང་པོ   ༥ ༥

༡	ཚིག་ལྷུག	(Prose Section)	ཨང་ 20
༢	ཚིགས་བཅད	(Poetry Section)	ཨང་ 20
༣	བརྡ་སྤྲོད་སྐོགས	(Grammar Section)	ཨང་ 20

༡ ཚིག་ལྷུག (Prose Section)   **Marks 20**

རང་གི་སློབ་དེབ་ནང་གི་གནའས་གསལ་སློབ་ཚན།

དགེ་སློང་ཀྱུ་སྒྲུབ་སོགས།

༢ ཚེ་སྒྲོག་གཅོད་པ་དང་ཞིས་སོགས།

༣ སེམས་ཅན་རང་རང་གི་ཁམས་དང་བསམ་པའི་དབང་གི་ཞིས་སོགས།

༣ ཚིགས་བཅད (Poetry Section)   **Marks 10**

རང་གི་སྤྱོད་དེབ་ནང་ནས་གན�འམ་གསལ་ཆེགས་སུ་བཅད་པ

༡ ཡོན་ཏན་རང་བཞིན་དགེ་འོས་བདག་ཕྱིས་ནི།

༢ གང་ལ་ཕ་དང་མ་དག་མཆོད་པ་ཡི།

༣ སེམས་ནི་རྒྱ་དང་ས་དང་དོ་བ་ལ།

༤ ཁྱད་ཀྱིས་བྱམས་ཏེ་དགེ་སྨོང་ཁུ་དང་ནི།

༥ བྱམས་དང་སྙིང་རྗེ་དང་དགའ་བ་དང་།

༣ བདའ་སྒྱོད (Grammar Section)   **Marks 20**

༡ བགད་པ   །

༢ ཡི་གེ། རྐྱན་ཊུ །

༣ འཇོད་པ་དང་པོ་བཙོ་རྒུ །

༤ སྐྱོང་ཚ་འགྱིངས་རྒུ །

༥ གཏུམ་དཔེ །

༦ རང་བཞིན་འཇོད་པ་དཔེ་རྒུན །

༧ འགལ་ལྒ །

༨ གཙོབ་འཇུག་རྒུ །

༩ མཚན་འཇོད །

༡༠ ཡང་ཁང་རེ་མི་ནར་ ས་བོད་སྐད་ལ་བསྒྱུར་རྒུ །

ཤེས་ཚད་བརྟག་པ། (Scheme of Assessment)

Note:-

ཤེས་ཚད་བརྟག་པ་ནི་སློབ་བུ་རང་གིས་སྤྲབས་སྤྲབས་སུ་ཡིན་དན་ལས་ཁང་ས་ཀྱིས་བཤད་པའི་འཆར་
གཞི་དང་བཞིན་མཛད་རྒྱུ།

༡ ཚིག་ལྷུག (Prose Section)   Marks 20

༡ སློབ་ཚན་ནང་གི་ཚིག་ལྷུག་གི་བཅད་མཚམས་ཁག་བཞི་ཡི་དན་ནས་གཉིས་
    སློབ་ཚན་དང་ཏྲོམ་པ་པོའི་མིང་གི་འབྲེལ་དང་བཅས་པ། འདུ། དེ་སྐྲ་ཡང་
    ན་གང་རེ་རེ་ནང་དུ་འགྱུར་རྒྱུ།   ཨང་ 07

༢ སློབ་ཚན་ཀུན་ཡིགས་པར་ནེད་ཡོད་མིན་དང་འད་ཕོད་མིན་དང་། བཟོད་བྱ་
    བརྟག་ཕྱིར་བྱི་དི་བ་ལྕའི་ནང་ནས་གསུམ་ལ་ལན་འདྲི་རྒྱུ།   ཨང་ 04

༣ ཚིག་ལྷུག་ཏྲོམ་པ་པོའི་སྐོར་མདོར་བསྡུས་གཉིས་ཀྱི་ནང་ནས་གཅིག་གི་སྐོར་རང་
    གི་སློབ་ཚན་ནང་ཡོད་པ་ལྟར་འབྲི་རྒྱུ།   ཨང་ 03

༤ ཚིག་ལྷུག་གི་བཅད་མཚམས་ཁག་གཉིས་ཀྱི་ནང་ནས་དོག་གི་གནས་ལ་ཕབ་
    འབྲི་རྒྱུ།   ཨང་ 03

༥ དཔལ་གནས་ལ་ཕྱི་ཚིག་ལྷུག་ཁག་ཡིགས་པར་བཀྲོལ་ནས་གཏོག་གི་དི་བ་བཞི་ལ་
    ལན་འབྲི་རྒྱུ།   ཨང་ 03

༣. ཚིགས་བཅད་ (Poetry Section)   Marks 10

༡) གདམ་གསལ་ཚིགས་བཅད་བཞི་ཡི་ནང་ནས་འབྲེལ་དང་བཅས་པ་གཉིས་ཏེན་
 དེ་ཇུར་དུ་དང་ཡང་རེ་རེ་གང་རུང་ནང་བསྐུར་རྒྱུ །   ཨང་ 4

༢) ཚིགས་བཅད་གཉིས་ཀྱི་ནང་ནས་གཅིག་གི་ཚིག་འབྲེལ་སྙིང་དོན་བྲིས །   ཨང་ 2

༣) གདམ་གསལ་ཚིགས་བཅད་རྩོམ་ཚུལ་མི་འདྲི་བ་གཉིས་ཀྱི་ནང་ནས་གཅིག་གི་
ངོས་འཛིན་བྱ་རྒྱུ །   ཨང་ 2

༤) སྔན་དག་མཁན་གཉིས་ཀྱི་ནང་ནས་གཅིག་གི་ལོ་རྒྱུས་མདོར་བསྡུས་འབྲི་རྒྱུ །   ཨང་ 2

༤. བདེ་སྦྱོད་ (Grammar Section)   Marks 20

༡) གདམ་གསལ་རྩོམ་གཞི་བཞིའི་ནང་ནས་གཅིག་གི་སྐོར་ཚིག ༣༠༠ལས་མི་ཉུང་
བ་འབྲི་རྒྱུ །   ཨང་ 7

༢) ཡི་གེ་ཡང་ན་སྔན་ཆུ་གསུམ་བྱེ་ནང་ནས་གཅིག་འབྲི་རྒྱུ །   ཨང་ 4

༣) གདམ་གསལ་བརྗོད་པ་ལྔ་ཡི་ནང་ནས་གསུམ་དག་པོ་འབྲི་རྒྱུ །   ཨང་ 2

༤) གདམ་གསལ་སྙིང་ཚ་བཞི་པོ་འབྱེང་ས་རྒྱུ །   ཨང་ 2

༥) གདམ་གསལ་གདུམ་དཔེ་ལྔ་ཡི་ནང་ནས་གསུམ་ལ་བརྗོད་པ་འབྲི་རྒྱུ །   ཨང་ 2

༦) གདམ་གསལ་བྱ་བ་བསྐྱུད་ཀྱི་ནང་ནས་བཞིའི་འདས་མ་འོངས་པ་དང་ད་ལྟ་
བའི་ཚིག་སྒྲུབ་སྲང་ས་འབྲི་རྒྱུ །   ཨང་ 1

༧) གདམ་གསལ་ཚིག་བསྐྱུད་ཀྱི་ནང་ནས་བཞི་ལ་འགལ་རྣ་འབྲི་རྒྱུ   ཨང་ 1

༨) གདམ་གསལ་བརྗོད་པ་བཞི་གཙོ་བ་འཇུག་ནས་དོན་ཚ་ཚང་སྟོན་པ་འབྲི་རྒྱུ །   ཨང་ 1

(IInd Term) ཁག་གཉིས་པ་	Marks 50 ཞང་ ༌ ༣༥	
༡ ཚིག་ལྷུག །	**Prose Section**	ཞང་ 20
༣ ཚིགས་བཅད །	**Poetry Section**	ཞང་ 10
༣ བད་སྒྱུར །	**Grammar Section**	ཞང་ 20

༡ ཚིག་ལྷུག (Prose Section)   **Marks 20**

རང་གི་སློབ་དེབ་ནང་གི་བདམ་གསལ་ཚིག་ལྷུག་ཀུན་ཡོད།

༡ སྙིང་སྟག་པ་ནས་ཚོས་སྒྲུབ་པའི་ཚེ་ཐོག་མར་དགེ་བའི་བཤེས་གཉིན་བསྟེན་པར་བྱ་ཞེས་སོགས།

༣ མཚོ་རེས་ཀྱི་གནས་རིན་པོ་ཆེའི་རང་བཞིན་ཏྲི་ས་ཞེས་སོགས།

༣ ཡི་དགས་ཁ་ཅིག་གི་ལུས་ནི་ཞེས་སོགས།

༤ བསམ་གཏན་མེད་པར་ཡང་ནི་བདག་མེད་པའི་དོན་ལ་ཞེས་སོགས།

༥ དངེ་གཉིས་པ་ཤུན་མོང་བའི་རྒྱུན་གྱི་དགྲེ་བཞིབ་མོར་བཔད་པ་ལ་གཉིས་ཏེ་ཞེས་སོགས།

༣ ཚིགས་བཅད (Poetry Section)   **Marks 10**

རང་གི་སློབ་དེབ་ནང་གི་བདམ་གསལ་ཚིགས་སུ་བཅད་པ་ཀུན་ཡོད།

༡ དད་དང་བཙོན་འགྲུས་དགའ་དང་དན་པ་དང་།

༣ ཕར་པ་བདདག་ལ་རབ་༌༌༈ ཤད་ལ་ནི།

༣ བདི་བ་ཀུན་ཀྱི་ནང་ནས་ུྃད་ཐར་ཕྱོ།

༤ ཉེན་ཅིང་འཁྲུག་བར་འཆུང་འདི་ྃལ་བ་ཡིༀ།

༤ ཡང་དགག་ལྡང་འཚོ་དང་རྫོལ་བ་རང་།

༣ བད་སྒྲུང (Grammar Section)   **Marks 20**

༡ བཤད་པ །

༢ ཨི་བེ ཤུན་ལུ ༑

༣ འཚོད་པ་དག་པོ་བརྫོ་ཤུ །

༤ སྐྱོང་ཚ་ཀྱུན་འཁོར་ས་ཤུ །

༥ བཅུམ་དཔེ །

༦ བརྗགས་ཚན་ཏྲི་ཤུར་དང་བསལ་བྱེད་ཀྱི་ཤུན །

༧ ཕྱག་ན །

༨ གཉོབ་འཇུག་ནས་འབྱེ་ཤུ །

༩ མཚན་འཚོད །

༡༠ བདགས་གསལ་ཁང་རེ་རེའི་ཚིག་ཕྱུག་གཉིས་ཀྱི་ནང་ནས་གཅིག་བོད་སྐད་དུ་བསྒྱུར་ཤུ །

ཤེས་ཚད་བདག་པ (Scheme of Assessment)

སློབ་བུ་རང་གིས་སྐབས་སྐབས་སུ་ཇ་སྒྲུག་གཉེར་བོ་རྩ་ཞལ་སི་ཀུལ་ཨི་དུ་ཀི་ནན་ཉིས་འཆར་བཞི།
གནག་ཡོད་པ་ལྱར་སྐབས་སྐབས་སུ་ཤེས་ཚད་བདག་ཤུ

༢ ཚིག་ལྷུག (Prose Section)   Marks 20

༡ རང་གི་སློབ་ཚན་ནང་ཡོད་པའི་ཚིག་ལྷུག་གི་བཅད་མཚམས་ཁག་བཞིའི་ནང་
ནས་གཉིས་ཀྱི་འབྲེལ་དང་བཅས་པོ་སྐྱོད་ནས་ཏིཎྞི། འདུ། ཡང་ན་ཡང་རེ
ཉེའི་ནང་དུ་བསྐྱར་རྒྱུ །   ཨང་ 07

༢ རང་གི་སློབ་ཚན་ཀུན་ཁྲིགས་པར་ཉེས་ཡོད་མིན་བརྟག་ཕྱིར་དྲི་བ་སྤྱིའི་ནང་ནས་
གསུམ་ལ་ལན་འབྲི་རྒྱུ །   ཨང་ 04

༣ རང་གི་སློབ་ཚན་ནང་ཡོད་པའི་ཚིག་ལྷུག་རྩོམ་པ་པོ་གཉིས་ཀྱི་སྐོར་མདོར་བསྡུས
ཤིག་འབྲི་རྒྱུ །   ཨང་ 03

༤ ཚིག་ལྷུག་ཁག་གཉིས་ཀྱི་ནང་ནས་གཅིག་གི་འབྲེལ་དང་བཅས་གསལ་བཤད་འབྲི
རྒྱུ །   ཨང་ 03

ཚིག་ལྷུག་ཁག་གཉིས་བཏགས་རྒྱུ དེ་བཀྲགས་ཏེ་དྲི་བ་བཞི་ལ་ལན་འབྲི་རྒྱུ །   ཨང་ 03

༣ ཚིགས་བཅད (Poetry Section)   Marks 10

༡ ཚིགས་སུ་བཅད་པ་བཞིའི་ནང་ནས་གཉིས་ཀྱི་འབྲེལ་དང་བཅས་བོད་སྐད་ནས་
ཏིཎྞི ཨང་དུ། ཡང་ན་ཡང་རེ་ཉེའི་ནང་དུ་འབྲི་རྒྱུ །   ཨང་ 04

༢ ཚིགས་བཅད་གཉིས་ཀྱི་ནང་ནས་གཅིག་གི་འབྲེལ་དང་བཅས་པའི་ཚིག་འབྲེལ
ལམ སྐྱིང་དོན་འབྲིས །   ཨང་ 02

༣ དཔེའི་རྒྱན་བཞིའི་ནང་ནས་གཉིས་ཕོག་རང་རྩོམ་འབྲི་རྒྱུ །   ཨ 02

རང་གི་སློབ་དེབ་ནང་ཡོད་པའི་ཚིགས་བཅད་རྩོམ་པ་པོ་གཉིས་ཀྱི་ནང་ནས་གཅིག
ཏེ་ཕོ་རྒྱུས་མདོར་བསྡུས་ཤིག་འབྲི་རྒྱུ །   ཨང་ 02

༣ བརྡ་སྤྲོད་ (Grammar etc.) **Makrs 20**

༢ གདམ་གསལ་ཚིག་གཞི་བཞིའི་ནང་ནས་གཅིག་གི་སྐོར་ཚིག་ ༣༠༠ ལས་མི་

ཉུང་བ་འབྲི་རྒྱུ ། ཁང་ 07

༣ ཡི་གེ་ཡང་ན་ སྐུན་ལུ་ ཡི་རང་ནས་གཅིག་འབྲི་རྒྱུ ། ཁང་ 04

༣ གདམ་གསལ་བརྗོད་པ་ལྔའི་ནང་ནས་གསུམ་དག་པོ་འབྲི་རྒྱུ ། ཁང་ 02

༤ སྐད་ཆ་བཞི་འབྱེད་རྒྱུ ། ཁང་ 02

༥ གཏམ་དཔེ་ ལྔ་ནང་ནས་གསུམ་གྱི་དོན་དང་བརྗོད་པ་འབྲི་རྒྱུ ། ཁང་ 02

༦ བྱ་ཚིག་བཅུད་ཀྱི་ནང་ནས་བཞིའི་འདས་ མ་འོངས་དང་ ད་ལྟ་བའི་ཚིགས་ ཁང་ 01
སྒྲུབ་བཟོ་རྒྱུ །

༧ ཚིག་བཅུད་ཀྱི་ནང་ནས་བཞིའི་ཡིག་སྣ་འབྲི་རྒྱུ ། ཁང་ 01

༨ བརྗོད་པ་བཞིའི་སྐོར་ཆ་ཚང་སྙོན་པ་གསོག་འཇུག་སྟེ་འབྲི་རྒྱུ ། ཁང་ 01

Code : 207

ਜਮਾਤ ਯਾਰਵੀ (ਹਾਇਰ ਸਕੈਂਡਰੀ ਪਾਰਟ ਫਸਟ)

ਸਲੈਬਸ ਪੰਜਾਬੀ (PUNJABI)

ਪਹਿਲੀ ਸਤਰ ਦੀ ਪ੍ਰੀਖਿਆ ਦਾ ਆਧਾਰ ਇਕਾਈ 1 + ਪ੍ਰੀਖਿਆ ਕਾਲ ਤਕ ਪੜ੍ਹਿਆ ਹੋਇਆ ਸਿਲੇਬਸ ਹੋਵੇਗ ਇਕਾਈ 1 + ਅਤੇ ਸਤਰ ਦੀ ਪ੍ਰੀਖਿ ਤਰਤੀਥਵਾਰ 15 ਔਕ. ਅਤੇ 35 ਔਕ ਦੀਆ ਹੋਣਗੀਆਂ । ਇਸੇ ਤਰ੍ਹਾਂ ਦੂਜੇ ਸਤਰ ਦੀ ਪ੍ਰੀਖਿਆ ਦਾ ਆਧਾਰਾ ਇਕਾਈ 2 + ਪ੍ਰੀਖਿਆ ਕਾਲ ਤਕ ਪੜ੍ਹਿਆ ਹੋਇਆ ਸਿਲੇਬਸ ਹੋਵੇਗ ।

ਇਕਾਈ 2 + ਅਤੇ ਦੂਜੇ ਸਤਰ ਦੀ ਪ੍ਰੀਖਿਆ ਤਰਤੀਥਵਾਰ 15 ਔਕ ਅਤੇ 35 ਔਕ ਦੀਆਂ ਹੋਣਗੀਆਂ ।

ਸਾਰੀਆਂ ਪ੍ਰੀਖਿਆਵਾਂ ਦਾ ਸਿਲੇਬਸ ਪਾਠਜ– ਪੁਸਤਕਾਂ ਅਤੇ C.C.E. ਸਕੀਮਾਂ ਦੇ ਆਧਾਰ ਤੇ ਹੋਵੇਗ । ਸਿਲੇਬਸ ਤਰਤੀਥਵਾਰ ਸਤਰਾਂ ਵਿਚੋਂ ਵੰਡਦਿਆਂ ਹੋਇਆ ਪਾਠਾਂ ਦੀ ਕਠਿਨਾਈ ਦੇ ਸਤਰ ਦਾ ਧਿਆਨ ਰਖਿਆ ਗਿਆ ਹੈ । ਅਤੇ ਅਧਿਆਪਕਾਂ ਪ੍ਰੀ ਬੇਨਤੀ ਹੈ ਕਿ ਦਸੇ ਹੋਏ ਕਰਮ ਦੇ ਅਨੁਸਾਰ ਪਾਠਾਂ ਨੂੰ ਲੈਣ ਤੇ ਪੜ੍ਹਾਉਣ ।

ਪਹਿਲੀ ਸਤਰ (1st Term) ਦਾ ਸਿਲੇਬਸ

(੧)   ਕਾਵਿ ਪ੍ਰਵਾਹ   ਸੰਪਾਦਕ ਦੀਵਾਨ ਸਿੰਘ (ਕਵਿਤਾ)

    (ੳ) ਸ਼ੇਖ ਫਰੀਦ

    (ਅ) ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ

    (ੲ) ਦਮੋਦਰ

    (ਸ) ਪੀਲੂ

    (ਹ) ਭਾਈ ਗੁਰਦਾਮ ਜੀ

    (ਕ) ਗੁਰੂ ਗੋਬਿਦ ਸਿੰਘ ਜੀ

(੨)   ਦਸ ਝਰੋਖੇ ਨਵਤੇਜ ਸਿੰਘ ਨਿੱਕੀ ਕਹਾਣੀ

    (ੳ) ਪ੍ਰੀਤਾਂ ਦੇ ਪਹਿਰੇਦਾਰ   ਕਹਾਣੀ ਦਾ ਸਾਰ

ਅ) ਤਾਸ਼ ਦੀ ਆਦਤ   ਪਾਤਰ ਚਿਤ੍ਰਣ

(ੲ) ਬਾਗੀ ਦੀ ਧੀ

(ਸ) ਪ੍ਰੇਮੀ ਦੇ ਨਿਆਣੇ

(ਹ) ਪਠਾਣ ਦੀ ਧੀ

(ੲ) ਇਕਾਂਗੀ ਪੰਜ ਚੋਣਵੇਂ ਇਕਾਂਗੀ ਸੁਰਜੀਤ ਸਿੰਘ ਸੇਠੀ

   (ੳ) ਮਨ ਦੀਆਂ ਮਨ ਵਿਚ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ

   (ਅ) ਇਕ ਐਤਵਾਰ   ਪਾਤਰ ਚਿਤ੍ਰਣ

   (ੲ) ਰਾਤ ਕਟ ਗਈ

ਵਿਆਕਰਨ

   (ੳ) ਲੇਖ ਰਚਨਾ

   (ਅ) ਚਿੱਠੀ ਪੱਤਰ

   (.ੲ) ਅਖਾਣ ਤੇ ਮੁਹਾਵਰੇ

ਸਤਰ ਦੂਜਾ

1. ਕਾਵਿ ਪ੍ਰਵਾਰ: ਕਵਿਤਾ: ਦੀਵਾਨ ਸਿੰਘ

   (ੳ) ਨਜਾਬਤ   ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ

   (ਅ) ਵਾਰਸ ਸ਼ਾਹ   ਕਵਿਤਾ ਦਾ ਸਾਰ

   (ੲ) ਹਾਸ਼ਮ

   (ਸ) ਸ਼ਾਸ ਮੁਹਮੰਦ

   (ਹ) ਫ਼ਸਲ ਸ਼ਾਹ

   (ਕ) ਮੁਹਮੰਦ ਬੂਟਾ ਗੁਜਰਾਂਤੀ

2. ਦਸ ਝਰੋਖਤ: ਨਵਤੇਜ ਸਿੰਘ: ਨਿੱਕੀ ਕਹਾਣੀ

   (ੳ) ਕਰਾਮਾਤ   ਕਹਾਣੀ ਦਾ ਸਾਰ

   (ਅ) ਸਵੇਰ ਹੋਣ   ਪਾਤਰ ਚਿਤੂਰ

   (ੲ) ਤੁਤੀ ਦੀ ਪੰਡ

   (ਸ) ਦੇਸ਼ ਵਾਪਸੀ

   (ਹ) ਗੁਲਬਾਨੋ

3. ਪੰਜ ਚੋਣਵੇਂ ਇਕਾਂਗੀ

   (ੳ) ਦਿਲ ਦੀ ਬੁਕੱਲ   ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ

   (ਅ) ਅਪਮਾਨ   ਪਾਤਰ ਚਿਤ੍ਰਣ

ਅਿਵਾਕਰਣ

   (ੳ) ਲੇਖ ਰਚਨਾ

   (ਅ) ਸ਼ਬਦ ਰਚਨਾ ਤੇ ਸ਼ਬਦਾਵਲੀ

   (ਇਕ) ਵਿਰੋਧਅਰਥਕ ਸ਼ਬਦ

   (ਦੂਜਾ) ਅਗੇਤਰ ਤੇ ਪਿਛੇਤਰ

   (ਤੀਜਾਂ) ਬਹੁਅਰਥਕ ਸ਼ਬਦ

   (ਚੰਥਾ) ਭਿੰਨਅਰਥਕ ਸ਼ਬਦ

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

<div align="center">

Code : 211

KASHMIRI

</div>

1st Term Course

i)	Prose: First five lesson from the prescribed textbook.	=	17 marks
ii)	Poetry: First six poems from the prescribed textbook	=	13 marks
iii)	Grammar: Based on exercise given in textbook	=	20 marks
		Total:	**50 marks**

Assessment of 1st Term Course

During the transaction of 1st term course, students would be given one unit test of 15 marks and a term test (T_1) at the end of 1st Term having a weight age of 35 marks. The unit and term Test(s) are to be given as per the guidelines contained in Continuous and Comprehensive Evaluation Scheme introduced by the Board for Higher Secondary Part-I i.e. Class 11th

First Term Test

Marks : 35   **Time : 2½ hours**

1. A question on explanation with reference to context of one prose passage out of two drawn from the prescribed content of prose section of the textbook.   **4 marks**

2. A question of textual nature with internal and parallel choice, testing the comprehension of contents (prose section)   **4 marks**

3. Explanation with reference to context of any one out of three poetry passages drawn from the prescribed poetry section of the textbook.   **4 marks**

4. A note on any one of the genres of Kashmir poetry represented in the prescribed portion of the text book.   **4 marks**

5. Two question on applied grammar based on the exercises given in the textbook and having weightage of 06 marks and another of 07 marks.   **12 marks**

6. An objective type question consisting of 10 multiple-choice items each of one mark based on the prescribed contents of the textbook and grammar.   **07 marks**

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JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

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SYLLABUS CLASS XI

Second Term Course

i)	Prose: Last six lessons from the prescribed textbook	**17 marks**
ii)	Poetry: Last seven poems from the prescribed textbook	**13 marks**
iii)	Essay	**10 marks**
iv)	Grammar	**06 marks**
v)	Letter/Application	**04 marks**
		Total: 50 marks

Assessment of 2nd Term Course

During the transaction of Second Term Course students would be given 1 unit test of 15 marks and a term test at the end of 2nd term course having a weightage of 35 marks. The tests are to be given as per the guidelines laid down by the Board in CCE Scheme for class-XI

Second Term Test

Marks: 35   **Time : 2½ hours**

1. Explanation with reference to context of one prose passage out of two from the prescribed textbook. **04 marks**
2. A question testing the comprehension of contents based on the prose section prescribed for the term. **04 marks**
3. Explanation with reference to context of any one out of two poetry passages drawn from the prescribed portion of the textbook. **04 marks**
4. A question with alternative choice of textual nature from the prescribed poetry section testing the comprehension. **04 marks**
5. An essay of descriptive/imaginative/reflective nature on one of the four given topics. **07 marks**
6. An objective type question consisting of 8 multiple-choice items, testing comprehension of grammar based on the exercises of the prescribed textbook. **08 marks**
7. A letter on application out of two given letters or one letter and one application. **04 marks**

Book prescribed:
       Kashur Kitab for Class XI published by J&K State Board of School Education.

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JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

SYLLABUS CLASS XI

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Code : 209

ARABIC

Term 1ˢᵗ = 35 marks

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Unit 1   **15 marks**

Unit 1 will comprise of lessons based on the following :

1/1 اَلحـروف الهجائية

2/2 مخـرج الحروف

3/3 المفردات

4/4 الحروف الشـمسية و القمرية

5/5 الحركات

6/6 التزكير و التأنيث

7/7 لمفرد و تثنية و الجمع

8/1 تقسيم الكلمة إلى الاسم و ا عل و الحرف

9/2 تقسيم الاسم إلى الد رة و المعرفة

10/3 اسم العلم

11/4 سم الضمير

12/5 اسم الإشارة

13/6 اسم الموصول

Term 1 will comprise of lessons of Unit 1 and of the lessons based on :

14/1 لماضاء و تصريفه

15/2 المضارع و تصريفه

16/3 الامر و تصريفه

17/4 الذهى وتصريفه

18/5 تقسيم الفعل إلى اللاز م وَ المتعدي

19/6 تقسيم الفعل إلى المعروف و المجهول

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SYLLABUS CLASS XI

Term 2nd = 35 marks

Unit 2   **15 marks**

Unit 2 will comprise of lessons based on the following :

20/1 الجملة الاسمية

21/2 الجملة الفعلية

22/3 المركب التوصيفي

23/4 المركب الإضافي

24/5 الأسماء الممنوعة من الصرف

25/1 الأعداد

26/2 اسماء الايام

27/3 شهور السنة

28/4 فصول السنة

29/5 الأيات القرآنية

30/6 الأحاديث النبوية

Term 2 will comprise of lessons of Unit 2 and of the lessons based on :

31/1 القرآن الكريم

32/2 المسجد

33/3 تلميذ أمين

34/4 التعاون

35/5 مدرستي

36/6 الأشعار

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JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Assessment of Term 1ˢᵗ

The question paper for term 1ˢᵗ will be framed on the following pattern:

Question 1 = 10 marks

Part 1 : The student will be asked to identify اقمرية الحروف الشمسية و from given words with internal choice. **4 marks**

Part 2: The student will be asked to supply المؤنث or المذكر for the given nouns with internal choice. **03 marks**

Part 3 : The student will be asked to supply الجمع or التثنية for the given nouns with internal choice. **03 marks**

Question 2 = 10 marks

Part 1 : The student will be asked to pick out الحروف الاسماء و الافعال from the given sentences with internal choice. **03 marks**

Part 2 : The student will be asked to fill in the blanks with اسم المعرفة و النكرة with internal choice. **03 marks**

Part 3 : The student will be asked to correct the given sentences based on the lessons 10-13 with internal choice. **04 marks**

Question 3 = 15 marks

Part 1 : The student will be asked to write الماضي وتصريف المضارع و الامرو النهي with internal choice. **5 marks**

Part 2 : The student will be asked to fill in the blanks appropriate صيغة of الفعل اللازم و المتعدي و المعروف و المجهول صيغة with internal choice **5 marks**

Part 3 : The student will be asked to translate five simple sentences into Arabic with internal choice **5 marks**

Assessment of Term 2nd

The question paper for term 2 will be framed on the following pattern:

Question 1 = 10 marks

Part 1 : The student will be asked to write five الفعلية أو للجمل الاسمية   **03 marks**

Part 2: The student will be asked to fill in the blanks with appropriate

الموصوف و الصفة   المضاف و الاضضاف إليه with internal choice.

                         03 marks

Part 3 : The student will be asked to correct the given sentences containing

الاسما الممنوعة من الصرف.   **03 marks**

Question 2 = 10 marks

Part 1 : The student will be asked to write or complete or translate الايات القرانية

into English or Urdu with internal choice.   **04 marks**

Part 2 : The student will be asked to write or complete or translate some

الاحاديث النبوية   into English or Urdu with internal choice.   **03 marks**

Part 3 : The student will be asked to correct the given sentences based on the lessons 25-28 with internal choice.   **03 marks**

Question 3 = 15 marks

Part 1 : The student will be asked to translate five sentences from lessons 31-35 with internal choice.   **5 marks**

Part 2 : The student will be asked to write five sentences in Arabic about of the lessons 31-35 with internal choice.   **5 marks**

Part 3 : The student will be asked to translate five stanzas from poems with internal choice.

                         5 marks

JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 210

PERSIAN

1st Term Course

(i)   Prose: 1st half portion of the textbook, (excluding deletions)

(ii)   Poetry: 1st half portion of the textbook. (Excluding deletions)

(iii)   Grammar
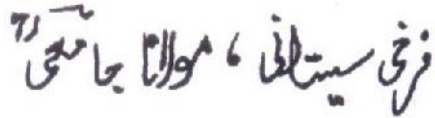
Assessment of 1st Term Course

During the transaction of 1st term course, students would be given 1 Unit test (U_1) of 15 marks and a term test (T_1) at the end of 1st term having a weightage of 35 marks. The unit and term test(s) are to be given as per the guidelines contained in Continuous and Comprehensive Evaluation Scheme introduced by the BOSE for Higher Secondary Part-I i.e. Class 11th.

First Term Test

Marks: 35   **Time: 2½ hours**

1.   Translation and explanation in Urdu/English/Hindi of any one passage out of two from the selected portion of the textbok prescribed.   **04 marks**

2.   A question with appropriate choice based on selected portion of prose section to test the comprehension of content.   **04 marks**

3.   Translation and explanation of one stanza out of two taken from the selected portion of poetry section, in Urdu/English.   **04 marks**

4.   Life sketch of any one of the following two poets.   **04 marks**

فرخی سیستانی، مولانا جامعی

(Farkhi Seestani, Moulanajamai)

5.   A question of applied grammar

       (a) Study of tenses

       (b) Translation of 4 simple sentences from Urdu/English/Hindi in Persian. **12 marks**

6.   An objective type question consisting of 7 multiple-choice items each of one mark based on the prescribed contents and grammar.   **07 marks**

2nd Term Course

(I)   Prose: 2nd half portion of the textbook. (Excluding deletions)

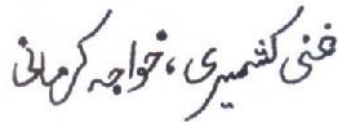(Ii)   Poetry: 2nd half portion of the textbook. (Excluding deletions)

(Iii)   Grammar.

Assessment of 2nd Term Test

During the transaction of 2nd term course, students would be given 1 Unit test (U$_2$) of 15 marks and a term test (T$_2$) at the end of 2nd term course having a weightage of 35 marks. The unit and term test(s) are to be given as per the guidelines contained in Continuous and Comprehensive Evaluation Scheme introduced by the BOSE for Higher Secondary Part-I i.e. Class 11th.
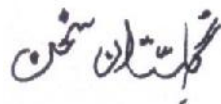
Second Term Test

Marks: 35   **Time: 2½ hours**

1.   Translation and explanation in Urdu/English/Hindi of any one passage out of two from the select prose portion of the textbook prescribed.   **04 marks**

2.   Translation in Persian from Urdu/English/Hindi of simple sentences with appropriate choice.   **04 marks**

3.   Translation of one out of two stanza in Urdu/English/Hindi taken from the selected portion of the poetry section of the textbook prescribed.   **04 marks**

4.   Life sketch of any one of the following poets: **04 marks**

فنی کشمیری، خواجہ کرمانی

(Ghani Kashmiri, Khawaja Kirmani)

5.   A question of applied grammar based on the textbook

(A)   Completion of incomplete Persian sentences, proverbs.   **07 marks**

(B)   Translation in Persian from Urdu/English/Hindi of five sentences, which may include proverbs   **5 marks**

6.   An objective type question consisting of 07 multiple-choice items of 01 mark each base on the contents of textbooks and grammar.   **07 marks**

Textbook prescribed: (Gulistan-I-sukhan)   گلستان سخن

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JAMMU AND KASHMIR STATE BOARD OF SCHOOL EDUCATION

Code : 212

URDU

اردو

50 نمبرات

تحصیل: یونٹ اول ۵۰ نمبرات

1st Term course

وقت: ۳ گھنٹے نصف

ٹرم اول ۵ لم نمبرات

(پہلی میقات کا کورس)

نصابی کتاب: بہارستان اردو

(اردو کی گیارہویں کتاب)

(نمبرات 20)

حصہ نثر: نام مین نام مصنف

حاتم کی سخاوت میر امن دہلوی

نمک کپلی مرزا فرحت اللہ بیگ

التفات رشید احمد صدیقی

گلاب سمیع شبیب رضوی

حصہ نظم: بہارستان اردو مسجد میں غزلیں اور نظمیں۔ 10 نمبرات

نام شاعر غزلیات

خواجہ میر درد

علامہ اقبال

سیماب عظیم آبادی

نظمات

نظیر اکبر آبادی ۔ حالی ۔ اکبر الہ آبادی۔

گرائمر:-

(ا) مضمون نگاری 07 نمبرات

(ب) اصناف ادب

ناول، افسانہ، ڈرامہ، طنزو مزاح، مقالہ، وغیرہ

(ج) تعریف کرنا۔ تشبیہ۔ ترجمہ تشبیہ۔ سیف تشبیہ 07 نمبرات

عرض تشبیہ ۔ عروف تشبیہ 06 نمبرات

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(پہلی ٹرم ٹیسٹ) **1ˢᵗ Term Test**

نمبرات :۔ 35

وقت :۔ 2½ گھنٹے

تشریح اقتباسات

1. حصہ نثر سے لئے گئے دو اقتباسات میں سے ایک کی مصنف اور سبق کے حوالے کے ساتھ تشریح کرنا۔ 04 نمبرات

2. ادباء کے حالاتِ زندگی پر نوٹ لکھنا (دو میں سے ایک پر)

یا

نصاب میں دیئے گئے دو اسباق میں سے ایک کا خلاصہ تحریر کرنا۔ 04 نمبرات

3. اشعارِ غزل کی تشریح، بحوالہ شاعر (دو ٹکڑوں میں سے ایک کی) 04 نمبرات

4. نصاب میں دی گئی دو نظموں میں سے ایک کا خلاصہ لکھنا۔ 04 نمبرات

5. دیئے گئے پانچ عنوانات میں سے کسی ایک پر مضمون لکھنا۔ 08 نمبرات

اصنافِ ادب پر مختصر نوٹ تحریر کرنا۔ 04 نمبرات

6. نصاب میں شامل مصنفین اور شعراء سے متعلق درج ذیل عنوانات پر ایک ایک نمبر کے 7 مختصر

سوالات ۔ Multiple Choice Question 07 نمبرات

I سن پیدائش و وفات

II کس مصنف کا کون سا سبق

III کس نظم کا کون سا شاعر

IV تصانیف

V اصنافِ ادب و سخن وغیرہ

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2nd Term course (دوسری میقات کا لائحہ)

نمبرات: 50

تفصیل: یونٹ 2nd :5 نمبرات ۔ حصہ دوم :35 نمبرات ۔

حصہ نثر:۔

نام سبق   نام مصنف

1 ایک یاد حیدر وہب

2 گلفروش محل لال لو نہاں   پنڈت جواہر لال نہرو

3 اردو ناول کا ارتقاء آخری قدم   مولوی عبدالحق
                                                                    ڈاکٹر ذاکر حسین

4 مجلے کی ہولی   طاہر پرویز   نمبرات : 20

حصہ نظم : بہارستان اردو سے منتخبہ غزل ، غزلیں اور نظمیں

غزلیات

نام شاعر   ۔

1۔ جگر مراد آبادی   نمبر 5

2۔ حکیم منظور   نمبرات 10

معلومات:۔ ماخوذ از سحر البیان

سبزہ خزاں ، چکبست ، مسدار الحق محاذ
اور شیخا (لی) لم راد کی منظومات

گرائمر:۔

(ا) مضمون نگاری   نمبرات 5

(ب) اصناف سخن ، غزل ، مرثیہ ، مثنوی ، قصیدہ ، سہ ، رباعی اور قطعہ   نمبرات 5

(ج) تعریف کرنا اور مشالیں دینا   نمبرات 5

استعارہ ، طرفین استعارہ

استعارہ بالکنایہ ، استعارہ بالتصریح

2nd Term Test

نمبرات :۔ 35

وقت :۔ 2½ گھنٹے

1. منتخبہ نثری اسباق میں سے لئے گئے دو اقتباسات میں سے ایک کی مصنف اور مضمون کے حوالے کے
ساتھ تشریح کرنا۔ 04 نمبرات

2. ادباء کے طرزِ تحریر اور ادبی کارناموں پر نوٹ لکھنا۔ (دو میں سے ایک)

یا

دئے گئے دو اسباق میں سے ایک کا خلاصہ تحریر کرنا۔ 04 نمبرات

3. اشعارِ غزل کی تشریح بحوالہ شاعر   (دو ٹکڑوں میں سے ایک کی) 04 نمبرات

4. شاملِ نصاب غزلیات اور منظومات میں لی گئی غزل یا نظم کا خلاصہ تحریر کرنا۔ 04 نمبرات

5. دئے گئے پانچ عنوانات میں سے کسی ایک پر مضمون لکھنا۔ 08 نمبرات

6. اصنافِ ادب پر نوٹ لکھنا۔

یا

شاملِ نصاب گرائمر سے ماخوذ استعارات کی تعریف کرنا اور مثالیں دینا۔ 04 نمبرات

7. شاملِ نصاب مصنفین و شعراء سے متعلق ایک ایک نمبر کے 7 مختصر
سوالات (Multiple Choice Question) 07 نمبرات

Books Prescribed

BAHARISTAN-E- URDU

" بہارستانِ اردو "

ناشر : جموں و کشمیر سٹیٹ بورڈ آف سکول ایجوکیشن