Punjab School Education Board

Syllabus -XI
Session 2018-19

CONTENTS

SENIOR SECONDARY LEVEL

(C) Commerce Group

46. Business Studies I
47. Accountancy-I
48. Business Economics and Quantitative Methods –I
49. Modern Office Practices

(d) Agriculture Group

50. Agriculture

(d) Technical Group

Note:

1. Syllabi of all the subjects of +2 are available on the Board's web site www.pseb.ac.in
2. Provision for opting state language as an elective subject is withdrawn.
3. There is no change in the Scheme of Studies of +2.
4. Syllabi for technical group can be obtained from Director, Academics, Punjab School Education Board, Mohali.

(A) SCHEME OF STUDIES
(ACADEMIC STREAM)
FOR
Senior Secondary (12th Class) Examination

(a) Compulsory Subjects: Every candidate shall offer the following subjects:

Sr. No.	Subject	Th		Prac		CCE	Total Marks	Min Pass Marks
		Max/Min		Max/Min		Max		
1.	General English	65	22			10	75	25
2.	General Punjabi Or Punjab History and Culture	65	22			10	75	25
3.	Environmental Education	45	15			05	50	17
4.	Computer Science	50	17	40	13	10	100	33

***Important Note**: Every candidate shall offer 'Environmental Education and Computer Science' as compulsory subjects. Examination of these subjects will be conducted at the school level. Evaluation also shall be done at school level and result in the form of Grades as shown in the Pass Formula will be sent to the Board and same will be reflected on the Certificate.

Note: 1. A candidate who has passed the Matriculation examination from a Board other than the Punjab School Education Board can have Punjab History and Culture in lieu of the Compulsory Punjabi Subject in the 11th/12th classes. Such students will furnish proof of not having studied Punjabi at the Matric level.

2. A candidate who has passed Matriculation examination from the Punjab School Education Board with 'Punjab History and Culture' as a subject can opt for Punjab History and Culture in lieu of compulsory Punjabi in the 11th and 12th classes.

(b) Elective Subjects:

In addition to the compulsory subjects every candidate shall offer any of the following groups:

Group I Humanities
Group II Science
Group III Commerce
Group IV Agriculture
Group V Technical

(c) Additional Subjects:

In addition to three elective subjects offered by a candidate out of the group (only in case of Humanities, Science and Agriculture groups) a student may offer one additional subject from the same group.

HUMANITIES GROUP

Every candidate shall offer any three elective subjects from the following:

Sr. No.	Subject	Th		Prac		CCE	Total Marks	Min Pass Marks
		Max/Min		Max/ Min		Max		
1.	Language (anyone)							
i.	Punjabi (Elective)	90	30			10	100	33
ii.	Hindi	90	30			10	100	33
iii.	English(Elective)	90	30			10	100	33
iv.	Urdu	90	30			10	100	33
2.	Classical/Foreign Language (anyone)							
i.	Sanskrit	90	30			10	100	33
ii.	Arabic	90	30			10	100	33
iii.	Persian	90	30			10	100	33
	OR							
iv.	French	70	23	20	07	10	100	33
v.	German	70	23	20	07	10	100	33
vi.	Russian	70	23	20	07	10	100	33
vii.	Korean	70	23	20	07	10	100	33
3.	History	90	30			10	100	33
4.	Economics	90	30			10	100	33
5.	Mathematics	90	30			10	100	33
6.	Business Organisation & Management	90	30			10	100	33
7.	Book Keeping and Accountancy	90	30			10	100	33
8.	Political Science	90	30			10	100	33
9.	Sociology	90	30			10	100	33
10.	Public Administration	90	30			10	100	33
11.	Philosophy	90	30			10	100	33
12.	Education	90	30			10	100	33
13.	Religion	90	30			10	100	33
14.	Geography	70	23	20	07	10	100	33
15.	Defense Studies	70	23	20	07	10	100	33
16.	Psychology	70	23	20	07	10	100	33
17.	History and Appreciation of Art	90	30			10	100	33
18.	Geometrical Perspective and Architectural Drawing	90	30			10	100	33
19.	Rural Development and Environment	90	30			10	100	33
20.	Insurance	90	30			10	100	33
21	Computer Application	60	20	30	10	10	100	33

22.	Agriculture	60	23	30	07	10	100	33
23.	Home Science	60	20	30	10	10	100	33
24.	Music (Vocal)	60	20	30	10	10	100	33
25.	Gurmat Sangeet	60	20	30	10	10	100	33
26.	Music (Instrumental)	60	20	30	10	10	100	33
27.	Music (Tabla)	60	20	30	10	10	100	33
28.	Music (Dance)	60	20	30	10	10	100	33
29.	Physical Education & Sports	40	13	50	17	10	100	33
30.	Drawing & Painting			90	30	10	100	33
31.	Commercial Art			90	30	10	100	33
32.	Modeling and Sculpture			90	30	10	100	33
33.	Media Studies	70	23	20	07	10	100	33

Note: (1) Candidates taking up Home Science as an elective subject may choose atleast one subject from Sociology, Psychology and Economics if they wish to seek admission to higher courses in Home Science.

(2) The syllabus of computer application will be same as prescribed in the Science Group.

(3) The syllabus of Agriculture will be same as prescribed in the Agriculture Group.

Imp. Note : If a candidate wants to appear in a language other than Punjabi, Hindi, English, Sanskrit, Urdu, Arabian, Persian and French, he/she shall have to take prior permission from Director Academics.

SCIENCE GROUP

Every candidate shall offer the following subjects:

Sr. No.	Subject	Th		Prac		CCE	Total Marks	Min Pass Marks
		Max/ Min		Max/ Min		Max		
1.	Physics	70	23	20	07	10	100	33
2.	Chemistry	70	23	20	07	10	100	33
3.	Biology Or Mathematics	70 90	23 30	20	07	10 10	100 100	33 33
A candidate can offer an additional subject out of the following:								
I.	Geology	70	23	20	07	10	100	33
II.	Geography	70	23	20	07	10	100	33
III.	Home Science	60	20	30	10	10	100	33
IV.	Agriculture	70	23	20	07	10	100	33
V.	Biology Or Mathematics	70 90	23 30	20	07	10 10	100 100	33 33

VI.	Computer Application	60	20	30	10	10	100	33
VII.	Elements of Electronic Engg.	40	13	50	17	10	100	33
VIII	Economics	90	30			10	100	33
IX.	Biotechnology	70	23	20	07	10	100	33

Note: (i) In addition to three elective subjects offered by a candidate out of Science group a candidate desiring higher studies in Ayurveda, may offer Sanskrit as an additional language. The syllabus of Sanskrit will be the same as prescribed in the Humanities Group.

(ii) The Syllabi in subjects of Economics, Geography, Home Science and Mathematics will be the same as prescribed in the Humanities Group.

(iii) The syllabus in the subject of Agriculture will be same as prescribed in the Agriculture Group.

COMMERCE GROUP

Sr. No.	**Subject**	**Th**		**Prac**		**CCE**	**Total Marks**	**Min Pass Marks**
		Max/Min		**Max/Min**		**Max**		
1.	Business Studies-II	65	22			10	75	25
2.	Accountancy II	50	17	15	05	10	75	25
3.	Business Economics & Quantitative Methods-II	65	22			10	75	25
4.	Fundamentals of E-Business	50	17	15	05	10	75	25

A candidate can also offer an additional subject out of the following:

(a) Computer Application

(b) Mathematics

Note: (i) All the four Elective subjects i.e. Sr. No. 1 to 4 are compulsory.

(ii) The syllabus of Computer Application will be the same as prescribed in Science and Humanities Group.

(iii) The syllabus of Mathematics will be the same as prescribed in Humanties Group.

AGRICULTURE GROUP

Sr. No	**Subject**	**Th**		**Prac**		**CCE**	**Total Marks**	**Min Pass Marks**
		Max/ Min		**Max/ Min**		**Max**		
1.	Agriculture	70	23	20	07	10	100	33
2. & 3. Any two of the following:								
(i)	Physics	70	23	20	07	10	100	33
(ii)	Chemistry	70	23	20	07	10	100	33
(iii)	Economics	90	30			10	100	33

(iv)	Rural Development & Environment	90	30			10	100	33
(v)	Geography	70	23	20	07	10	100	33
A candidate can offer an additional subject out of the following:								
(a)	Mathematics	90	30			10	100	33
(b)	Computer Application	60	20	30	10	10	100	33

Note: The Syllabi in the subjects of Physics, Chemistry and Computer Application will be same as prescribed in the Science Group and that of Geography, Mathematics, Economics and Rural Development & Environment will be the same as in the Humanities Group.

Abbreviations :

Th - Theory

Pr - Practial

CCE - Continuous Comprehensive Evaluation.

Note: 1 A candidate can offer computer application as an additional subjects also. The syllabus of computer application will be the same as prescribed in Science Group.

CLASS - XI

1. GENERAL ENGLISH

Time: 3 Hrs **Theory: 65 Marks**
CCE: 10 Marks
Total: 75 Marks

SYLLABUS AND THE STRUCTURE OF QUESTION PAPER

Part-I (Objective type question) 8 marks

1. It will consist of 8 objective type questions carrying one mark each. Objective type questions may include questions with one word to one sentence answer **or** fill in the blank **or** true/false **or** multiple choice type questions.

   a Lessons meant for intensive study 3×1=3

   b Lessons meant for extensive study 3×1=3

   c Grammar 2×1=2

Part-II (Reading) 10 marks

2. Unseen passage for Comprehension. (passage of 150-200 words) followed by two M.C.Q, 2 single line comprehension questions, one question on fill in the blank (two), one question on match the words(two). 1+1+1+1+1+1 = 6 marks
3. Comprehension questions from poetry on a given stanza (4 questions including a question on name of the poet / poem , Rhyme / Simile / Metaphor / Personification /Alliteration/ Imagery etc on selected stanza).(1 out of two given stanzas to be attempted) 4 marks

Part-III (Writing) 10 marks

4. Note making/Message writing/Notice writing/Advertisement writing (to attempt 1 out of the given 2) 4 marks
5. Letter writing (only social and personal) (with internal choice) 6 marks

Part-IV (Grammar and Translation) 12 marks

6 Grammar items can be from anywhere including the exrcises from the text book.

a) Translation (sentences from Punjabi/Hindi to English). 4 marks

b) Do as directed. 8 marks

   a. Prepositions
   b. Determiners
   c. Modals
   d. Use of the same words as verb, noun and adjectives
   e. Removal and use of too
   f. Tenses
   g. Voice
   h. Narration

Part-V (Literature) 25 marks

7. Central idea (1out of 2.) 3 marks
8. Three (out of four) short answer questions of about 40 to 50 words from intensive study. 3×2=6
9. Two (out of three) short answer questions of about 40 to 50 words from extensive study. 2×2=4
10. Long answer question (100 to 120) words on theme, incident, content, character etc. from intensive study (with internal choice). 6 marks
11. Long answer type (100-120 words) question from extensive study on Character/incident/theme etc.(with internal choice). 6 marks

SYLLABUS

SECTION A
LESSONS FOR INTENSIVE STUDY

1. Gender Bias
2. The Portrait of a Lady
3. Of Studies
4. Liberty and Discipline
5. A President Speaks
6. The Earth is not Ours
7. Let's Not Forget the Martyrs
8. Water- A True Elixir
9. The First Atom Bomb
10. No Time for Fear

SECTION B
POETRY

1. Lines Written in Early Spring
2. Mother's Day
3. Television
4. Upagupta
5. Confessions of A Born Spectator
6. The Little Black Boy
7. A Thing of Beauty is a Joy For Ever

SECTION C
LESSONS FOR EXTENSIVE STUDY

1. An Astrologer's Day
2. The Tiger in the Tunnel
3. Sparrows
4. The Model Millionaire
5. The Panch Parmeshwar
6. The Peasant's Bread

SECTION D

GRAMMAR

a. Preposition

b. Determiners

c. Use of the same word as noun, verb and adjective

d. Modals

e. Tenses

f. Removal and use of too

g. Voice

h. Narration

Composition

a. Note Making

b. Message Writing

c. Notice Writing

d. Advertisement Writing

e. Letter Writing (only social and personal)

The book prescribed & published by the Punjab School Education Board.

1. (General English XI) A Panorama of Life

Note: All the lessons in the above book are included in the syllabus. No part has been deleted.

CLASS - XI

2. ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)

ਸਮਾਂ : 3 ਘੰਟੇ **ਲਿਖਤੀ ਪੇਪਰ: 65 ਅੰਕ**

ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ: 10 ਅੰਕ

ਕੁੱਲ :75 ਅੰਕ

ਅੰਕ ਵੰਡ ਅਤੇ ਪਾਠ-ਕ੍ਰਮ

ਲੜੀ ਨੰ:	ਪਾਠ-ਕ੍ਰਮ	ਅੰਕ
1.	ਪੰਜਾਬੀ ਲੋਕ ਸਾਹਿਤ:- ਲੋਕ-ਗੀਤ ਅਤੇ ਲੋਕ-ਕਥਾਵਾਂ	26
2.	ਅੰਗਰੇਜ਼ੀ ਤੋਂ ਪੰਜਾਬੀ ਵਿੱਚ ਅਨੁਵਾਦ:- ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ:-ਬੈਂਕ, ਰੇਲਵੇ, ਡਾਕ, ਕੰਪਿਊਟਰ ਅਤੇ ਬੀਮਾ ਸੇਵਾਵਾਂ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਵਾਕਾਂ ਵਿੱਚ ਵਰਤੋਂ	10
3.	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਲਿਖਣ ਦਾ ਹੁਨਰ:- ਅਖ਼ਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ, ਇਸ਼ਤਿਹਾਰ, ਸੱਦਾ ਪੱਤਰ ਅਤੇ ਪੈਰਾ ਰਚਨਾ।	19
4.	ਵਿਆਕਰਨ:-ਮੁਹਾਵਰੇ	10
	ਕੁੱਲ ਅੰਕ	**65**

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

ਪਰੀਖਿਆ ਪੱਖੋਂ ਅਧਿਆਪਕਾਂ, ਵਿਦਿਆਰਥੀਆਂ, ਪੇਪਰ ਸੈੱਟਰਾਂ ਅਤੇ ਪਰੀਖਿਅਕਾਂ ਲਈ ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ

ਪ੍ਰਸ਼ਨ ਨੰ: 1 ਸਮੁੱਚੇ ਪਾਠ-ਕ੍ਰਮ ਦੇ ਅਧਾਰ ਤੇ ਸੰਖੇਪ ਉੱਤਰਾਂ ਵਾਲ਼ੇ ਦੱਸ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ 1 ਅੰਕ ਹੋਵੇਗਾ। ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ :-

(ੳ) **ਪੰਜਾਬੀ ਲੋਕ-ਸਾਹਿਤ :** 2 ਅੰਕ (ਬਹੁ-ਚੋਣ, ਠੀਕ/ਗ਼ਲਤ, ਖ਼ਾਲੀ ਥਾਂਵਾਂ ਜਾਂ ਇੱਕ ਦੋ ਸ਼ਬਦਾਂ ਦੇ ਉੱਤਰ ਵਾਲ਼ੇ ਪ੍ਰਸ਼ਨ)

(ਅ) **ਲੋਕ-ਗੀਤ :** 2 ਅੰਕ (ਦੋ ਪ੍ਰਸ਼ਨ - ਦੋਵੇਂ ਪ੍ਰਸ਼ਨ ਨਿਰਧਾਰਿਤ ਪਾਠ-ਸਮਗਰੀ ਦੇ ਆਧਾਰ 'ਤੇ ਪੁੱਛੇ ਜਾਣਗੇ)।

(ੲ) **ਲੋਕ ਕਥਾਵਾਂ** : 2 ਅੰਕ (ਦੋ ਪ੍ਰਸ਼ਨ ਪਾਤਰਾਂ ਸੰਬੰਧੀ ਪੁੱਛੇ ਜਾਣਗੇ)।

(ਸ) **ਅੰਗਰੇਜ਼ੀ ਤੋਂ ਪੰਜਾਬੀ ਅਨੁਵਾਦ** : 2 ਅੰਕ(ਸਿੱਧਾ ਅਰਥ ਪੁੱਛਣਾ, ਬਹੁ-ਚੋਣ, ਮਿਲਾਨ ਕਰਨਾ) ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ 'ਤੇ ਆਧਾਰਿਤ ਪਾਠ ਅਤੇ ਪਾਠ ਅਭਿਆਸ ਵਿੱਚੋ 2 ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ ਦਾ ਇੱਕ ਅੰਕ ਹੋਵੇਗਾ।

(ਹ) **ਮੁਹਾਵਰੇ**:-2 ਅੰਕ (1 ਅੰਕ ਵਰਤੋਂ ਸਥਿਤੀ ਦੱਸ ਕੇ ਢੁਕਵਾਂ ਮੁਹਾਵਰਾ ਲਿਖਣ, 1 ਅੰਕ ਮੁਹਾਵਰੇ ਦੇ ਅਰਥ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਬਹੁ-ਚੋਣੀ ਪ੍ਰਸ਼ਨ 'ਚੋਂ ਠੀਕ ਅਰਥ ਲਿਖਣ ਦਾ ਹੋਵੇਗਾ)। **10×1=10 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 2 ਪੰਜਾਬੀ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਲੋਕ-ਗੀਤਾਂ ਬਾਰੇ ਦਿੱਤੇ ਪਾਠ-ਅਭਿਆਸਾਂ ਦੇ ਪ੍ਰਸ਼ਨਾਂ ਵਿੱਚੋਂ ਕੋਈ 4 ਪ੍ਰਸ਼ਨ ਦੇ ਕੇ ਦੋ ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **5+5=10 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 3 ਪੰਜਾਬੀ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੀਆਂ ਵੱਖ-ਵੱਖ ਵੰਨਗੀਆਂ ਦੀਆਂ ਲੋਕ-ਕਥਾਵਾਂ ਵਿੱਚੋਂ ਦੋ ਦੇ ਨਾਂ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਕਥਾ ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **10 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 4 (ੳ) ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੀ ਗਈ ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ ਵਿੱਚੋਂ ਦਸ ਸ਼ਬਦ ਦੇ ਕੇ ਕਿਸੇ ਛੇ ਦੇ ਅਰਥ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **6×1/2=3 ਅੰਕ**

(ਅ) ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੇ ਗਏ ਬੈਂਕ, ਰੇਲਵੇ, ਡਾਕ ਅਤੇ ਬੀਮਾ-ਸੇਵਾਵਾਂ ਅਤੇ ਕੰਪਿਊਟਰ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਅੱਠ ਵਾਕ ਦੇ ਕੇ ਕੋਈ ਪੰਜ ਵਾਕਾਂ ਦਾ ਪੰਜਾਬੀ ਅਨੁਵਾਦ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **5×1=5 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 5 ਕਿਸੇ ਮਸਲੇ/ਘਟਨਾ ਸੰਬੰਧੀ ਕਿਸੇ ਅਖ਼ਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ ਲਿਖਣ ਲਈ ਦੋ ਵਿਸ਼ੇ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਬਾਰੇ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **2+4+2=8 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 6 ਪੰਜਾਬੀ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੀਆਂ ਵੰਨਗੀਆਂ ਅਨੁਸਾਰ ਇੱਕ ਇਸ਼ਤਿਹਾਰ ਜਾਂ ਸੱਦਾ-ਪੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ । **5 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 7 ਕੋਈ ਤਿੰਨ ਵਿਸ਼ੇ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਵਿਸ਼ੇ ਬਾਰੇ ਲਗ-ਪਗ 150 ਸ਼ਬਦਾਂ ਦੀ ਪੈਰਾ-ਰਚਨਾ ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **6 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 8 ਪੰਜਾਬੀ ਪਾਠ- ਪੁਸਤਕ ਵਿੱਚੋਂ ਕੋਈ ਸੱਤ ਮੁਹਾਵਰੇ ਦੇ ਕੇ ਕਿਸੇ ਚਾਰ ਨੂੰ ਵਾਕਾਂ ਵਿੱਚ ਵਰਤਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **4×2=8 ਅੰਕ**

\# **ਨਿਰਧਾਰਿਤ ਪਾਠ-ਪੁਸਤਕ: ਲਾਜ਼ਮੀ ਪੰਜਾਬੀ-11**

\# **ਪ੍ਰਕਾਸ਼ਕ: ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ**

CLASS - XI

3. PUNJAB HISTORY & CULTURE

Time: 3 Hrs **Theory: 65 Marks**

CCE: 10 Marks

Total: 75 Marks

STRUCTURE OF QUESTION PAPER

1. All questions are compulsory.

   The question paper will comprise of four sections A, B, C and D of 18 questions in total. The question paper will carry:

A. Objective Type Questions: This type will include Question No. 1 to 7 carrying 1 mark each with one word answer/ fill in the blank/ true or false/ multiple choice type questions. **1 × 7 = 7 Marks**

B. Short Answer Type Questions: This type will include 6 questions from Question No. 8 to 13 carrying 3 marks each. Answer to each question should be in about 30- 35 words. **3 × 6 = 18 Marks**

C. Long answer Type Questions: This type will include 5 question from Question No. 14 to 18 will carry 5 marks each with 100% internal choice. Answer to each question should be in about 80-100 words.

5 × 5 = 25 Marks

D. Map Question: There will be one section of map carrying 15 marks (10 marks for 5 places and 5 marks each for explanation)

Note:- For blind candidates alternative questions will be given in lieu of question no. 19 (map).

Note:- All units of the syllabus should be given adequate representation in the question paper.

Syllabus	**A Objective type Questions 1 mark**	**B Short Answer type Questions 3 marks**	**C Long Answer type Questions 5 marks**	**D Map question**	**Total**
Part-1 Units I-XI	04	03	03	100% Internal choice	10
Part-2 Unit XII-XXII	03	03	02	5 Places ×2 =10 marks Explanation5×1=5 marks	08
No.of Questions	07	06	05	1	19
Total Marks	**07**	**18**	**25**	**15**	**65**

SYLLABUS

SECTION-A

1. The Land of the People.
2. The Age of the Harappa Culture.
3. The Age of the Vedic Aryans.
4. From Buddha to Ashoka.
5. Invasions and Impact.

SECTION -B

1. The Gupta-Vardhana Age.
2. The Turks in the Punjab.
3. Education and Literature.
4. Art and Architecture.
5. The Siddhas and the Sufis.

SECTION-C

MAP QUESTION TOPICS

1. Harappa Culture
2. Ashoka Dhama- Important Places
3. The Gupta-Vardhana Age- Places
4. Any Five Historical Places

CLASS -XI

4. ENVIRONMENT EDUCATION

Time: 2 Hrs **Theory Marks: 45**

CCE Marks: 05

Total Marks: 50

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be one theory paper comprising of 17 questions. All questions will be compulsory.
2. Question No. 1-5 are very short answer type question carrying 1 mark each. Answer to each question will be in one line or few words only.
3. Question No. 6-10 are short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
4. Question No. 11-15 are long/medium answer type question carrying 4 marks each. Answer to each question will be in 50-60 words.
5. Question No. 16 and 17 are long answer type question carrying 5 marks each. Answer to these questions will be in 80-100 words.
6. In Question No 16 and 17 there will be 100 % internal choice.
7. There will be no objective type question like yes/ No, tick/ cross, fill in the blanks, multiple choice, true/ false etc.
8. The Question paper should be strictly from the prescribed syllabus based on above mentioned guidelines.

UNIT WISE DISTRIBUTION OF MARKS

Unit	**1 Mark questions**	**2 Mark questions**	**4 Mark questions**	**5 Mark questions**
Unit I Man and Environment	1	1	1	1 or 1
Unit II Environment and Development	1	1	1	
Unit III Environmental Pollution and Global issues	1	1	1	1 or 1
Unit IV Energy	1	1	1	
Unit V Safe work Environment and Occupational Hazards	1	1	1	---
Total Maks	**5 marks**	**10 marks**	**20 marks**	**10 marks**

INSTRUCTION FOR PAPER SETTER

1. There will be 17 questions in theory paper.
2. Questions No. 1-5 are of 1 mark each and there should be one question from each unit.
3. Question 6-10 are of 2 marks each and there should be one question from each unit.
4. Question 11-15 are of 4 marks each and there should be one question from each unit.
5. Question 16 will be of 5 marks and to be set from unit I and choice question should be set from unit II.
6. Question 17 will be of 5 marks and to be set from unit III and choice Question should be set from unit IV.

SYLLABUS

Unit- I Man and Environment

1. Environment

- Dimensions of Environment- physical, biological and social.
- Human being as rational and social partner in environmental actions.
- Society and environment in India: Indian traditions, customs and culture in past and present.

2. Population and Environment

- Demography, causes of increase in population and its ill effects on environment, urbanization.

3. Impact of human activities on Environment

- Environmental problems of urban and rural areas.
- Natural resources and their depletion
- Stress on civic amenities, supply of water and electricity, waste disposal, transport, health services.
- Vehicular emissions.
- Urbanisation- land use, housing, migrating and floating population.

Unit-II Envirtonment and Development

4. Economic and Social Development

- Economic and social needs as basic considerations for development.
- Agriculture and industry as major sector of development.
- Social factors affecting development- poverty, affluence, education, employment, child marriage and child labour, human health- HIV/AIDS, social culture and ethical values.

5. Impact of Liberalization and Globalization

- Impact of liberalization and globalization- agriculture and industries, dislocation of manpower and unemployment implications for social harmony.

6. Role of Society in Development and Environment

- Role of society in development and environment- public awareness through education, eco- clubs, population education programmes and campaigans, public participation in decision making.

Unit-III Environmental Pollution and Global Issues

7. Environmental Pollution

- Air water (fresh and marine), soil pollution- sources and consequences.
- Noise and radiation polluation- sources and consequesnces.
- Solid, liquid and gaseous pollution.

8. Pollution and Diseases

- Handling of hazardous material, process and management of hazardous wastes.
- Pollution related diseases.

- Strategies for reducing pollution and improving the environment.

9. Global Issues and Improvement of Environment

- Ozone Layer depletion and its effects.
- Greenhouse effect, global warming, climate changes and their effects on human society, agriculture plants and animals.

10. Disaster

- Disaster- natural (earthquakes, droughts, floods, cyclones, landslides) and man made (technological and industrial), their impact on the environment, prevention, control and mitligation.

Unit- IV Energy

11. Energy Consumption

- Changing global pattern of energy consumption -from ancient to modern times.
- Energy consumption as a measure of quality of life.
- Rising demand for energy gap between demand and supply (Indian context.)

12. Conventional Sources of Energy

- Conventional energy sources- fossil and firwood, potential (India context) and limitations of each source, methods of harnessing energy and environment consequences of their use.

13. Non- conventional Source of Energy

- Non Conventional energy sources- type of non -conventional sources(bio- mass, solar, wind, ocean, hydel, geothermal, nuclear),potential(Indian context) and limitations of each source, methods of harnessing and their environmental consequences, need to promote non- conventional energy sources.

14. Conservation of Energy

- Conservation of energy sour ces- efficiency in production, transportation and utilization of energy.
- Future sources of energy- hydrogen, alcohal, fuel cells.

Unit V Safe work Environment and Occupational Hazards

15. Safe Work Environment

- Safe work environement- adequate light, ventilation, cleanliness, good house keeping.

16. Safety Laws, Accidents and First- Aid

- Safety awareness management- safety precautions- home and work (laboratory, workshop, work site), safe handling of equipment and materal.
- Occupational hazards- physical, chemical, mechanical, electrical, biological, radiational and psychological.
- Accidents and major hazards in industries and occupations- fire, explosion, toxic release.
- First aid measures.
- Laws and regulations related to occupational health and safety.

17*. Drugs- ill Effects Part-I

- Importance of health, Drug-addiction, symptoms (Material upload on website)

- Drugs of abuse and their health consequences, academic and occupational consequences, consequences for family, social, legal and criminal consequences.
- Prevention of Drug , Government initiatives, the narcotic drug and psychotropic substances act-1985, offences and penalties.

*** Chapter 17 is added in the syllabus as a compulsary topic, Matter is available on the Board's website www.pseb.ac.in.**

CCE

Instructions for CCE (05 marks)

Teachers teaching the subject of Environment Education to students will evaluate them throughout the year for the work done by the student in and around the school campus regarding environmental cleanliness, planting tress, developing herbal gardens, growing ornamental plants, medicinal plants and participating in environmental activities which are celebrated in the school. Student will also keep the record in a project file for two different projects carried by him/her. So over all evaluation of the student will be based on his/her performance and contribution to environment.

ਗਿਆਰਵੀਂ ਸ਼੍ਰੇਣੀ

5. ਕੰਪਿਊਟਰ ਸਾਇੰਸ

(ਲਿਖਤੀ ਪ੍ਰੀਖਿਆ)

ਸਮਾਂ : 3 ਘੰਟੇ **ਲਿਖਤੀ : 50 ਅੰਕ**

ਸੀ.ਸੀ.ਈ. : 10 ਅੰਕ

ਪ੍ਰਯੋਗੀ : 40 ਅੰਕ

ਕੁੱਲ : 100 ਅੰਕ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਚਾਰ ਭਾਗਾਂ (ਭਾਗ ੳ, ਭਾਗ ਅ, ਭਾਗ ੲ ਅਤੇ ਭਾਗ ਸ) ਵਿੱਚ ਵੰਡਿਆ ਹੋਵੇਗਾ।
2. ਭਾਗ ੳ ਆਬਜੈਕਟਿਵ ਟਾਇਪ ਹੋਵੇਗਾ ਜਿਸ ਵਿੱਚ 1 ਤੋਂ 6 ਤੱਕ 1-1 ਅੰਕ ਦੇ 6 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
3. ਭਾਗ ਅ ਵਿੱਚ ਪ੍ਰਸ਼ਨ ਨੰ 7 ਤੋਂ 12 ਤੱਕ 2-2 ਅੰਕ ਦੇ 6 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
4. ਭਾਗ ੲ ਵਿੱਚ ਪ੍ਰਸ਼ਨ ਨੰ 13 ਤੋਂ 17 ਤੱਕ 4-4 ਅੰਕ ਦੇ 5 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
5. ਭਾਗ ਸ ਵਿੱਚ ਪ੍ਰਸ਼ਨ ਨੰ 18 ਤੋਂ 19 ਤੱਕ 6-6 ਅੰਕ ਦੇ 2 ਪ੍ਰਸ਼ਨ ਹੋਣਗ
6. ਭਾਗ ੳ, ਅ, ੲ ਅਤੇ ਭਾਗ ਸ ਦੇ ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਜਰੂਰੀ ਹੋਣਗੇ। ਭਾਗ ੲ ਅਤੇ ਸ ਵਿੱਚ ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦੇ ਦੋ ਜਾਂ ਦੋ ਤੋਂ ਵੱਧ ਭਾਗ ਵੀ ਹੋ ਸਕਦੇ ਹਨ। ਭਾਗ ਸ ਵਿੱਚ ਅੰਦਰੂਨੀ ਛੋਟ ਹੋਵੇਗੀ।

ਲੜੀ ਨੰ	ਅਧਿਆਇ ਦਾ ਨਾਂ	ਕੁੱਲ ਅੰਕ	1 ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ	2 ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ	4 ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ	6 ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ
1.	ਦਸਵੀਂ ਕਲਾਸ ਦੀ ਦੁਹਰਾਈ	3	1	1		
2.	"ਸੀ" ਭਾਸ਼ਾ ਵਿੱਚ ਪ੍ਰੋਗਰਾਮਿੰਗ ਲਈ ਭੂਮਿਕਾ	6		1	1	
3.	ਕਾਂਸਟੈਂਟਸ, ਵੈਰੀਏਬਲਜ਼ ਅਤੇ ਡਾਟਾ ਟਾਈਪਸ	7	1	1	1	
4.	ਓਪਰੇਟਰਸ ਅਤੇ ਐਕਸਪ੍ਰੇਸ਼ਨ	7	1	1	1	
5.	ਕੰਟਰੋਲ ਫਲੋ (ਭਾਗ 1)	7	1			1
6.	ਕੰਟਰੋਲ ਫਲੋ (ਭਾਗ 2)	6		1	1	
7.	ਐਰੇਸ (ਭਾਗ 1)	3	1	1		
8.	ਐਰੇਸ (ਭਾਗ 2)	4			1	
9.	ਡੈਸਕਟਾਪ ਪਬਲਿਸ਼ਿੰਗ	7	1			1
	ਕੁੱਲ ਜੋੜ	50	6	12	20	12

1. **<u>ਦਸਵੀਂ ਕਲਾਸ ਦੀ ਦੁਹਰਾਈ</u>**

ਸਾਫਟਵੇਅਰ ਸੰਕਲਪ

ਸਿਸਟਮ ਸਾਫਟਵੇਅਰ : ਔਪਰੇਟਿੰਗ ਸਿਸਟਮ, ਯੁਟਿਲਿਟੀ ਸਾਫਟਵੇਅਰ, ਐਪਲੀਕੇਸ਼ਨ ਸਾਫਟਵੇਅਰ ਐਕਸਲ: ਡਾਟਾ ਟਾਈਪ ਫਾਰਮੂਲਾ ਅਤੇ ਫੰਕਸ਼ਨਜ਼, ਐਕਸਲ ਅਤੇ ਫੀਈਨੈਂਨਸ਼ਿਯਲ ਡਾਟਾ ਐਚ.ਟੀ.ਐਮ.ਐਲ.ਦੀ ਦੁਹਰਾਈ (REVIEW ON HTML): ਵੈੱਬ ਪੇਜਿਸ, ਐਚ.ਟੀ.ਐਮ.ਐਲ. (HTML) ਫਾਈਲ, ਮਾਈਕਰੋਸੋਫਟ ਅਸੈਸ : ਡਾਟਾ ਸੋਧਨਾ, ਅਸੈਸ ਡਾਟਾਬੇਸ ਦੇ ਆਬਜੈਕਟਸ (ਟੇਬਲ, ਕੁਐਰੀਜ, ਫਾਰਮ, ਰਿਪੋਰਟ, ਪੇਜ ਪ੍ਰਗਰਾਮਿੰਗ ਕੰਨਸੈਪਟਸ ਦੀ ਦੁਹਰਾਈ (Review on programming concepts) :ਪ੍ਰੋਗਰਾਮ ਡਿਵੈਲਪਮੈਂਟ ਦੇ ਵੱਖ-ਵੱਖ ਪੜਾਅ, ਪ੍ਰੋਗਰਾਮਿੰਗ ਭਾਸ਼ਾ ਦੇ ਐਲੀਮੈਂਟ

2. **<u>"ਸੀ" ਭਾਸ਼ਾ ਵਿੱਚ ਪ੍ਰੋਗਰਾਮਿੰਗ ਲਈ ਭੂਮਿਕਾ</u>**

ਭੂਮਿਕਾ

ਸੀ (C) ਭਾਸ਼ਾ ਦੇ ਵਿਸ਼ੇਸ਼ ਲੱਛਣ

ਸੀ (C) ਚਿੰਨ੍ਹ ਸੈੱਟ : ਐਸਕੇਪ ਚਿੰਨ੍ਹ, ਵਾਈਟ ਸਪੇਸ ਕਰੈਕਟਰ

ਸੀ(C) ਪ੍ਰੋਗਰਾਮ ਦਾ ਸਟਰਕਚਰ: ਹੈਡਰ ਫਾਈਲਜ਼, ਪ੍ਰੀ ਪ੍ਰੋਸੈਸਰ ਸਟੇਟਮੈਂਟ/ਨਿਰਦੇਸ਼, ਗਲੋਬਲ ਡਿਕਲੇਰੇਸਨਸ

ਸੀ (C) ਪ੍ਰੋਗਰਾਮ ਦਾ ਕੰਪਾਈਲ ਅਤੇ ਲਾਗੂ ਕਰਨ

ਐਡੀਟਰ ਦੀ ਵਰਤੋਂ

ਫੰਕਸ਼ਨ: ਬਿਲਟ ਇਨ ਫੰਕਸ਼ਨਸ, ਯੂਜ਼ਰ ਪਰਭਾਸ਼ਤ ਫੰਕਸ਼ਨਸ ਫਾਰਮੇਟਡ ਆਈ/ਓ ਫੰਕਸ਼ਨ : ਪ੍ਰਿਟਐਫ ਫੰਕਸ਼ਨ (printf function), ਸਕੈਨਐਫ ਫੰਕਸ਼ਨ (scanf function) ਸੀ (C) ਪ੍ਰਗਰਾਮਿੰਗ ਨਾਲ ਸ਼ੁਰੂਆਤ ਕਰਨੀ : ਟਰਬੋ ਸੀ ਨੂੰ ਸਥਾਪਿਤ ਕਰਨਾ, ਪ੍ਰਗਰਾਮ ਦੀ ਕੰਪਾਇਲਿੰਗ ਅਤੇ ਐਗਜ਼ਿਕਿਊਟਿੰਗ

3. **ਕਾਂਸਟੈਂਟਸ, ਵੈਰੀਏਬਲਜ਼ ਅਤੇ ਡਾਟਾ ਟਾਈਪਸ**

ਭੂਮਿਕਾ

ਕਾਂਸਟੈਂਟਸ/ਸ਼ਾਬਦਿਕ : ਸੀ (C) ਕਾਂਸਟੈਂਟ ਦੀਆਂ ਟਾਈਪਸ

ਸੀ (C) ਵੈਰੀਏਬਲਜ਼/ਆਈਡੈਂਟੀਫਾਈਰ ਦੀਆਂ ਟਾਈਪਸ : ਡਿਲੀਮੀਟਰ, ਵੈਰੀਏਬਲਜ਼ ਦਾ ਡਿਕਲੇਰੇਸ਼ਨ ਇਨਿਸ਼ਿਯਲਾਈਜੇਸਨ

ਵੈਰੀਏਬਲ ਵਿਚ ਕਾਂਸਟੈਂਟ ਸਟੋਰ ਕਰਨਾ

ਡਾਟਾ ਟਾਈਪਸ: : ਬਿਲਟ ਇਨ ਡਾਟਾ ਟਾਈਪਸ (ਇੰਨਟੀਜਰ, ਫਲੋਟਿੰਗ ਪੁਆਇੰਟ – ਡਾਟਾ ਟਾਈਪ , ਕਰੈਕਟਰ ਡਾਟਾ ਟਾਈਪ, ਡਬਲ, ਵੋਆਇਡ ਡਾਟਾ ਟਾਈਪ),, ਮੇਨ ਫੰਕਸ਼ਨ ਹੈਡਰ ਟੋਕਨਜ਼ (ਆਈਡੈਂਟਿਫਾਇਰਜ਼), ਕੀ–ਵਰਡਜ਼, ਕਾਂਸਟੈਂਟ, ਓਪਰੇਟਰਸ) : ਕੀ ਵਰਡਜ਼ ਅਤੇ ਆਈਡੈਂਟੀਫਾਇਰਜ਼, ਟਾਈਪ ਮੋਡੀਫਾਇਰ ਜਾਂ ਕੁਆਲੀਫਾਈਰ

4 **<u>ਓਪਰੇਟਰਸ ਅਤੇ ਐਕਸਪ੍ਰੈਸ਼ਨ</u>**

ਭੂਮਿਕਾ

ਓਪਰੇਟਰਸ ਅਤੇ ਐਕਸਪ੍ਰੈਸ਼ਨ : ਐਕਸਪ੍ਰੈਸ਼ਨ, ਬਾਇਨਰੀ ਓਪਰੇਟਰ, ਔਪਰਸ਼ਨਜ਼ ਅਤੇ ਹਿਰੈਚੀਕਲ ਆਰਡਰ (Operations & Hierarchical order) ਰਿਲੇਸ਼ਨਲ ਅਤੇ ਲੋਜੀਕਲ ਓਪਰੇਟਰ: ਲੋਜੀਕਲ ਓਪਰੇਟਰ, ਅਸਾਈਨਮੈਂਟ ਓਪਰੇਟਰ,

ਇਨਕਰੀਮੈਂਟ ਅਤੇ ਡਿਕਰੀਮੈਂਟ ਓਪਰੇਟਰਸ, ਟਰਨਰੀ ਓਪਰੇਟਰ, ਕੌਮਾ ਓਪਰੇਟਰ, ਸਾਈਡਆਫ() ਓਪਰੇਟਰ, ਬਿਟਵਾਈਜ

ਓਪਰੇਟਰ

5. **<u>ਕੰਟਰੋਲ ਫਲੋ (ਭਾਗ 1)</u>**

ਭੂਮਿਕਾ

ਡਿਸਿਜ਼ਨ ਮੇਕਿੰਗ ਸਟੇਟਮੈਂਟ : ਇਫ ਸਟੇਟਮੈਂਟ (if statement), ਇਫ ਐਲਸ ਸਟੇਟਮੈਂਟ (if else)

ਸਵਿਚ ਸਟੇਟਮੈਂਟ

ਬ੍ਰੇਕ ਸਟੇਟਮੈਂਟ

ਨਿਰੰਤਰ ਸਟੇਟਮੈਂਟ

6. **<u>ਕੰਟਰੋਲ ਫਲੋ (ਭਾਗ 2)</u>**

ਭੂਮਿਕਾ

ਕੰਟਰੋਲ ਲੂਪ ਸਟਰਕਚਰ : ਵਾਈਲ ਸਟੇਟਮੈਂਟ (While statement), ਡੂ ਵਾਈਲ (do while), ਫਾਰ ਸਟੇਟਮੈਂਟ ਲੂਪ (For Statement loop)

7. **<u>ਐਰੇਸ (ਭਾਗ 1)</u>**

ਭੂਮਿਕਾ

ਐਰੇ ਦੀ ਡਿਕਲੋਅਰਿੰਗ ਅਤੇ ਇਨਿਸ਼ਿਯਲਾਈਜ਼ੇਸ਼ਨ : ਇਨਿਸ਼ਿਯਲਾਈਜ਼ਿੰਗ ਐਰੇਸ

ਕੁਝ ਵਿਸ਼ੇਸ਼ ਨਿਯਮ: ਐਰੇ ਵਿਚ ਡਾਟਾ ਪ੍ਰਵੇਸ਼ ਕਰਨਾ,

ਐਰੇ ਕਾਪੀ ਕਰਨੀ

ਐਰੇ ਦੇ ਮੁੱਲਾਂ ਦੀ ਪਹੁੰਚ ਕਰਨੀ

ਐਰੇ ਐਲੀਮੈਂਟਸ ਦਾ ਪ੍ਰਬੰਧਨ

8. **<u>ਐਰੇਸ (ਭਾਗ 2)</u>**

ਭੂਮਿਕਾ

ਦੋ ਡਾਈਮੈਨਸ਼ਨਲ ਐਰੇ : ਦੋ ਡਾਈਮੈਨਸ਼ਨਸ ਐਰੇ ਦੀ ਡਿਕਲੇਰੇਸ਼ਨ, ਦੋ ਡਾਈਮੈਨਸ਼ਨਲ ਐਰੇ ਦੀ ਬਣਤਰ, ਦੋ ਡਾਈਮੈਨਸ਼ਲ ਐਰੇ ਐਲੀਮੈਂਟਸ ਦਾ ਇਨੀਸ਼ਿਯਲਾਈਜ਼ੇਸ਼ਨ, ਦੋ ਡਾਈਮੈਨਸ਼ਲ ਐਰੇ ਸਟੇਟਮੈਂਟ ਦਾ ਇਨੀਸ਼ਿਯਲਾਈਜ਼ੇਸ਼ਨ ਮੈਮਰੀ ਵਿਚ ਦੋ ਡਾਈਮੈਨਸ਼ਨਲ ਐਰੇ ਐਲੀਮੈਂਟਸ ਮਲਟੀ ਆਇਮੈਨਸ਼ਨਲ ਐਰੇਸ – ਕੈਰ ਟਾਈਪ: ਮਲਟੀ ਆਇਮੈਨਸ਼ਨਲ ਐਰੇਸ ਦੇ ਐਲੀਮੈਂਟਸ ਤੱਕ ਪਹੁੰਚ, ਕੈਰ ਟਾਈਪ ਮਲਟੀ ਡਾਇਮੈਨਸ਼ਨਲ ਐਰੇ ਦਾ ਇਨਿਸ਼ਯਲਾਈਜੇਸ਼ਨ, ਕੈਰ ਵੱਰਡ ਪ੍ਰੋਸੈਸਿੰਗ ਦੇ ਦੋ ਡਾਇਮੈਨਸ਼ਨਲ ਐਰੇ ਇਕ–ਕੈਰ ਟਾਈਪ ਇਨਪੁੱਟ/ਆਊਟਪੁਟ

ਡੀਡਾਈਨ ਡਾਇਰੈਕਟਿਵ (# define directive)

9. **<u>ਡੈਸਕਟਾਪ ਪਬਲਿਸ਼ਿੰਗ</u>**

ਡੈਸਕਟਾਪ ਪਬਲਿਸ਼ਿੰਗ ਬਾਰੇ ਜਾਣਕਾਰੀ

ਡਾਕੂਮੈਂਟਸ ਨੂੰ ਪ੍ਰਿੰਟ ਕਰਨਾ

ਪ੍ਰਿੰਟਿੰਗ ਦੇ ਤਰੀਕੇ ਆਫ਼ਸੈਟ ਪ੍ਰਿੰਟਿੰਗ, ਲੇਜ਼ਰ ਪ੍ਰਿੰਟਿੰਗ

ਫੌਂਟਸ
ਫਰੇਮ
ਪੇਜ ਲੇਆਊਟ
ਡੈਸਕਟਾਪ ਪਬਲੀਸ਼ਿੰਗ ਅਤੇ ਵਰਡਪ੍ਰੋਸੈਸਰ ਵਿਚ ਅੰਤਰ
ਡਾਕੂਮੈਂਟ ਪਲੈਨਿੰਗ
ਮੁੱਖ ਸੂਚਨਾ ਨੂੰ ਖਾਸ ਤੌਰ ਤੇ ਦਿਖਾਇਆ ਜਾਣਾ : ਸਟਾਈਲ, ਮਾਰਜਨ, ਫੁਟਰ, ਫੌਂਟ

ਕੰਪਿਊਟਰ ਸਾਇੰਸ (ਗਿਆਰਵੀਂ ਸ਼੍ਰੇਣੀ)
ਅਗਵਾਈ ਲੀਹਾਂ (ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ)

ਸਮਾਂ–3 ਘੰਟੇ **ਅੰਕ –4●**

ਪ੍ਰੀਖਿਆ ਲਈ ਅੰਕ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ:

ਸੈਕਸ਼ਨ – ਏ	ਵਾਇਵਾ– ਵੋਸ	1●
ਸੈਕਸ਼ਨ - ਬੀ	ਰਿਕਾਰਡ ਫਾਇਲ	1●
ਸੈਕਸ਼ਨ – ਸੀ	ਛੋਟੇ ਪ੍ਰੋਗਰਾਮ	2●

1. ਸੈਕਸ਼ਨ – ਏ ਵਿੱਚ ਪ੍ਰੀਖਿਆਰਥੀ ਤੋਂ ਪਾਠ ਕ੍ਰਮ ਵਿੱਚੋਂ ਪੰਜ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ ਦੋ ਦੋ ਅੰਕ ਦਾ ਹੋਵੇਗਾ। ਇਹ ਪ੍ਰਸ਼ਨ ਓਬਜੈਕਟਿਵ ਟਾਈਪ ਜਾਂ ਵਿਆਖਿਆ ਦੱਸਣੀ ਜਾਂ ਕੰਪਿਊਟਰ ਦੇ ਵੱਖ ਵੱਖ ਹਿੱਸਿਆਂ ਅਤੇ ਇਸ ਨਾਲ ਜੁੜੇ ਸਹਾਇਕਾਂ ਦੇ ਬਹੁਤ ਛੋਟੇ ਅਭਿਆਸ ਹੋਣਗੇ। **1×10=10 ਅੰਕ**
2. ਸੈਕਸ਼ਨ – ਬੀ ਵਿੱਚ ਪ੍ਰੀਖਿਆਰਥੀ ਦਾ ਸਲਾਨਾ ਰਿਕਾਰਡ ਚੈਕ ਕੀਤਾ ਜਾਵੇਗਾ। **10 ਅੰਕ**
3. ਸੈਕਸ਼ਨ – ਸੀ ਵਿੱਚ ਪੰਜ ਪ੍ਰਸ਼ਨ /ਪ੍ਰੋਗਰਾਮ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ ਜਿਨ੍ਹਾਂ ਵਿੱਚੋਂ ਪ੍ਰੀਖਿਆਰਥੀ ਨੂੰ ਚਾਰ ਪ੍ਰੋਗਰਾਮ / ਪ੍ਰਸ਼ਨ ਕਰਨ ਦੀ ਖੁੱਲ ਹੋਵੇਗੀ। ਹਰ ਪ੍ਰੋਗਰਾਮ/ਪ੍ਰਸ਼ਨ ਪੰਜ ਪੰਜ ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ, ਹਰੇਕ ਪ੍ਰੋਗਰਾਮ / ਪ੍ਰਸ਼ਨ ਲਈ ਅੰਦਰੂਨੀ ਅੰਕ ਵੰਡ ਪੇਪਰ ਸੈੱਟਰ ਕਰਕੇ ਦੇਵੇਗਾ। **4×5=2● ਅੰਕ**

<u>ਦੁਹਰਾਈ</u>

ਐਕਸਲ
ਐਚ.ਟੀ.ਐਮ.ਐਲ.
ਮਾਈਕਰੋਸੋਫਟ ਅਸੈਸ : ਡਾਟਾ ਸੋਧਨਾ, ਅਸੈਸ ਡਾਟਾਬੇਸ ਦੇ ਆਬਜੈਕਟ

1. **<u>''ਸੀ'' ਪ੍ਰੋਗਰਾਮ</u>**

ਸਟਰਕਚਰ: ਗਲੋਬਲ ਡਿਕਲੇਰੇਸਨਸ, ਸੀ (C) ਪ੍ਰੋਗਰਾਮ ਦਾ ਕੰਪਾਈਲ ਅਤੇ ਲਾਗੂ ਕਰਨ ਐਡੀਟਰ ਦੀ ਵਰਤੋਂ ਫੰਕਸ਼ਨ: ਬਿਲਟ ਇਨ ਫੰਕਸ਼ਨਸ, ਯੂਜ਼ਰ ਪਰਭਾਸ਼ਤ ਫੰਕਸ਼ਨਸ
ਫਾਰਮੇਟਡ ਆਈ/ਓ ਫੰਕਸ਼ਨ ,ਪ੍ਰੋਗਰਾਮਿੰਗ ਨਾਲ ਸ਼ੁਰੂਆਤ ਕਰਨੀ : ਟਰਬੋ ਸੀ ਨੂੰ ਸਥਾਪਿਤ ਕਰਨਾ, ਪ੍ਰਗਰਾਮ ਦੀ ਕੰਪਾਇਲਿੰਗ ਅਤੇ ਐਗਜ਼ਿਕਿਊਟਿੰਗ, ਇੰਸਟਾਲੇਸਨ, ਓਪਰੇਟਰ

3 **<u>ਕੰਟਰੋਲ ਫਲੋ (ਭਾਗ 1)</u>**

ਡਿਸਿਜ਼ਨ ਮੇਕਿੰਗ ਸਟੇਟਮੈਂਟ : ਇਫ ਸਟੇਟਮੈਂਟ(if statement), ਇਫ ਐਲਸ ਸਟੇਟਮੈਂਟ (if else)
ਸਵਿਚ ਸਟੇਟਮੈਂਟ
ਬ੍ਰੇਕ ਸਟੇਟਮੈਂਟ
ਨਿਰੰਤਰ ਸਟੇਟਮੈਂਟ !

4. **<u>ਕੰਟਰੋਲ ਫਲੋ (ਭਾਗ 2)</u>**

ਕੰਟਰੋਲ ਲੂਪ ਸਟਰਕਚਰ : ਵਾਈਲ ਸਟੇਟਮੈਂਟ (While statement), ਡੂ ਵਾਈਲ (do while),
ਫਾਰ ਸਟੇਟਮੈਂਟ ਲੂਪ (For Statement loop)

5. **<u>ਐਰੇਸ (ਭਾਗ 1)</u>**

ਐਰੇ ਵਿਚ ਡਾਟਾ ਪ੍ਰਵੇਸ਼ ਕਰਨਾ
ਐਰੇ ਕਾਪੀ ਕਰਨੀ
ਐਰੇ ਦੇ ਮੁੱਲਾਂ ਦੀ ਪਹੁੰਚ ਕਰਨੀ
ਐਰੇ ਐਲੀਮੈਂਟਸ ਦਾ ਪ੍ਰਬੰਧਨ : ਐਲੀਮੈਂਟਸ ਦਾ ਜੋੜ, ਐਲੀਮੈਂਟਸ ਦਾ ਗੁਣਾਂਕ-ਮੁੱਲ, ਐਲੀਮੈਂਟਸ ਦਾ ਪ੍ਰੋਡਕਟ, ਐਲੀਮੈਂਟਸ ਦਾ ਔਸਤਨ, ਓੱਚਤਮ ਅਤੇ ਨਿਊਨਤਮ ਅੰਕ ਲੱਭਣਾ

8. **<u>ਐਰੇਸ (ਭਾਗ 2)</u>**

ਦੋ ਡਾਈਮੈਨਸ਼ਨਲ ਐਰੇ ਦੀ ਬਣਤਰ ਅਤੇ ਇਨੀਸ਼ਿਯਲਾਈਜ਼ੇਸ਼ਨ
ਮਲਟੀ ਡਾਇਮੈਨਸ਼ਨਲ ਐਰੇਸ : ਐਲੀਮੈਂਟਸ , ਇਨਿਸ਼ਯਲਾਈਜੇਸ਼ਨ, ਦੋ ਡਾਇਮੈਨਸ਼ਨਲ ਐਰ,
ਇਕ-ਕੈਰ ਟਾਈਪ ਇਨਪੁੱਟ/ ਆਊਟਪੁਟ

9. **<u>ਡੈਸਕਟਾਪ ਪਬਲਿਸ਼ਿੰਗ</u>**

ਡਾਕੂਮੈਂਟਸ ਨੂੰ ਪ੍ਰਿੰਟ ਕਰਨਾ

ਪ੍ਰਿੰਟਿੰਗ ਦੇ ਤਰੀਕੇ : ਆਫ਼ਸੈਟ ਪ੍ਰਿੰਟਿੰਗ, ਫੁਟਰ ਪ੍ਰਿੰਟਿੰਗ

ਫੌਂਟਸ

ਫਰੇਮ

ਪੇਜ ਲੇਆਊਟ

ਡਾਕੂਮੈਂਟ ਪਲੈਨਿੰਗ

ਮੁੱਖ ਸੂਚਨਾ ਨੂੰ ਖਾਸ ਤੌਰ ਤੇ ਦਿਖਾਇਆ ਜਾਣਾ : ਸਟਾਈਲ, ਮਾਰਜਨ, ਫੁਟਰ, ਫੌਂਟ

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6. ਪੰਜਾਬੀ (ਚੋਣਵਾਂ ਵਿਸ਼ਾ)

ਸਮਾਂ: 3 ਘੰਟੇ **ਲਿਖਤੀ ਪੇਪਰ: 9● ਅੰਕ**

ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ: 1● ਅੰਕ

ਕੁੱਲ : 1●● ਅੰਕ

ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਅੰਕ-ਵੰਡ

ਲੜੀ ਨੰ:	ਪਾਠ-ਕ੍ਰਮ	ਅੰਕ
1.	ਪੰਜਾਬੀ-ਕਾਵਿ:- ਆਧੁਨਿਕ-ਕਾਵਿ	39
2.	ਪੰਜਾਬੀ ਵਾਰਤਕ :- ਸਫ਼ਰਨਾਮਾ-ਅੰਸ਼	27
3.	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ	12
4.	ਪੰਜਾਬੀ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ ਦੀ ਸ਼ਬਦਾਵਲੀ	12
ਕੁੱਲ ਅੰਕ		**9●**

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

ਅਧਿਆਪਕਾਂ, ਵਿਦਿਆਰਥੀਆਂ, ਪੇਪਰ ਸੈੱਟਰਾਂ ਅਤੇ ਪਰੀਖਿਅਕਾਂ ਲਈ ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ।

ਪ੍ਰਸ਼ਨ ਨੰ:1 ਸਮੁੱਚੇ ਪਾਠ-ਕ੍ਰਮ ਦੇ ਆਧਾਰ 'ਤੇ 1● ਅੰਕਾਂ ਦੇ ਵਸਤੂ-ਨਿਸ਼ਠ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਇਹ ਪ੍ਰਸ਼ਨ ਬਹੁ-ਚੋਣ, ਠੀਕ/ਗ਼ਲਤ, ਖ਼ਾਲੀ ਥਾਂਵਾਂ ਜਾਂ ਇੱਕ ਜਾਂ ਦੋ ਸ਼ਬਦਾਂ ਵਿੱਚ ਉੱਤਰ ਦੇਣ ਵਾਲ਼ੇ ਹੋਣਗੇ। ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ :-

ਆਧੁਨਿਕ ਪੰਜਾਬੀ- ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) ਭਾਗ-1

(ੳ) **ਆਧੁਨਿਕ-ਕਾਵਿ:** 4 ਅੰਕ (ਦੋ ਪ੍ਰਸ਼ਨ ਰਚਨਾ ਦਾ ਕਵੀ ਜਾਂ ਕਵੀ ਦੀ ਰਚਨਾ ਨਾਲ਼ ਸੰਬੰਧਿਤ, ਦੋ ਪ੍ਰਸ਼ਨ ਪਾਠ- ਸਮਗਰੀ 'ਤੇ ਆਧਾਰਿਤ ਹੋਣਗੇ)।

(ਅ) **ਅੱਖੀਂ ਡਿੱਠੀ ਦੁਨੀਆਂ:** 2 ਅੰਕ (ਇੱਕ ਪ੍ਰਸ਼ਨ ਸਫ਼ਰਨਾਮਾ-ਅੰਸ਼ ਦੇ ਲੇਖਕ/ਲੇਖਕ ਰਚਿਤ ਸਫ਼ਰਨਾਮਾ-ਅੰਸ਼ ਨਾਲ਼ ਸੰਬੰਧਿਤ, ਦੂਜਾ ਪ੍ਰਸ਼ਨ ਸਫ਼ਰਨਾਮਾ-ਅੰਸ਼ਾਂ ਦੀ ਪਾਠ -ਸਮਗਰੀ 'ਤੇ ਆਧਾਰਿਤ ਹੋਵੇਗਾ)।

(ਏ) **ਭਾਸ਼ਾ-ਬੋਧ:** 4 ਅੰਕ

- ਇੱਕ ਪ੍ਰਸ਼ਨ ਭਾਸ਼ਾ ਦੀ ਬਣਤਰ ਜਾਂ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਭਾਸ਼ਾ ਦੇ ਮਹੱਤਵ ਨਾਲ਼ ਸੰਬੰਧਿਤ।
- ਇੱਕ ਪ੍ਰਸ਼ਨ ਗੁਰਮੁਖੀ ਲਿਪੀ ਨਾਲ਼ ਸੰਬੰਧਿਤ।
- ਦੋ ਪ੍ਰਸ਼ਨ ਉਪਭਾਸ਼ਾਈ ਸ਼ਬਦਾਵਲੀ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਹੋਣਗੇ। **1●×1=1● ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 2 'ਆਧੁਨਿਕ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ)' ਪਾਠ-ਪੁਸਤਕ ਦੇ ਆਧੁਨਿਕ-ਕਾਵਿ ਵਿੱਚੋਂ ਚਾਰ ਬੰਦ ਦੇ ਕੇ ਕਿਸੇ ਦੋ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।

7+7=14 ਅੰਕ

ਪ੍ਰਸ਼ਨ ਨੰ: 3 'ਆਧੁਨਿਕ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ)' ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਰਚਨਾਵਾਂ ਦਾ ਸਿਰਲੇਖ ਅਤੇ ਕਵੀ ਦਾ ਨਾਂ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦਾ ਕੇਂਦਰੀ ਭਾਵ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।

6 ਅੰਕ

ਪ੍ਰਸ਼ਨ ਨੰ: 4 'ਆਧੁਨਿਕ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ)' ਪਾਠ-ਪੁਸਤਕ ਦੇ 'ਪੰਜਾਬੀ ਕਵਿਤਾ ਦਾ ਸੰਖੇਪ ਇਤਿਹਾਸ' ਭਾਗ ਵਿੱਚੋਂ ਕੋਈ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **15 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 5 'ਅੱਖੀਂ ਡਿੱਠੀ ਦੁਨੀਆਂ' ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲ਼ੇ ਚਾਰ ਪ੍ਰਸ਼ਨ ਪੁੱਛ ਕੇ ਕਿਸੇ ਦੋ ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **5+5=10 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 6 'ਅੱਖੀਂ ਡਿੱਠੀ ਦੁਨੀਆਂ' ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਤਿੰਨ ਸਫ਼ਰਨਾਮਾ-ਅੰਸ਼ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦਾ ਸਾਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **15 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 7 'ਭਾਸ਼ਾ-ਬੋਧ' ਪਾਠ-ਪੁਸਤਕ 'ਤੇ ਆਧਾਰਿਤ, ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਚਾਰ ਪ੍ਰਸ਼ਨ ਪੁੱਛ ਕੇ ਕਿਸੇ ਦੋ ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। **5+5=10 ਅੰਕ**

ਪ੍ਰਸ਼ਨ ਨੰ: 8 'ਭਾਸ਼ਾ-ਬੋਧ' ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੀਆਂ ਪੰਜਾਬੀ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ ਦੀ ਸ਼ਬਦਾਵਲੀ 'ਤੇ ਆਧਾਰਿਤ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ-

(ੳ) ਉਪਭਾਸ਼ਾਈ ਅੱਠ ਸ਼ਬਦ ਦੇ ਕੇ ਉਹਨਾਂ ਵਿੱਚੋਂ ਕਿਸੇ ਪੰਜ ਦਾ ਟਕਸਾਲੀ ਪੰਜਾਬੀ ਵਿੱਚ ਰੂਪਾਂਤਰ ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।

(ਅ) ਟਕਸਾਲੀ ਪੰਜਾਬੀ ਦੇ ਅੱਠ ਸ਼ਬਦ ਦੇ ਕੇ ਕਿਸੇ ਪੰਜ ਦਾ ਉਪਭਾਸ਼ਾ ਵਿੱਚ ਮਿਲ਼ਦਾ ਰੂਪ ਪੁੱਛਿਆ ਜਾਵੇਗਾ। **5+5=10 ਅੰਕ**

ਨਿਰਧਾਰਿਤ ਪਾਠ-ਪੁਸਤਕਾਂ:-

1. **ਆਧੁਨਿਕ ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ)**
2. **ਅੱਖੀਂ ਡਿੱਠੀ ਦੁਨੀਆਂ**
3. **ਭਾਸ਼ਾ -ਬੋਧ**

ਪ੍ਰਕਾਸ਼ਕ: ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ।

7. Hindi

पाठ्यक्रम (संशोधित)

कक्षा : ग्यारहवीं पूर्णांक - 90

विषय : हिंदी सी.सी.ई - 10

समय : 3 घंटे

विषय वस्तु	अंक
भाग-क : अति लघूत्तर प्रश्न (वस्तुनिष्ठ प्रश्न)	10
भाग-ख : पाठ्य-पुस्तक (हिंदी पुस्तक- 11)	35
भाग-ग : हिंदी साहित्य का इतिहास (आदिकाल एवं भक्तिकाल)	10
भाग-घ : रचनात्मक लेखन	15
1.पत्र-लेखन	(7)
2.अनुच्छेद लेखन	(8)
भाग-ङ : व्यावहारिक ज्ञान	15
1. पंजाबी वाक्यों का हिंदी अनुवाद	(5)
2. पारिभाषिक शब्दावली (A से लेकर I तक)	(6)
3. संक्षेपीकरण	(4)
भाग-च : रस (शृंगार,करुण,हास्य, शांत, रौद्र ,वीर,अद्भुत,भयानक और वीभत्स)	05

पंजाब स्कूल शिक्षा बोर्ड द्वारा निर्धारित पाठ्य-पुस्तकें

1.हिंदी पुस्तक-11
2.हिंदी भाषा बोध और व्याकरण (ग्यारहवीं और बारहवीं कक्षा के लिए)
3.हिंदी साहित्य का इतिहास (ग्यारहवीं और बारहवीं कक्षा के लिए)

प्रश्न-पत्र की रूपरेखा (संशोधित)

कक्षा : ग्यारहवीं पूर्णांक - 90

समय : 3 घंटे **विषय : हिंदी** सी.सी.ई - 10

- प्रश्न-पत्र में कुल 16 प्रश्न होंगे ।
- सभी प्रश्न हल करने अनिवार्य होंगे ।
- प्रश्न-पत्र के छह भाग (**क से च तक**) होंगे ।

भाग-क : अति लघूत्तर प्रश्न (वस्तुनिष्ठ प्रश्न) 10

प्रश्न-1 : में (i) से (X) तक वस्तुनिष्ठ प्रश्न पूछे जायेंगे । प्रत्येक प्रश्न एक अंक का होगा। ये प्रश्न एक शब्द से एक वाक्य तक के उत्तर वाले अथवा हाँ/ नहीं अथवा रिक्त स्थानों की पूर्ति अथवा सही/ गलत अथवा बहुवैकल्पिक उत्तरों वाले, किसी भी प्रकार के हो सकते हैं।

(i) से (iii) तक संधि/ संधिविच्छेद से सम्बन्धित तीन वस्तुनिष्ठ प्रश्न पूछे जायेंगे। 1×3 = (3)

(iv) वाक्य विश्लेषण से सम्बन्धित एक वस्तुनिष्ठ प्रश्न पूछा जायेगा। (1)

(v) वाक्य संश्लेषण से सम्बन्धित एक वस्तुनिष्ठ प्रश्न पूछा जायेगा। (1)

(vi) से (vii) तक पाठ्य -पुस्तक (हिंदी पुस्तक-11) में से दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे। 1×2 = (2)

(viii) से (ix) तक हिंदी साहित्य का इतिहास (आदिकाल एवं भक्तिकाल) में से दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे। 1×2 = (2)

(x) रस से सम्बन्धित एक वस्तुनिष्ठ प्रश्न पूछा जायेगा। (1)

भाग-ख (पाठ्य -पुस्तक) 35

प्रश्न-2 (i) हिंदी पुस्तक-11 में संकलित 'प्राचीन काव्य' में से दो पद्यांश दिये जायेंगे जिनमें से एक पद्यांश की सप्रसंग व्याख्या लिखने के लिये कहा जायेगा।प्रसंग के लिये 1 अंक तथा व्याख्या के लिये 4 अंक निर्धारित हैं। 1+4= (5)

(ii) हिंदी पुस्तक-11 में संकलित 'आधुनिक काव्य' में से दो पद्यांश दिये जायेंगे जिनमें से एक पद्यांश की सप्रसंग व्याख्या लिखने के लिये कहा जायेगा।प्रसंग के लिये 1 अंक तथा व्याख्या के लिये 4 अंक निर्धारित हैं। 1+4= (5)

प्रश्न-3 (i) 'प्राचीन काव्य' की विषय वस्तु से सम्बन्धित दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा। 3

(ii) 'आधुनिक काव्य' की विषय वस्तु से सम्बन्धित दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा। 3

प्रश्न-4 पाठ्य - पुस्तक में संकलित गद्य भाग में से दो गद्यांश दिये जायेंगे जिनमें से एक गद्यांश की सप्रसंग व्याख्या लिखने के लिये कहा जायेगा। प्रसंग के लिये 1 अंक तथा व्याख्या के लिये 4 अंक निर्धारित हैं। 1+4= (5)

प्रश्न-5 पाठ्य - पुस्तक में संकलित गद्य भाग की विषय वस्तु से सम्बन्धित दो निबन्धात्मक प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 80 शब्दों में लिखने के लिये कहा जायेगा। (5)

नोट :- प्रश्न-पत्र निर्माता पाठ्य - पुस्तक में संकलित गद्य भाग (निबन्ध, कहानी एवं एकांकी) की सभी विधाओं को पूर्ण प्रतिनिधित्व दे।

प्रश्न-6 पाठ्य - पुस्तक में संकलित 'निबन्ध' भाग में से दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा। (3)

प्रश्न-7 पाठ्य - पुस्तक में संकलित 'कहानी' भाग में से दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा। (3)

प्रश्न-8 पाठ्य - पुस्तक में संकलित 'एकांकी' भाग में से दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा। (3)

भाग-ग हिंदी साहित्य का इतिहास (आदिकाल एवं भक्तिकाल) 10

प्रश्न-9 इस प्रश्न में हिंदी साहित्य के 'आदिकाल'की प्रमुख परिस्थितियों , प्रमुख प्रवृत्तियों एवं प्रमुख कवियों से सम्बन्धित दो निबन्धात्मक प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 80 शब्दों में लिखने के लिये कहा जायेगा। (5)

प्रश्न-10 इस प्रश्न में हिंदी साहित्य के 'भक्तिकाल'की प्रमुख परिस्थितियों , प्रमुख प्रवृत्तियों एवं प्रमुख कवियों से सम्बन्धित दो निबन्धात्मक प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 80 शब्दों में लिखने के लिये कहा जायेगा। (5)

भाग-घ (रचनात्मक लेखन) 15

प्रश्न-11 यह प्रश्न पत्र- लेखन से सम्बन्धित होगा। इस प्रश्न में 100 प्रतिशत आन्तरिक विकल्प दिया जायेगा। (7)

प्रश्न-12 यह प्रश्न अनुच्छेद लेखन से सम्बन्धित होगा । कोई तीन विषय देकर उनमें से किसी एक विषय पर लगभग 120 शब्दों में अनुच्छेद लिखने के लिये कहा जायेगा। (8)

भाग-ङ (व्यावहारिक ज्ञान) 15

प्रश्न-13 यह प्रश्न अनुवाद से सम्बन्धित होगा । इस प्रश्न में पंजाबी के सात वाक्य देकर उनमें से किन्हीं पाँच वाक्यों का हिंदी में अनुवाद करने के लिये कहा जायेगा। (5)

प्रश्न-14 इसमें अंग्रेज़ी के छह पारिभाषिक शब्द दिये जायेंगे जिनमें से किन्हीं चार शब्दों के हिंदी रूप लिखकर वाक्यों में प्रयोग करने के लिये कहा जायेगा। 1½×4 (6)

प्रश्न-15 यह प्रश्न संक्षेपीकरण से सम्बन्धित होगा । कोई एक अनुच्छेद देकर उसका संक्षेपीकरण करने के लिये कहा जायेगा। (4)

भाग-च : (रस) 05

प्रश्न-16 कोई दो रस देकर किसी एक रस की परिभाषा और उदाहरण लिखने के लिये कहा जायेगा। (5)

CLASS - XI
8. ENGLISH ELECTIVE

Time: 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER
PART-A

Objective type question No.1 will be compulsory (10 marks)

(1) It will consist of 10 objective type questions carrying one mark each. Objective type questions may include questions with one word to one sentence answer **or** fill in the blank **or** true/false **or** multiple choice type questions.

- English Reader Book-V 5
- Selections from English Verse 2
- A Book of Essays and Stories 3

PART-B (ENGLISH READER BOOK-V) (18 marks)

Text for detailed study

(2) Comprehension of a passage

Comprehension is to be tested with the help of the following techniques:

(i) Who spoke/wrote these words to whom/about whom/name of the chapter and the author

(ii) Short - answer type questions

(iii) Matching exercise

(iv) Fill in the blanks

(v) Meanings of difficult words in simple English 10 marks

(3) (a) An essay type question in about 125 words on character-sketch/ theme etc.

(with internal choice) 4

(b) An essay type question in about 125 words on the main incident/episode etc.

(with internal choice) 4

PART -C (SELECTIONS FROM ENGLISH VERSE)

Text for detailed study (10 marks)

(4) (a) Explanation with Reference to the Context (One out of two stanzas) 6

(b) Central idea of a poem 4

PART-D (A BOOK OF ESSAYS AND STORIES) (20 marks)

Text for detailed study

(5) (a) Short answer type questions from different lessons (four out of six) 4×3=12

(c) One essay type question on incident/episode/character-sketch/theme etc.
(with internal choice) 8

PART-E (COMPOSITION AND GRAMMAR) (32 marks)

(6) Application/Letter 10

(7) Essay (One out of three) 6

(8) Do as directed type question covering the following items:

(i) Voice	2
(ii) Narration	2
(iii) Use of words as a noun, a verb or an adjective/an adverb in a sentence (Only one word)	1
(iv) Combining two sentences with appropriate linkers.	1
(v) Fill in the blank with a suitable preposition or a determiner.	1
(vii) Various concepts	2
(viii) Transformation of sentences	2
1. Translation from English into Vernacular (A running passage of 4 sentences only)	5

Note: A special question in lieu of translation for foreign students.

SYLLABUS

Book-I English Reader Book V

1. The Young Akbar
2. The Story of Sri Rama's Exile
3. The Discovery of Penicillin
4. The Story of Michael
5. Guru Gobind Singh
6. Sohrab and Rustam-I
7. Sohrab and Rustam-II
8. A Modern Miracle
9. Abou Hassan and his Wife
10. A Spark Neglected Burns the House-I
11. A Spark Neglected Burns the House II

Book-II Selections From English Verse

1. The Way of Poetry – *William Blake*
2. Going Downhill on a Bicycle – *H.C. Beeching*
3. My Native Land – *Walter Scott*
4. The Snake – *Emily Dickinson*
5. Abou Ben Adhem – *Leigh Hunt*
6. The Patriot – *Robert Browning*
7. The Brook – *Alfred Lord Tennyson*
8. Casabianca – *Mrs Hemans*
9. Robin Hood and Alan-A-Dale *(Anonymous)*
10. Elegy on the Death of a Mad Dog – *Oliver Goldsmith*
11. We are Seven – *William Wordsworth*
12. Lady Clare - *Alfred Lord Tennyson*
13. The Charge of the Light Brigade - *Alfred Lord Tennyson*

Book-III A Book of Essays and Stories

1. The Real Princess
2. Gulliver in Lilliput
3. Tom Whitewashes a Fence
4. A Street Scene
5. Build Yourself for Leadership
6. Controlling the Mind
7. Three Questions

8. The Cabuliwallah
9. The Emperor's New Clothes
10. Gandhi's Appeal
11. The Judgement Seat of Vikramaditya
12. The Black Cat
13. The Happy Prince
14. The Bet
15. The Last leaf

APPLIED GRAMMAR

1. The Sentence and its Foms
2. The Sentence and its Kinds
3. The Clause and its Kinds
4. The Structure of the Noun Phrase
5. Nouns
6. Pronouns
7. Determiners (The Use of Articles and their Equivalents)
8. Adjectives
9. The Structure of the Verb Phrase
10. The Main Verb: Transitive and Intransitive
11. Linking Verbs
12. The Tense
13. Preposition and Prepositional Phrases
14. Adverbs
15. Conditional Sentences
16. Adjective Clauses
17. Active and Passive Voice
18. Direct and Indirect Speech
19. Vocabulary Expansion
20. Short Responses
21. Various Concepts- How to express them(1)
22. Various Concepts- How to express them(2)
23. The Patterning of Certain Verbs

Composition

1. Translation from English into Vernacular
2. Application
3. Letter
4. Essay

Note: A paragraph in lieu of translation for foreign students.

Books Prescribed & Published by the Punjab School Education Board.

1. English Reader Book-V
2. Selections from English Verse
3. A Book of Essays and Stories
4. A Practice Book of English Grammar

Note: All the lessons in the above books are included in the syllabus. No part has been deleted.

CLASS-XI

9. विषय : संस्कृत

पाठ्यक्रम 2018-19

	• **प्रश्नपत्र में कुल 11 प्रश्न होंगे।** • **प्रश्न पत्र में चार भाग (क से घ तक) होंगे ।** **भाग – क** **अति लघूत्तर प्रश्न (वस्तुनिष्ठ प्रश्न)** **प्रश्न–1 में (i) से (x)** तक वस्तुनिष्ठ प्रश्न पूछे जायेंगे । प्रत्येक प्रश्न एक अंक का होगा ।ये प्रश्न एक शब्द से एक वाक्य तक के उत्तरों वाले अथवा हाँ/नहीं अथवा सही/गलत अथवा बहुवैकल्पिक उत्तरों वाले, किसी भी प्रकार के हो सकते हैं ।यह प्रश्न पाठ्यक्रम से ही पूछे जायें। **(i)** से **(ii)** तक शब्द रूप (पुल्लिग ,स्त्री लिंग तथा नपुंसकलिंग से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे । **(iii)** से **(iv)** तक धातुरूप (लट्लकार, लोटलकार्,लङ्लकार, विधिलिङ् , लृट्लकार) से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे । **(v)** से **(vi)** तक केवल (इतरेतर , एकशेष ,समाहार) द्वन्द्व समास से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे। **(vii)** से **(viii)** तक तुलनात्मक प्रत्यय अथवा स्त्री प्रत्यय से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे। **(ix)** से **(x)** तक सन्धि से सम्बन्धित दो वस्तुनिष्ठ प्रश्न पूछे जायेंगे। **भाग –ख** **(पाठ्य पुस्तक के 1 से 18 तक पाठ)**
2	गद्यांशों का हिन्दी या पंजाबी या अंग्रेज़ी में अनुवाद ।
3	पद्य का हिन्दी या पंजाबी या अंग्रेज़ी में प्रसंग सहित अर्थ ।
4	पाठों के अभ्यासों में से हिन्दी में प्रश्न ।
5	पाठों के अभ्यासों में से संस्कृत लघु प्रश्न ।
6	पाठों के अभ्यासों में से संस्कृत शब्दों के हिन्दी मे अर्थ ।
7	पाठों के अभ्यासों में से रिक्त स्थान पूर्ति । **अथवा** पाठों के अभ्यासों में से यथानिर्दिष्ट परिवर्तन ।
8	**भाग ग** **नाटक भाग (19 , 20 पाठ)** (क) नाटक के अंशों का प्रसंग सहित अर्थ हिन्दी या पंजाबी या अंग्रेजी में। (ख) नाटक के अभ्यासों पर आधारित हिन्दी में प्रश्न ।
	भाग–घ **(व्याकरण भाग)**
9	(क) **शब्द रूप :** (पु.) देव, पति, सखि , साधु, महत्, वलवत्, पठत्, गच्छत्,आत्मन्, करिन् ।
	(नपुं.) फल , पठत ,नामन् महत्, गच्छत्,् ।
	(स्त्री.) प्रभा , नदी वधू प्रभा, महती, गच्छन्ती, पठन्ती। सर्वनाम सव लिगों और विभक्तियों में –युस्मद्, अस्मद् , तद् , एतद्, यद् ,इदम् ,किम् , सर्व ।
	(ख) **धातु रूप** : (लट्, लोट्, लङ्, विधिलिङ् , लृटलकार्)
	भ्वादिगण : (परस्मैपद्) गर्ज ,सृ ,तृ ,। आत्मनेपद- लभ्, सेव्, वृत् ।
	तुदादिगण : (परस्मैपद) सिच् ।
	दिवादिगण : (परस्मैपद) शम्।
	चुरादिगण : उभयपद (प.)चिन्त् ,तुल् ,पाल् कथ्
	(ग) **वाक्य शुद्धि** : अशुद्ध- शुद्ध वाक्यों पर आधारित । **अथवा** **वाच्य परिवर्तन** :- कर्तृवाच्य ,कर्मवाच्य , भाववाच्य की सरल रचनाएं केवल लट्लकार में ।
10	(क) **समास :** केवल (इतरेतर , एकशेष ,समाहार) द्वन्द्व समास ।
	(ख) **सन्धि : स्वर सन्धि** :- पूर्वरूप विधि , पररूप विधि , प्रकृतिभाव सन्धि ।
	व्यंजन सन्धि :-श्चुत्व विधि , ष्टुत्व विधि ,छत्व विधि,चर विधि , अनुनासिक विधि, अनुस्वर विधि , षत्व विधि , लत्व विधि , जश् विधि ,पूर्व सवर्ण विधि ।

	विसर्ग सन्धि :- लोप विधि , उत्व विधि ,रत्व विधि , शत्व विधि , सत्व विधि । (ग) निम्नलिखित धातुओं के साथ क्त, क्तवतु ,शतृ ,शानच् , प्रत्यय लगाकर तीनों लिंगों में केवल प्रथमा विभक्ति एकवचन के रूप -भू,पठ्, लिख् ,नम् , हस्, वस् , चल् , पत् , खाद् धाव्,क्रीड दृश् ,स्था, पा, सेव् , वृत् ,वृध् , लभ् । **अथवा** निम्नलिखित धातुओं के साथ क्त्वा प्रत्यय के रुप तथा उपयुक्त उपसर्ग लगाकर ल्यप् प्रत्यय के रुप गम्, नम्, नश्, पत्, क्षल्, जि, नी, विश्, भू, स्था, घ्रा, दा, आप, कृ, हृ, स्मृ ।
	(घ) **तुलनात्मक प्रत्यय:** विशेषणों के साथ केवल तरप् तथा तमप् प्रत्यय । **अथवा** **तद्धित प्रत्यय** - केवल भाववाची त्व और ता प्रत्यय । (ङ) **स्त्री प्रत्यय** - ई तथा आ प्रत्यय के सरल प्रयोग ।
11	हिन्दी सरल वाक्यों का संस्कृत में अनुवाद् ।
	निर्धारित पुस्तक : संस्कृत सौरभम्- 11 पंजाब स्कूल शिक्षा बोर्ड द्वारा प्रकाशित

कक्षा : ग्यारहवी

संस्कृत

प्रश्न- पत्र की रूपरेखा

समय : 3 घण्टे **कुल अंक : 90**

सी. सी. ई : 10

भाग= क

1 अति लघूत्तर प्रश्न (वस्तुनिष्ठ प्रश्न) 10x1=10

भाग = ख

(पाठ्य पुस्तक)

2	तीन गद्यांश दिए जाएं जिनमें से दो का अनुवाद हिन्दी या पंजाबी या अंग्रेज़ी में करने को कहा जाए ।	5x2=10
3	तीन पद्य दिए जाएं जिनमें से दो का प्रसंग सहित अर्थ हिन्दी या पंजाबी या अंग्रेज़ी में लिखने को कहा जाए।	5x2=10
4	पाठों के अभ्यासों में से चार प्रश्न हिन्दी में पूछे जाएं, जिनमें से दो का उत्तर हिन्दी में लिखने को कहा जाए ।	2x2=4
5	संस्कृत में चार लघु प्रश्न दिए जाएं , जिनमें से दो का उत्तर संस्कृत में लिखने को कहा जाए।	2x2=4
6	पाठों के अभ्यासों में से सात संस्कृत शब्द दिए जाएं, जिनमें से पाँच शब्दों का हिन्दी में अर्थ लिखने को कहा जाए ।	5 x1=5
7	पाठों के अभ्यासों में से छ: रिक्त स्थान पूर्ति के वाक्य दिए जाएं जिनमें से चार रिक्त स्थानों की पूर्ति करने को कहा जाए । **अथवा** यथानिर्दिष्ट परिवर्तन के छ: वाक्य दिए जाएं जिनमें से चार वाक्यों में परिवर्तन करने को कहा जाए।	4 x1=4
8	**भाग (ग) नाटक भाग** (क) नाटक भाग में से दो अंश दिए जाएं जिनमें से एक का प्रसंग सहित अर्थ हिन्दी या पंजाबी या अंग्रेजी में लिखने को कहा जाए ।प्रसंग के 2 अंक तथा अर्थ के 2 अंक हैं । (ख) नाटक के अभ्यासों में से चार प्रश्न हिन्दी में पूछे जाएं , जिनमें से दो का उत्तर हिन्दी में लिखने को कहा जाए ।	1×4=4 2×2=4
	भाग (घ) व्याकरण भाग	
9	(क) पाठ्यक्रम में दिए गये शब्द रूपों में से छ: शब्दों के रूप किसी एक विभक्ति के तीनों वचनों में पूछे जायें जिनमें से केवल चार शब्दों के रूप लिखने हों ।	4x1½=6
	(ख) पाठ्यक्रम में दिए गये धातु रूपों में से छ: धातुओं के रूप किसी एक लकार के एक पुरुष के तीनों वचनों में पूछे जायें जिनमें से केवल चार धातुओं के रूप लिखने हों ।	4x1½=6
10	(ग) कारक सम्बन्धी अशुद्धि वाले पाँच वाक्य दिये जायें जिनमें से तीन वाक्यों को शुद्ध करने को कहा जाये । **अथवा** वाच्य परिवर्तन के पाँच वाक्य दिए जाएं जिनमें तीन वाक्य हल करने को कहा जाए। (क) पाठ्यक्रम में दिए गए समासों से संबंधित पाँच समस्त पद दिए जाएं जिनमें से तीन का विग्रह करने को कहा जाए ।	3x1=3 3x1=3
	(ख) पाठ्यक्रम में दी गई सन्धियों में से सात सन्धि विच्छेद दिये जाएं जिनमें से चार करने को कहा जाए। (ग) पाठ्यक्रम के अनुसार सात धातुओं के साथ कृदन्त प्रत्यय लगाने के लिए दिए जाएं जिनमें से चार करने को कहा जाए । **अथवा**	4x1=4

	पाठ्यक्रम के अनुसार सात धातुओं के साथ क्त्वा प्रत्यय के रुप तथा ल्यप् प्रत्यय के रूप बनाने के लिए दिए जाएं जिनमें से चार करने को कहा जाए।	4×1=4
	(घ) पाठ्यक्रम में से तुलनात्मक प्रत्यय : विशेषणों के साथ केवल तरप् तथा तमप् प्रत्यय के छ: रूप दिये जायें जिनमें चार करने को कहा जाए। **अथवा** तद्धित प्रत्यय केवल भाववाची त्व और ता प्रत्यय के छ: रूप दिये जायें जिनमें चार करने को कहा जाए। (ङ) स्त्री प्रत्यय के छ: रूप दिये जायें जिनमें चार करने को कहा जाए ।	4x½=2 4x½=2
11	हिन्दी के आठ वाक्य दिए जाएं जिनमें से पाँच वाक्यों का संस्कृत में अनुवाद करने को कहा जाए ।	5x1=5

CLASS - XI
11. ECONOMICS
(HUMANITIES GROUP)

Time: 3 Hrs **Theory: 80 Marks**
CCE: 10 Marks
Project Work: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

1. There will be 29 Questions in all. All Questions will be compulsory.

A. Objective Type Questions:- Question No. 1 to 10 will carry 1 mark each. Answer to each question should be in about 1- 15 words. Each sub part carries 1 mark. Objective type questions may include questions with one word to one sentence answer/fill in the blank/true or false/multiple choice type questions. **1×10= 10**

B. Very Short Answer Type Questions:- Question No. 11 to 17 will carry 2 marks each. Answer to each question should be in about 30-35 words. Out of 7 questions, 3 questions will be numerical. **2×7= 14**

C. Short Answer Type Questions:- Question No. 18 to 25 will carry 4 marks. Three questions out of 8 questions will be of internal choice. Answer to each question should be in about 60-70 words and 3 questions will be numerical from Part-A. **4×8= 32**

D. Very Short Answer Type Questions:- Question No. 26 & 29 will carry 6 marks each. Answer to each question should be in about 150 - 200 words. Out of 2 questions from Part-A one question will be numerical. **6×4= 24**

Note: There will be a project work of 10 marks from Unit-4 of the syllabus. The practical examination of this project work will be taken by the subject teacher.

Unit-wise Weightage to Content

Typology of Questions	**Number of questions**	**Marks Division**	**Division of Syllabus**		**Total marks**
			Part A Unit 1to 4	**Part B Unit 5 to8**	
Objective Type Questions	10	1	5	5	10 Marks
Short Answer Type questions type I	07	2	3	4	14 Marks
Short Answer Type Questions type-II	08	4	4	4	32 Marks
Long Answer Type Questions	04	06	2	2	24 Marks
Total	**29**	**---**	**14**	**15**	**80**

SYLLABUS
PART-A
STATISTICS FOR ECONOMICS

UNIT-1. INTRODUCTION

Statistics : Meaning, Scope and Importance of Statistics in Economics.

UNIT-2. COLLECTION AND ORGANIZATION OF DATA

a) Collection of Data:

Sources of Data-Primary and Secondary; Methods of Collecting Data; Important Sources of Secondary Data, Census of India and National Sample Survey Organization.

b) Organization of Data:

Presentation of Data and Diagrammatic Presentation of Data.

i. Geometric Forms (Bar-Diagrams, Pie-Diagrams)

ii. Frequency Diagrams (Histogram, Polygon and Ogive) and

iii. Arithmetic Line-Graphs (Time Series Graphs)

Unit-3. STATISTICAL TOOS AND INTERPRETATION

a) Measures of Central Tendency

Mean (simple and weighted), Median and Mode.

b) Measures of Dispersion

Absolute Dispersion (Range, Quartile Deviation, Mean Deviation & Standard Deviation); Relative Dispersion (Co-efficient of Quartile- Deviation, Coefficient of Mean Deviation, Co-Efficient of Variation). Lorenz Curve: Meaning and its Application.

c) Correlation:- Meaning, Scatter Diagram, Measures of Correlation-Karl Pearson's Method (two variables ungrouped data), Spearman's Rank Correlation.

d) 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. DEVELOPMENT PROJECTS IN ECONOMICS

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

i) A report on demographic structure of your neighbourhood / Institution.

ii) Consumer awareness amongst households.

iii) Changing prices of a few vegetables in your market.

iv) Study of a co-operative institution: Milk Co-operatives.

NOTE:- (The idea behind introducing this unit is to enable the students the ways and means by which 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, Analysing the Data, Presentation of the project and using various statistical tools and their interpretation and conclusion.)

PART-B

INDIAN ECONOMIC DEVELOPMENT (Including Punjab Economy)

Unit-5. DEVELOPMENT POLICIES AND EXPERIENCE (1947-90)

i) A brief introduction of the state of Indian Economy on the eve of Independence.

ii) Common Goals of Five Year Plans.

iii) Agriculture: Main Features, Problems and Policies; Institutional Aspects and New Agriculture Strategy (Industrial Licensing etc.) and Foreign Trade.

Unit-6. ECONOMIC REFORMS SINCE 1991

Liberalization, Globalization, Privatization and WTO:Their Need And Main Features

Unit-7. CURRENT CHALLENGES FACING INDIAN ECONOMY

i) Poverty-Absolute and Relative; Main Programmes for Poverty Alleviation:A critical assessment.

ii) Rural Development:

a) Rural Finance and Credit Facility, The Problem of Indebtedness.

b) Different Sources of Rural Finance, The Role of Co-operative Credit Societies, Agricultural Land Development Banks, Co-operative Banks, NABARD, RBI and other Govt. Agencies for the Provision of Finance to the Rural People.

c) Rural Marketing Facilities:

Problem of Storage and Marketing of Agricultural Produce in the Rural Areas; Role of Regulated and Unregulated Markets; Procurement and Pricing Policies of Agricultural Produce.

iii) Status of Education, Health and Employment in India.

iv) Environment: Sustainable Economic Development, Limited Availability of Resources, Environmental Degradation.

Unit-8. PUNJAB ECONOMY

i) Manpower and Physical Resources of Punjab.

ii) Agricultural Development of Punjab since 1966.

iii) Indùstrial Development of Punjab since 1966

Structure, Location and Industrial Policy of State Govt.

iv) Growth and Pattern of Revenue and Expenditure and Financial Position of Punjab Govt.

v) Economic Planning in Punjab: Aims, Objectives, Strategy and Performance of Planning in Punjab.

CLASS - XI

12. MATHEMATICS

Time: 3:00 hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

1. All Questions are Compulsory.
2. Q 1 will consist of 10 parts and each part will carry one (1) Mark.
3. Q 2 to Q 9 each will be of 2 Marks.
4. Q 10 to Q 19 each will be of 4 marks.
5. Q 20 to 23 each will of 6 marks.
6. There will be no overall choice. There will be an internal choice in any 3 questions of 4 marks each and all questions of 6 marks.(Total of 7 internal choices)
7. Use of Calculator is not allowed.

Sr. No	Topic	Q. Carrying 1-Marks	Q. Carrying 2-Marks	Q. Carrying 4-Marks	Q. Carrying 6-Marks	Total Marks
1	Sets	1	-	**1**	-	05
2	Relations & Functions	1	-	1	-	05
3	Trigonometric Functions	1	2	1	-	09
4	Principle of Mathematical Induction	-	-	1	-	04
5	Complex numbers & Quadratic Equations	1	1	-	1	09
6	Linear Inequalities	-	-	-	1	06
7	Permutations & Combinations	1	-	1	-	05
8	Binomial Theorem	-	2	-	-	04
9	Sequence & Series	1	-	1	-	05
10	Straight lines	1	-	1	-	05
11	Conic Sections	1	-	1	-	05
12	Introduction to Three-dimensional Geometry	-	1	-	-	02
13	Limits & Derivatives	1	-	1	1	11
14	Mathematical Reasoning	-	2	-	-	04
15	Statistics	-	-	-	1	06
16	Probability	1	-	1	-	05
Total Questions		**1(10Parts)**	**8**	**10**	**4**	**23**
Total Marks		**10**	**16**	**40**	**24**	**90**

1. Sets:

Sets and their representations. Empty set, Finite & 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. Complement of a set, Properties of complement sets.

2. Relations & Functions:

Ordered pairs, Cartesian product of sets. Number of elements in the Cartesian product of two finite sets. Cartesian product of the reals with itself (upto R × R ×R).

Definition of relation, pictorial diagrams, domain, co-domain and range of a relation. Function as a special kind of relation from one set to another. Pictorial representation of a function, domain, 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 graphs. Sum, difference, product and quotients of functions.

3. Trigonometric Functions:

Positive and negative angles. Measuring angles in radians and in degrees and conversion from one measure to another. Definition of trigonometric 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±y) and cos(x±y) in terms of sinx, siny, cosx & cosy. Deducing the identities like following:

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

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

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

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.

4. Principle of Mathematical Induction:

Process of the proof by induction, motivating the application of the method by looking at natural numbers as the least inductive subset of real numbers. The principle of mathematical induction and simple applications.

5. Complex Numbers and Quadratic Equations:

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 equations in the complex number system. Square-root of a Complex number.

6. Linear Inequalities:

Linear inequalities, Algebraic solutions 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.

7. Permutations & Combinations :

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

8. 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.

9. 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 . Arithmetic and Geometric series, infinite G.P. and its sum. Geometric mean (G .M), relation between A.M and G.M, Sum to n term of the special series $\sum n$,. $\sum n^2$ and $\sum n^3$.

10. Straight Lines :

Brief recall of 2-D from earlier classes, Shifting of origin. Slope of a line and angle between two lines .Various forms of equations of a line: parallel to axes, point–slope form, slop–intercept form, two–point form, intercept form and normal form ,General equation of a line. Equation of family of lines passing through the point of intersection of two lines. Distance of a point from a line.

11. 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 equations of a circle;

12. Introduction to Three-dimensional Geometry:

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

13. Limits and Derivatives:

Derivative introduced as rate of change both as that of distance function and geometrically, intuitive idea of limit.

$$\lim_{x\to 0}\frac{\log_e(1+x)}{x}, \lim_{x\to 0}\frac{e^x-1}{x}$$

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.

14. Mathematical Reasoning:

Mathematically acceptable statements. Connecting words/phrases– consolidating the understanding of "if and only if (necessary and sufficient) condition", " implies", " and/or", "implied by", "and", "or", "there exists" and their use through variety of examples related to real life and Mathematics , Validating the statements involving the connecting words- difference between contradiction, converse and contrapositive.

15. Statistics:

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

16. Probability:

Random experiments: outcomes, sample spaces(set representation).Events: Occurrence of events , 'not', 'and' & 'or' events, exhaustive 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.

Note:- The subtopics which are printed in the book published by Punjab School Education Board but are not mentioned in syllabus, should be considered as part of syllabus.

CLASS - XI

13. BUSINESS ORGANISATION & MANAGEMENT
(HUMANITIES GROUP)

Time: 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

1. The question paper will cover whole of the syllabus.
2. 26 Questions will be set in the question paper. Student will attempt only 24 Questions.
3. All units of the syllabus should be given adequate representation in the question paper.

SECTION -A

4. Question No. 1 consist of 8 sub part of 1 mark each. Answer of each part should be given in 1-15 words. Objective type questions may include questions with one word or one sentence answer / fill in the blanks / multiple choice type questions/true or false.

SECTION -B

5. Question No 2 to 10 will carry 2 marks each. Answer of each question should be given in 5-10 lines.

SECTION -C

6. Do any seven questions from this section.Question No 11 to 22 will carry 4 marks each. Student will attempt 10 questions out of 12 questions. Answer of each question should be given in 15-20 lines.

SECTION -D

7. Question No. 23 to 26 will carry 6 marks each with internal choice. Anwser of each question should be given in 3-5 pages. Internal choice questions shuld not be set from the same unit.

DETAIL OF QUESTIONS SET FROM EACH UNIT

		Section-A	**Section-B**	**Section-C**	**Section-D**
Unit No.	**Name of the unit**	**1 mark question**	**2marks question**	**4 marks questions**	**6 marks question**
1	Nature and Purpose of Business	1	1	1	(i)1Q from unit 1or 2 with 1Qfrom 3 or 4 as internal choice
2	Structure of Business	1	1	1	(ii) 1Q from 7 or 8 with 1Q from 9 or10 Q. as internal choice.
3	Service Sector and Business	1	1	1	(iii) 1Q from unit 5 with 1Q from unit 6 as internal choice.
4	Social Responsibility of Business and Business Ethics	1		1	iv) 1Q from unit 5 or 6 with 1Q from unit 8 or 10 as internal choice.

5	Forms and Formation of Business Enterprises	1	1	2	
6	Sectoral Organisation of Business	1	1	1	
7	Formation of a Company	1	1	1	
8	Internal Trade		1	2	
9	Sources of Business Finance	1	1	1	
10	External Trade		1	1	
	Total	**08**	**09**	**10**	**04**

SYLLABUS
FOUNDATION OF BUSINESS

UNIT-1 NATURE AND PURPOSE OF BUSINESS

a) Concept and Characteristics of Business.
b) Business-Profession and Employment- Distinctive Features.
c) Objectives of Business -Economic, Social and Human.
d) Business Risks — Nature and Causes.
e) Role of Profit in Business.
f) A brief outline of the evolution of business activities in India.

UNIT-2 STRUCTURES OF BUSINESS

a) Classification of Business Activities, Industry and Commerce.
b) Industry and Types: Primary and Secondary.
c) E-Commerce-Meaning, Opportunities and Benefits, Resources required for successful E-Commerce implementation, Security and Safety for Business Transactions.
d) Outsourcing of Services: Nature, Need and Types, Financial Services, Advertising, Courier Services, Customer Support Services.

UNIT-3 SERVICE SECTOR AND BUSINESS

a) Banking: Types of Banks, Functions of Commercial Banks.
b) Insurance: Principles, Types; Life, General Fire, Marine and Insurance of other Risks, Health Insurance, Fidelity Insurance.
c) Communication: Postal, Telecom.
d) Warehousing : Types and Functions

UNIT-4 SOCIAL RESPONSIBILITY OF BUSINESS AND BUSINESS ETHICS

a) Concept of the Social Responsibility.
b) Case for Social Responsibility and Human Rights.
c) Responsibility towards various Interest Groups, Investors, Employees, Consumers, Government and Community in General.

UNIT-5 FORMS AND FORMATION OF BUSINESS ENTERPRISES

a) Meaning, Features, Merits and Limitations of following Forms -
    a. Sole Proprietorship
    b. Joint Hindu Family Business
    c. Partnership-Partnership Deed (main clauses), Types of Partners, Partnership Formation, Registration
    d. Co-operative Societies
    e. Company: Types of Companies-Private, Public and Deemed Public Privileges of Private Company.

b) Choice of Form of Business Enterprise.

c) Factors to be considered for starting a Business.

d) Scope for setting up small Business Enterprises.

UNIT-6 SECTORAL ORGANIZATION OF BUSINESS

a) Meaning, Features, Merits and Limitations of following:- Private Sector, Public Sector and Joint Sector.

b) Forms of Public Sectors Enterprises :
   a. Departmental Undertaking
   b. Starting Co-operative.
   c. Government Company.

c) Global Enterprise (multi-national company)

CORPORATE ORGANISATION, FINANCE AND TRADE

UNIT-7 FORMATION OF COMPANY

a) Stages in the Formation of the Company
   i. Promotion
   ii. Incorporation
   iii. Commencement of Business.

UNIT-8 INTERNAL TRADES

a) Meaning and Types,

b) Wholesale Trade — Functions and Services.

c) Retail Trade Organization : Meaning, Types, Features, Merits and Limitations
   i. Itinerant and Fixed Shop
   ii. Departmental Store, Chain Shop, Mail Order Business, Franchise, Consumers, Co-operative Store (including super bazaar).

d) Direct Marketing, Tele-Marketing, Internal Marketing.

UNIT-9 SOURCES OF BUSINESS FINANCE

a) Nature and Significance.
   a. Sources of Finance
   b. Equity and Preference Shares.
   c. Debentures/Bonds Types: (Secured, Unsecured, Convertible and Non-Convertible).
   d. Retained Profits.
   e. Public Deposits
   f. Loan from Finance Institutions.

b) International Sources : GDR's, FDI

UNIT-10 EXTERNAL TRADES

a) Nature and Importance.

b) Means of Export Promotion.

c) Incentive Available.

d) Export- Import Procedure and Documentation.

e) Nature and Importance of Export Processing Zones and Economic Zones.

CLASS - XI

14. BOOK KEEPING AND ACCOUNTANCY
(HUMANITIES GROUP)

Time: 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total:100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. The question paper will cover whole of the syllabus.
2. There are 4 sections in the question paper i.e. A, B,C and D.
3. 26 Questions will be set in the question paper. Out of which students will have to attempt 24 questions.
4. All units of the syllabus should be given adequate representation in the question paper.
5. There is no word, line or Page limit for numerical questions.
6. The use of non-programmable simple calculator is allowed.

SECTION-A

7. Question No. 1 consists of 10 sub parts carrying 1 mark each. Answer of each part should be given in 1-15 words. Objective type questions may include questions with one word or one sentence answer/fill in the blanks/true or false/multiple choice type questions.

SECTION-B

8. Question No. 2 to 11 (of which 3 questions will be numerical and 3 question will be theoretical) will carry 2 marks each. Answer of theoretical questions should be given in 5 to 10 lines.

SECTION-C

9. Question No. 12 to 22 will carry 4 marks each. Question No.12 to 22 (of which 6 questions will be numerical and 5 questions will be theoretical) and students will attempt any 9 questions out of these 11 questions.

SECTION-D

10. Question No. 23 to 26 will carry 6 marks each with internal choice. Of these, any two questions will have internal choice between therotical and numerical questions and other two will have only numerical question as internal choice. Answer of theoritical questions should be given in 3-4 pages of the answer book.

DETAIL OF QUESTIONS SET FROM EACH UNIT

Unit No.	Name of the unit	1Mark Question	2 Marks Question	4 marks Question	6 marks Question
1.	Introduction to Accounting	1	1	1	
2.	Theory Base of Accounting	1	1	2	1
3.	Recording of Business transactions	1	1	1	
4.	Trial Balance and Rectification of errors	1	1	1	2
5.	Depreciation, Provisions and Reserves	1	1	1	1
6.	Bank Reconciliation Statement	1	1	1	1
7.	Accounting for bill of exchange transaction	1	1	1	1
8.	Financial Statements	1	1	2	1
9.	Computer in Accounting	1	1	1	
10.	Accounting and Data Base System	1	1	1	1

SYLLABUS

Unit-1. INTRODUCTION TO ACCOUNTING

i) Accounting:- Meaning, Objectives, Accounting as Source of Information, Internal and External Users of Accounting Information and their Needs, Advantages and Limitations of Accounting, Difference between Book Keeping and Accountancy.

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: Cash and Trade Discount, Transaction, Drawings, Equity.

Unit-2. THEORY BASE OF ACCOUNTING

i) Accounting Concepts:- Entity Money Measurement, Going Concern, Accounting Period, Cost Concept, Dual Aspect, Revenue Recognition (realisation), Matching, Accrual.

ii) Accounting Conventions:-Full Disclosure, consistency, Conservation, Materiality, Objectives.

iii) Accounting Standards:- Meaning, Nature, Need and List of Indian Accounting Standards.

iv) Accounting Mechanism:- Single Entry and Double Entry.

v) Accounting Cycle:- From Recording of Business Transaction to Preparation of Trial Balance and Final Accounts.

vi) Bases of Accounting:- Cash Basis, Accrual Basis.

Unit-3. RECORDING OF BUSINESS TRANSACTIONS

i) Voucher and Transactions:- Origin of Transactions-Source Documents and Vouchers, Preparation of Voucher; Accounting Equation: Approach, Meaning and Analysis of Transaction using Accounting Equation; Rules of Debit and Credit.

ii) Recording of Transactions: Books of Original Entry-Journal, Special Purpose Books: (i) Cash Book-Simple, Cash book with Bank Column and Petty Cash Book, (ii) Purchase Book, Sales Book, Purchase Returns Book, Sales Returns Book, Bill Receivable Book. Bills Payable Book; Ledger Meaning, Utility, Format; Posting from Journal and Subsidiary Books; Balancing of Accounts.

Unit-4. TRIAL BALANCE AND RECTIFICATION OF ERRORS

i) Trial-Balance; Meaning, Objectives, Advantages and Methods of Preparation.

ii) Errors: Types of Errors; 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

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) Provision 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. BANK RECONCILIATION STATEMENT

Meaning, Need, Preparation, Correct Cash Balance.

Unit-7. ACCOUNTING FOR BILLS OF EXCHANGE TRANSACTION

i) Bills of Exchange and Promissory Note: Definition, Feature, Parties, Specimen and Distinction.

ii) Important Terms: Terms of Bill, Concept of Accommodation Bill, Days of Grace, Date of Maturity, Bill at Sight, Bill after Date, Negotiation, Endorsement,Discounting of Bill. Dishonor, Retirement.and Renewal of a Bill, Insolvency of Acceptor.

iii) Accounting Treatment of Bill Transaction.

Unit- 8. FINANCIAL STATEMENTS

i) Financial Statements: Meaning and Objectives.

ii) Distinction between Capital Expenditure and Revenue Expenditure

iii) Balance Sheet: Need, Grouping, Marshaling of Assets and Liabilities, Vertical Presentation of Financial Statement.

iv) Adjustments in Preparation of Financial Statements with respect to Closing Stock, Outstanding Expenses, Prepaid Expenses, Accrued Income, Income Received in Advance, Depreciation, Bad Debts, Provision for Doubtful Debts, Provision for Discount on Debtors, Managers Commission.

v) Preparation of Trading and Profit & Loss Account and Balance Sheet of Sole Proprietorship.

Unit-9. COMPUTER IN ACCOUNTING

i) Introduction to Computer and Accounting Information System (AIS)

ii) Applications of Computers in Accounting: Automation of Accounting Process, Designing Accounting Reports, MIS reporting Data Exchange with other Information Systems.

iii) Comparison of Accounting Processes in Manual and Computerized Accounting, Highlighting Advantages and Limitation of Automation.

iv) Sourcing of Accounting System: Readymade and Customized and Tailor Made Accounting Systems. Advantages and Disadvantages of each Option.

Unit-10. ACCOUNTING AND DATABASE SYSTEM

i) Accounting and Database Management System

ii) Concept of Entity and Relationship: Entities and Relationships in an Accounting System:

Designing and creating Simple Tables, Forms, Queries and Reports in the context of Accounting System.

CLASS - XI
15. POLITICAL SCIENCE

Time: 3 hrs **Theory: 90 Marks**
CCE: 10 Marks
Total:100 Marks

STRUCTURE OF QUESTION PAPER

1. All questions are compulsory.
2. The question paper will comprise of 4 sections A, B, C and D of four questions with 34 sub parts to be attempted.
3. **All units of the syllabus should be given adequate representation in the question paper.**

SECTION- A

Objective Type Questions: Question No. 1 will have ten Parts (I to X) and each Part will carry 1 mark. This section will include questions with one word answer/ fill in the blank/ true or false/multiple choice type questions.

10×1= 10

SECTION- B

Very Short Answer Type Questions: Question No. 2 comprises of 12 sub parts (questions I to XII) carrying 2 marks each. Answer to each question should be in about 20-30 words. All Questions are compulsory. **12×2= 24**

SECTION- C

Short Answer Type Questions: Question No. 3 comprises of 10 sub parts (I to X) out of which students have to attempt any 8 question carrying 4 marks each. Answer to each question should be in about 50-60 words.

8×4= 32

SECTION- D

Long Answer Type Questions: Question No. 4 comprises of 4 sub parts (questions I to IV) carrying 6 marks each. Answer to each question should be in about 150-200 words. Three will be 100% internal choice in these questions. **4×6= 24**

Typology of Questions	**Number of Questions**	**Marks Division**	**Division of Syllabus**		**Total Marks**
			Part A	**Part B**	
Section-A Objective Type Questions	Q.1 (Q.I to X)	01 mark	5	5	10 Marks
Section-B Very Short Answer Type questions	Q.2 (Q.I to XII)	02 marks	6	6	24 Marks
Section-C Short Answer Type Questions	Q.3 (Q.I to X) Attempt any eight	04 marks	5	5	32 marks
Section-D Long Answer Type Questions	Q.4 (Q.I to IV) 100% internal choice	06 marks	2 100% internal choice	2 100% internal choice	24 Marks
Total	**34/36**	**---**	**18**	**18**	**90**

Note:- Weightage to each unit must be given in each type of questions as appropriate.

SYLLABUS

PART-A

FOUNDATIONS OF POLITICAL SCIENCE

Unit-I Meaning, Scope and Significance of Political Science

a) Meaning of Political Science

b) Scope and significance of Political Science.

c) Relationship of political science with History, Economics, Sociology and Ethics.

Unit-II Citizen and his Rights and Duties

a) Citizen and citizenship

b) Meaning of rights and duties

c) Relation between rights and duties

Unit-III Basic concepts

a) Law-meaning and its kinds.

b) Liberty-meaning, kinds and safeguards.

c) Equality-meaning, kinds, liberty and equality.

d) Justice

Unit-IV Society, State and Nation

a) State and its attributes.

b) Difference between State and Society, State and Government, State and Nation.

c) State and Associations.

Unit-V Classification of constitutions and Forms of Governments

a) Constitution: Meaning and Types, Rigid and Flexible, Written and Unwritten.

b) Forms of Governments:

   a. Democratic And Authoritarian (Dictatorial)
   b. Parliamentary and Presidential
   c. Unitary and Federal

Unit-VI Organs of Government

a) Executive
   a. Types of Executive
   b. Functions.

b) Legislature
   a. Types of Legislature-Unicameral & Bicameral
   b. Functions.

c) Judiciary
   a. Importance and Functions
   b. Independence of the Judiciary

PART-B

INDIAN CONSTITUTION AND GOVERNMENT

Unit-VII Basic Principles of the Indian Constitution

a) Preamble and salient features of the Indian Constitution.

Unit-VIII Fundamental Rights and Directive Principles of State Policy

a) Fundamental Rights-Nature and Kinds.

b) Directive Principles of State Policy-Importance and Sanctions behind them.

c) Distinction and relationship between Fundamental Rights and Directive principles.

d) Fundamental Duties.

Unit-IX Indian Federal System

a) Nature of Indian Federation

b) Union-State relations: Legislative, Administrative and Financial.

Unit-X Union Government

a) The Union Executive-President, Prime Minister and Council of Ministers.

b) The Union Legislature.

Unit-XI The State Government

a) State Executive- Governor, Chief Minister and Council of Ministers

b) State Legislature

c) District Administration

Unit-XII Indian Judicial System

a) The Supreme Court

b) State High Court

CLASS - XI
16. SOCIOLOGY

Time: 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

1. All questions are compulsory.
2. The question paper will comprise of 4 sections A, B, C and D of four questions with 32 sub parts to be attempted.
3. **All units of the syllabus should be given adequate representation in the question paper.**

SECTION- A

Objective Type Questions: Question No. 1 will have ten Parts (I to X) and each Part will carry 1 mark. This section will include questions with one word answer/ fill in the blank/ true or false/multiple choice type questions.

1×10= 10

SECTION- B

Very Short Answer Type Questions: Question No. 2 comprises of 10 sub parts (questions I to X) carrying 2 marks each. Answer to each question should be in about 20-30 words. All Questions are compulsory. **2×10= 20**

SECTION- C

Short Answer Type Questions: Question No. 3 comprises of 6 sub parts (I to VI) out of which students have to attempt any 6 question carrying 4 marks each. Answer to each question should be in about 50-60 words.

4×6= 24

SECTION- D

Long Answer Type Questions: Question No. 4 comprises of 6 sub parts (questions I to VI) carrying 6 marks each. Answer to each question should be in about 100-150 words. Three will be 100% internal choice in these questions. **6×6= 36**

Note:- Weightage to each unit must be given in each type of questions as appropriate.

Typology of Questions	**Number of questions**	**Marks Division**	**Division of Syllabus**		**Total marks**
			Part A Unit 1,2,3,	**Part B Unit4,5,6**	
A. Objective Type Questions	10	01 mark	5	5	10 Marks
B. Short Answer Type Questions Type I	10	02 marks	5	5	20 Marks
C. Short Answer Type Questions TypeII	06	04 marks	3	3	24 Marks
D. Long Answer Type Type Questions	06	06 marks	3	3	36 Marks
Total	**32**	**---**	**16**	**16**	**90**

SYLLABUS

PART -A

Unit I- Origin and Development of Sociology

1. Emergence of Sociology: Historical Background Meaning, Nature and Scope of Sociology.
2. Relationship of Sociology with Other Social Sciences: Political Science, History, Economics, Psychology and Anthropology.

Unit II- Basic Concepts in Sociology

1. Society, Community and Association: Society – Meaning and Features, Relationship between Individual and Society; Community – Meaning and Features; Association – Meaning and Features, Difference between Society, Community and Association.
4. Social Groups: Meaning and Features, Types – Primary and Secondary group, In-group and Out-group.

Unit III- Culture and Socialisation

5. Culture: Meaning and Features, Material and Non-Material culture.
6. Socialisation: Meaning, Socialisation as a Process of Learning, Agencies of Socialisation: Formal and Informal Agencies.

PART -B

Unit IV- Social Institutions

7. Marriage, Family and Kinship.
8. Polity, Religion, Economy and Education.

Unit V- Social Structure, Social Stratification and Social Change

9. Social Structure: Meaning, Features and Elements – Status and Role.
10. Social Stratification: Concept, Forms, Caste and Class, Features and Differences.
11. Social Change: Meaning, Features and Factors – Demographic, Educational and Technological.

Unit VI- Founding Fathers of Sociology

12. Western Sociological Thinkers: Auguste Comte – Positivism, Law of Three Stages, Karl Marx – Class and Class conflict, Emile Durkheim –Social Facts, Division of Labour, Max Weber – Social Action, Types of Authority, Sociology of Religion.

CLASS - XI
17. PUBLIC ADMINISTRATION

Time: 3Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

All questions are compulsory.

The question paper will comprises 4 sections A, B, C and D of 27 questions in total. Student will attempt 25 questions. The question paper will have:

SECTION-A

Objective Type Questions: This section will include questions with one word answer/ fill in the blank/ true or false/ multiple choice type questions. Question No. 1 will have ten Parts (A to J) and each Part will carry 1 mark. **10×1= 10**

SECTION-B

Very Short Answer Type Questions: This section will have 12 questions (from Q no.2 to 13) Each question will carry 2 marks. All Questions are compulsory. Answer of each question should be in 20-30 words. **12×2= 24**

SECTION-C

Short Answer Type Questions: This section will have 10 questions from 14 to 23.Each question will carry 4 marks Student have to attempt any eight out of ten questions Each question should be in 50-60 words. **8×4=32**

SECTION-D

Long answer Type Questions: This section will have 4 questions (24 to 27) with internal choice. Each question will carry 6 marks. Answer of each question should be in 150-200 words. There will be 100% internal choice in these questions. **6×4= 24**

Note:- Weightage to each unit must be given in each type of questions as appropriate.

Typology of Questions	**Number of questions**	**Marks Division**	**Total marks**	**Division of Syllabus**	
				Part A	**Part B**
A. Objective Type Questions A to J	1 (In Parts A to J)	10 1 mark each part	10 Marks	5	5
B. Very Short Answer questions	12	02 marks each	24 Marks	6	6
C. Short Answer Questions (To be attempted = 8)	10 To be attempted 8	04 marks	32 ma rks	5	5
D. Long Answer Questions (with internal choice)	4	06 marks	24 Marks	2 (Internal choice)	2 (Internal choice)
Total			**90**		

SYLLABUS

ELEMENTS OF PUBLIC ADMINISTRATION

Unit-I

a) Meaning, Nature, Scope & Significance of Public dministration.

b) Public Administration and other Social Sciences.

c) Public Administration and Private Administration.

Unit-II

a) Chief Executive: Kinds, Functions.

b) Staff and Line Agencies.

c) Bureau and Board Type.

Unit III

a) Department, Public Corporation and Public Company

b) Public Administration and Legislature.

c) Public Administration and Judiciary.

Unit-IV

a) Public Relations.

b) Public Administration and Citizen

INDIAN ADMINISTRATION

Unit-V

a) Salient Features of the Indian Administrative System.

b) Fundamental Rights and Directive Principles of State Policy.

Unit-VI

a) Relations between the Union and the States.

b) The State Executive- President, Vice-President, Prime President and the Council of Ministers.

Unit VII

a) Organisation and working of the Ministry of Home Affairs.

b) The State Executive and Council of Ministers.

Unit VIII

a) Organisation and Functions of the Department of Education at the State Level.

b) District Administration with special reference to the Role of Deputy Commissioner.

CLASS - XI

18. ਧਰਮ

ਸਮਾਂ: 3 ਘੰਟੇ **ਲਿਖਤੀ ਪੇਪਰ: 9● ਅੰਕ**

ਸੀ.ਸੀ.ਈ.: 1● ਅੰਕ

ਕੁੱਲ: 1●● ਅੰਕ

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਵਿੱਚ ਕੁੱਲ 32 ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।
2. ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਲਾਜ਼ਮੀ ਹੋਣਗੇ।
3. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਚਾਰ ਭਾਗਾਂ ਵਿੱਚ ਵੰਡਿਆ ਹੋਵੇਗਾ। ਹਰ ਭਾਗ ਸਾਰੇ ਪਾਠ-ਕ੍ਰਮ ਤੇ ਅਧਾਰਿਤ ਹੋਵੇਗਾ।

ਭਾਗ-I ਵਿੱਚ ਦਸ (1●) ਵਸਤੂਨਿਸ਼ਠ ਪ੍ਰਸ਼ਨ (1 ਤੋਂ1●) ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ ਇੱਕ ਅੰਕ ਦਾ ਹੋਵੇਗਾ। ਵਸਤੂਨਿਸ਼ਠ ਪ੍ਰਸ਼ਨ ਇੱਕ ਸ਼ਬਦ ਤੋਂ ਇਕ ਵਾਕ ਤੱਕ ਦੇ ਉੱਤਰ ਵਾਲੇ **ਜਾਂ** ਹਾਂ/ਨਾਂ **ਜਾਂ** ਖਾਲੀ ਥਾਂ ਭਰੋ **ਜਾਂ** ਠੀਕ/ਗਲਤ **ਜਾਂ** ਬਹੁ- ਭਾਂਤੀਉੱਤਰਾਂ ਵਾਲੇ, ਕਿਸੇ ਵੀ ਤਰ੍ਹਾਂ ਦੇ ਹੋ ਸਕਦੇ ਹਨ। **1●×1=1●**

ਭਾਗ-II ਵਿੱਚ ਅੱਠ (8) ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ I) ਪ੍ਰਸ਼ਨ (11 ਤੋਂ 18) ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ 2 ਅੰਕ ਦਾ ਹੋਵੇਗਾ ਜਿਸ ਦਾ ਉੱਤਰ 3●-35 ਸ਼ਬਦਾਂ ਵਿੱਚ ਹੋਵੇ। **8×2=16**

ਭਾਗ-III ਵਿੱਚ ਦਸ (1●) ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ II) ਪ੍ਰਸ਼ਨ (19 ਤੋਂ 28) ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ 4 ਅੰਕ ਦਾ ਹੋਵੇਗਾ, ਜਿਸ ਦਾ ਉੱਤਰ 6● ਤੋਂ 7● ਸ਼ਬਦਾਂ ਵਿੱਚ ਹੋਵੇ। 1● ਪ੍ਰਸ਼ਨਾ ਵਿੱਚੋਂ, ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਅੰਦਰੂਨੀ ਛੋਟ ਵਾਲੇ ਹੋਣਗੇ। **1●×4=4●**

ਭਾਗ-IV ਵਿੱਚ ਚਾਰ(4) ਅੰਦਰੂਨੀ ਛੋਟ ਵਾਲੇ ਨਿਬੰਧਾਤਮਕ ਪ੍ਰਸ਼ਨ (29 ਤੋਂ 32) ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ 6 ਅੰਕ ਦਾ ਹੋਵੇਗਾ, ਜਿਸ ਦਾ ਉੱਤਰ, ਉੱਤਰ ਪੱਤਰੀ ਦੇ 1½ ਪੰਨੇ ਤੋਂ 2 ਪੰਨਿਆਂ ਦਾ ਹੋਵੇ। **4×6=24**

ਪਾਠ-ਕ੍ਰਮ ਦੇ ਭਾਗਾਂ ਅਨੁਸਾਰ ਪ੍ਰਸ਼ਨਾਂ ਅਤੇ ਅੰਕਾਂ ਦੀ ਵੰਡ

ਪਾਠ-ਕ੍ਰਮ

ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਕਿਸਮ	ਅੰਕ ਪ੍ਰਤੀ ਪ੍ਰਸ਼ਨ	ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਗਿਣਤੀ	ਪਾਠ-ਕ੍ਰਮ ਦੇ ਭਾਗਾਂ ਅਨੁਸਾਰ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ		ਕੁੱਲ ਅੰਕ
			ਭਾਗ 'ਓ'	ਭਾਗ 'ਅ'	
ਵਸਤੂ ਨਿਸ਼ਠ	1 ਅੰਕ	1●	5	5	1●
ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ I)	2 ਅੰਕ	●8	3	5	16
ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ II)	4 ਅੰਕ	1●	5	5	4●
ਵੱਡੇ ਉੱਤਰਾਂ ਵਾਲੇ	6 ਅੰਕ	●4	2	2	24
ਕੁੱਲ		**32**	**15**	**17**	**9●**

ਭਾਗ (ਓ)

ਪਵਿੱਤਰ ਵਿਅਕਤੀਆਂ ਦੀਆਂ ਜੀਵਨੀਆਂ

ਇਕਾਈ 1. ਭਗਵਾਨ ਕ੍ਰਿਸ਼ਨ, ਭਗਵਾਨ ਮਹਾਂਵੀਰ, ਭਗਵਾਨ ਮਹਾਤਮਾ ਬੁੱਧ ਅਤੇ ਸ਼੍ਰੀ ਸ਼ੰਕਰਾਚਾਰੀਆ।

ਇਕਾਈ 2. ਯਸ਼ੂ ਮਸੀਹ ਅਤੇ ਹਜ਼ਰਤ ਮੁਹੰਮਦ ਸਾਹਿਬ।

ਇਕਾਈ 3. ਭਗਤ ਕਬੀਰ, ਸ਼੍ਰੀ ਗੁਰੂ ਨਾਨਕ ਦੇਵ, ਸ਼੍ਰੀ ਚੈਤੰਨਆਂ, ਸ਼੍ਰੀ ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਅਤੇ ਸ਼੍ਰੀ ਰਾਮ ਕ੍ਰਿਸ਼ਨ।

ਭਾਗ (ਅ)

ਪਵਿੱਤਰ ਗ੍ਰੰਥਾਂ ਦਾ ਅਧਿਐਨ

ਇਕਾਈ 1 ਹਿੰਦੂ ਧਰਮ, ਜੈਨ ਧਰਮ ਅਤੇ ਬੁੱਧ ਧਰਮ:

ਮਹਾਂਭਾਰਤ ਦੇ ਚੋਣਵੇਂ ਅੰਸ਼, ਮੰਨੂ ਸਿਮਰਤੀ, ਵਿਸ਼ਨੂੰ ਸਿਮਰਤੀ, ਭਾਗਵਦਗੀਤਾ, ਉਪਨਿਸ਼ਦ, ਮਹਾਂਨਿਰਵਾਣ, ਤੰਤਰ, ਇਹਨਾਂ ਗ੍ਰੰਥਾਂ ਦੇ ਚੋਣਵੇਂ ਅੰਸ਼ਾਂ ਵਿੱਚ ਪ੍ਰਯੋਗ ਹੋਏ ਸੰਕਲਪ।

ਅਚਾਰੰਗ-ਸੂਤਰ, ਕਪਲ ਸੂਤਰ, ਉੱਤਰ ਧਿਆਨ ਸੂਤਰ, ਸੰਨਯਾਤ ਨਿਕਾਇਆ, ਧਮਪਦ, ਮਧਿਆਮਿਕਾ, ਮਹਾਂ ਵਨਗਾ, ਮਹਾਂ ਮੰਗਲ ਸੂਤਰ, ਬੁਧਚਰਿਆ ਅਵਤਾਰ, ਅਰਹਤ ਦਾ ਸੰਕਲਪ, ਅਸ਼ਟਾਂਗ ਮਾਰਗ, ਬੋਧੀ ਸਤਵ, ਸੰਘ, ਪੰਚ ਸਕੰਧ, ਨਿਰਵਾਣ।

ਇਕਾਈ 2 ਜੁਡਾਇਜ਼ਮ, ਇਸਾਈ ਮਤ ਅਤੇ ਇਸਲਾਮ:

ਪੁਰਾਣੀ ਬਾਈਬਲ ਦੇ ਚੋਣਵੇਂ ਅੰਸ਼, ਦਸ ਆਦੇਸ਼, ਨਵੀਂ ਬਾਈਬਲ ਦੇ ਚੋਣਵੇਂ ਅੰਸ਼, ਅੱਲ੍ਹਾ ਦਾ ਸੰਕਲਪ।

ਇਕਾਈ 3 ਸਿੱਖ ਧਰਮ:

ਸ਼੍ਰੀ ਗੁਰੂ ਨਾਨਕ ਦੇਵ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਅਮਰਦਾਸ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਰਾਮਦਾਸ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਅਰਜਨ ਦੇਵ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਤੇਗ ਬਹਾਦਰ ਜੀ, ਬਾਬਾ ਸ਼ੇਖ ਫਰੀਦ ਜੀ, ਭਗਤ ਕਬੀਰ ਜੀ, ਭਗਤ ਰਵਿਦਾਸ ਜੀ, ਭਗਤ ਧੰਨਾ ਜੀ, ਸ਼੍ਰੀ ਗੁਰੂ ਗੋਬਿੰਦ ਸਿੰਘ ਜੀ ਦੇ ਸ਼ਬਦ, ਚੋਣਵੀਆਂ ਰਚਨਾਵਾਂ ਵਿੱਚ ਪ੍ਰਯੁਕਤ ਸੰਕਲਪ।

CLASS - XI
19. MUSIC – VOCAL

Time: 3Hrs **Theory: 60 Marks**
Time:20 mints (Per student) **Practical: 30 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. The question paper will comprise of 22 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three part representing both sections.

Part-I will consist of 7 objective type questions (Q. no. 1 to 7) carrying one mark each.Objective type questions may include questions with one word to one sentence answer or fill in the blanks or true/false or multiple choice type questions. **7×1=7 Marks**

Part-II will consist of 11 short answer type questions (Q. no. 8 to 18) carrying three 3 marks each. Answer of each question should be given with in 60-80 words. **11×3=33 Marks**

Part-III will consist of 4 long answers type questions (Q. no. 19 to 22) with internal choice (from section A and B) carrying 5 marks each. Answer of each question should be given with in 150-200 words.

4×5=20 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	**Marks of per Question**	**No. of Questions**	**Section-wise Distribution of Questions**		**Total Marks**
			Section-A	**Section-B**	
Objective Type	1 mark	07	3	4	7
Short Answer Type	3 marks	11	6	5	33
Essay Type	5 marks	04	2	2	20
Total Questions		**22**	**11**	**11**	**60**

SYLLABUS (THEORY)
Part-A

1.) Definitions:-Sangeet, Dunni, alankar, aroh, avroh, pakar, sargamgeet, jatti, alaap, taal.
2.) Vadi swar, samvadi swar, Anuvadi swar, Vivadi swar, Varjit swar.
3.) Life sketches:-
   (a) Proof: Sohan Singh
   (b) D: Dalip Chander Bedi
4.) Knowledge of Patiala Kharana and Delhi Kharana.
5.) Classified the Indian music instruments. Tutt Vad, sushir vad, Avnad Vad, Ghan Vad.
6.) My favourite Subjet- Music.
7.) Naad, definition and types.
8.) Khaijal, invention of khayal and theirtypes.
9.) Knowledge of Music Instrument: Tanpura:- History and their body parts.

PART-B

(i) To write the nation, description of khayals in rags:-Kalayan, Allahiya Bilaval; Varinda vani sarang,

(ii) Notation of Talas, Teentaal, Jhap taal and chhartaal along with Ikgun, and dugun Layakaries.

PAPER – B

PRACTICAL (MUSIC VOCAL)

STRUCTURE OF QUESTION PAPER

There should not be more than 9 (nine) students in a batch of a practical examination. The question paper will set by the examiner on the spot, while setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

1. Demonstration/performance of any one Raag out of the prescribed syllabus. The choice of the Raag will be done by the student. It will be for 6 minutes and shall carry 7½ marks.
2. Demonstration/performance of any one Raag out of the prescribed syllabus. The choice of the Raag will be of the examiner. It will be for 4 minutes and will carry 7½ marks.
3. Demonstration of 'Taals' in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 5 marks.
4. Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 2 minutes and will carry 5 marks.
5. Demonstration regarding Alankaar/Shabad/Bhajn It will also be for 4 minutes and will carry 5 marks.

SYLLABUS (PRACTICAL)

(1) Five- Five alankars in Kalayan and Bilaval Thaats.

(2) Chotta Khyal, alap, tans in Kalayan, Allhayia,Billaval Varinda Vani Sarang raags.

(3) Vadda Khyal in any Rags of your syllabus with alap and tans.

(4) Tunning of string tanpura.

(5) In any raag of your syllabus; Bhajan, shabad, Patriotic song.

(g) Capability to demonstrate the following taals with bols and matras by hand in ikgun and dugun layakaries.

i) Tadra taal

ii) Teen Taal

(iii) Jhap taal

(iv) Chhar taal

Note:- The book Published and Prescribed by the Punjab School Education Board:-

Sangeet Gayan-11

CLASS - XI
20. GURMAT SANGEET

Time: 3 Hrs **Theory: 60 Marks**
Time:20 mints (Per student) **Practical: 30 Marks**
CCE: 10 Marks
Total: 100Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. The question paper will comprise of 22 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts.
4. The question paper will consist of three parts with each part representing both sections.

Part-I will consist of 7 objective type questions (Q. no. 1 to 7) carrying one mark each.Objective type questions may include questions with one word to one sentence answer or fill in the blanks or true/false or multiple choice type questions. **7×1=7 Marks**

Part-II will consist of 11 short answer type questions (Q. no. 8 to 18) carrying three 3 marks each. Answer of each question should be given with in 60-80 words. **11×3=33 Marks**

Part-III will consist of 4 long answers type questions (Q. no. 19 to 22) with internal choice (from part A and B) carrying 5 marks each. Answer of each question should be given with in 150-200 words.

4×5=20 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	**Marks of per Question**	**No. of Questions**	**Section-wise Distribution of Questions**		**Total Marks**
			Section-A	**Section-B**	
Objective Type	1 mark	07	3	4	7
Short Answer Type	3 marks	11	6	5	33
Essay Type	5 marks	04	2	2	20
Total Questions		**22**	**11**	**11**	**60**

SYLLABUS (THEORY)
PART-A

1. Short Introduction of Gurmat Sangeet.
2. Introduction of instruments (Rabab and Tabla) used in Gurmat Sangeet.
3. Definitions of the following :-

Sangeet, Naad, Shruti, Swar, Saptak, Thaat, Raag, Aroh, Avroh, Alankaar, Laya (Madhya, Drut, Vilambit), Taal, Avartan, Sam or Gur, Taali, Khalli, Matra, Sathai, Antra, Taan, Vaadi, Samvadi, Anuvadi, Vivadi.

4. Life sketch and contribution towards Gurmat Sangeet of the following:
   (i) Bhai Mardana
   (ii) Gian Singh Abtabad
   (iii) Bhai Samund Singh

PART-B

1. Description of prescribed Raags: Bilawal, Kalyan, Asa.
2. Notations of prescribed Taals (Teen Taal, Dadra and Kehrava) Dugun and Chougun Laykaries.
3. Recognition of prescribed Raags from given Swarsangities.
4. Recognition of signs of Swar lipi of Bhatkhande.

PAPER-B
PRACTICAL (GURMAT SANGEET)
STRUCTURE OF QUESTION PAPER

There should not be more than 9 (nine) students in a batch of practical examination. The question paper will set by the examiner on the spot. While setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

1. Demonstration/performance of Shabad Gayan in any one Raag out of the prescribed syllabus. The choice of the Raag will be done by the student. It will be for 6 minutes and shall carry 7½ marks.
2. Demonstration/performance of Shabad Gagyan in any one Raag out of the syllabus. The choice of the Raag will be done by the examiner. It will be for 4 minutes and will carry 7½ marks.
3. Demonstration of 'Taals' in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 5 marks.
4. Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 2 minutes and will carry 5 marks.
5. Demonstration regarding Alankaar/Shandha/non detailed Raags. It will also be for 4 minutes and will carry 5 marks.

SYLLABUS (PRACTICAL)

1. Singing of Gurbani Shabad according to traditional style in prescribed Raags: Bilawal, Kalyan , Asa.
2. Five Alankars (Sargam and Aakar) in each Raag: Bilawal and Kalyan.
3. Knowledge of prescribed Taals:-
   Teen Taal, Dadra and Keharva.
4. Singing of Shandha and Pauri.
5. Knowledge of non detailed raags
   (i) Bharav (ii) Bhoopali in terms of Aroh, Avrohi and definition.

CLASS - XI
21. MUSIC – INSTRUMENTAL

Time: 3 Hrs **Theory: 60Marks**
Time:20 mints (Per student) **Practical: 30 Marks**
CCE: 10 Marks
Total: 100Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. The question paper will comprise of 22 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts with each part representing both sections.

Part-I will consist of 7 objective type questions (Q. no. 1 to 7) carrying one mark each. Objective type questions may include questions with one word to one sentence answer or fill in the blanks or true/false or multiple choice type questions. **7×1=7 Marks**

Part-II will consist of 11 short answer type questions (Q. no. 8 to 18) carrying three (3) marks each. Answer of each question should be given with in 60-80 words. **11×3=33 Marks**

Part-III will consist of 4 long answer type questions (Q. no. 19 to 22) with internal choice (from section A and B) carrying 5 marks each.Answer of each question should be given with in 150-200word. **4×5=20 Marks**

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Questions	**Marks of per Question**	**No. of Questions**	**Section-wise Distribution of Questions**		**Total Marks**
			Section-A	**Section-B**	
Objective Type	1 mark	07	3	4	7
Short Answer Type	3marks	11	6	5	33
Essay Type	5marks	04	2	2	20
Total Questions		**22**	**11**	**11**	**60**

SYLLABUS (THEORY)
PART-A

1. Definitions:-
   Sangeet, Dunni, Alankar, Taal, Jhala, Aroh, Avroh, Pakar, Alaap, Toras.
2. Different bools of mizrav:- Akarsh parhar, Apakarsh parhar,
3. Vadi Swar, Samvadi swar, Anuvadiswar, Vivadi Swar, Varjit swar.
4. Life sketches:-
   (i) Pt: Vishnu Naryan Bhatkhande.
   (ii) Sri Narinder Narula.
5. Classified the India music Instruments:- Tutt vad, sushir vad, Avnad vad, Ghan vad.
6. My favourite subject Music.
7. Knowledge of music instruments:- Sitar, History and their body parts.
8. Naad, definition and types.
9. Gut:-Maseet Khani gut, Rajakhani gut.

PAPER – B

PRACTICAL (MUSIC INSTRUMENTAL)

STRUCTURE OF QUESTION PAPER

There should not be more than 9 (nine) students in a batch of a practical examination. The question paper will set by the examiner on the spot, while setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

1. Demonstration/performance of any one Raag out of the prescribed syllabus. The choice of the Raag will be done by the student. It will be for 6 minutes and shall carry 7½ marks.
2. Demonstration/performance of one Raag out of the prescribed syllabus. The choice of the Raag will be of the examiner. It will be for 4 minutes and will carry 7½ marks.
3. Demonstration of Taals in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 5 marks.
4. Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 2 minutes and will carry 5 marks.
5. Demonstration regarding Alankaar/dun/ nationalanthem It will also be for 4 minutes and will carry 5 marks.

SYLLABUS (PRACTICAL)

(a) Alankars in kalayan and Bilaval Thaats.

(b) Maseed Khani gut and Raja Khani gut with description, alap toras in following raags.

(1) Kalayan raag (2) Allhayia Billaval,

(3) Varinda Vani Sarang.

(c) Capability to demastrate the following taals with bols and matras by hand. In ikgun and dugun layakaries.

(1) Tadra Taal (2) Teen Taal (3) Jhap Taal (4) Chhar Taal

(d) Dun in Kalayan rag and Varinda Vani rarang raag.

(e) National Anthem (gaan), rules notation.

Note:- The book Published and Prescribed by the Punjab School Education Board:-

Sangeet Vadan-11 (Instrumental)

CLASS - XI
22. MUSIC – TABLA

Time: 3 Hrs **Theory: 60 Marks**
Time:20 mints (Per student) **Practical: 30 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. The question paper will comprise of 22 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts with each part representing both sections.

Part-I will consist of 7 objective type questions (Q. no. 1 to 7) carrying one mark each. Objective type questions may include questions with one word to one sentence answer or fill in the blanks or true/false or multiple choice type questions. **7×1=7 Marks**

Part-II will consist of 11 short answer type questions (Q. no. 8 to 18) carrying 3 marks each. Answer of each question should be given with in 60-80 words. **11×3=33 Marks**

Part-III will consist of 4 long answer type questions (Q. no. 19 to 22) with internal choice (from section A and B) carrying 5 marks each. Answer of each question should be given within 150-200 word.

4×5=20 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Question	**Marks of per Question**	**No. of Questions**	**Section-wise Distribution of Questions**		**Total Marks**
			Section - A	**Section - B**	
Objective Type	1marks	07	3	4	07
Short Answer Type	3marks	11	6	5	33
Essay Type	5marks	04	2	2	20
Total Questions		22	11	11	60

SYLLABUS (THEORY)
PART-A

(i) Definition of the following:-

Sangeet, Naad, Matra, Vibhag, Taal, Laya, Theka, Avartan, Sam, Taali, Khaali, Kayada, Laggi, Mukhra, Mohra.

(ii) (a) Short History of Tabla.
(b) Merits and demerits of Tabla Player.
(c) Description of Tabla.
(d) Ten Varnas of Tabla.
(e) Principles of Tabla accompaninent with vocalist and instrumentalist.

(iii) Biographical sketches.
(a) Ustad Ahmad Jaan Thirkva.
(b) Pt. Anokhe Lal
(c) Pt. Krishan Maharaj

(d) Ustad Alla Rakha.

PART-B

(i) Description and comparison of Teen Taal, Tilwara, Jhap Taal, Sul Taal.

(ii) Recognition of prescribed Taals from the given Bols.

(iii) Two laggies in Kehrva and Dadra.

(iv) Notation of prescribed Taals along with Dugun and Chougun Laykaries.

(v) Notation of the following terms in Teentaal, Jhap Taal, Rupak Taal: One Kayada, two Paltas, one Rela, one Tukra and one Tihai.

PAPER-B
PRACTICAL MUSIC (TABLA)
STRUCTURE OF QUESTION PAPER

There should not be more than 9 (nine) students in a batch of practical examination. The question paper will set by the examiner on the spot. While setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

1. Demonstration/performance of Solo Vadan of any one Taal out of the prescribed syllabus. The choice of the Taal will be done by the student. It will be for 6 minutes and shall carry 7½ marks.

2. Demonstration/performance of Solo Vadan of any one Taal out of the prescribed syllabus. The choice of the Taal will be done by the examiner. It will be for 4 minutes and will carry 7½ marks.

3. Demonstration of 'Taals' in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 5 marks.

4. Ability to play one laggi in any Taal out of the syllabus. It will be for 2 minutes and will carry 5 marks.

5. Ability to play Tabla with Lehra. It wil be for 4 Minutes and will carry 5 Marks.

PRACTICAL

(i) Systematic solo performance of the following Taals with Peshkar, Kayada, Palta, Tihai, Tukra, Rela and Pakar: Teen Taal, Jhap Taal, Rupak Taal.

(ii) Two laggies in Dadra and Kehrva Taal.

(iii) To play simple Theka of the Ek Taal, Tilwara, Sul Taal.

(iv) Ability to play Tabla with Lehra.

(v) Ability to produce different bols of Taal by the examiner.

(vi) Padhant of Ikgun, Dugun and Chougun Laykaries of prescribed Taals and on Tabla.

CLASS - XI

23. DANCE

Time: 3 Hrs **Theory: 60 Marks**
Time:20 mints (Per student) **Practical: 30 Marks**
CCE: 10 Marks
Total:100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. The question paper will comprise of 22 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts with each part representing both sections.

Part-I will consist of 7 objective type questions (Q. no. 1 to 7) carrying one mark each. Objective type questions may include questions with one word to one sentence answer or fill in the blanks or true/false or multiple choice type questions. **7×1=7 Marks**

Part-II will consist of 11 short answer type questions (Q. no. 8 to 18) carrying 3 marks each. Answer of each question should be given with in 60-80 words. **11×3=33 Marks**

Part-III will consist of 4 long answer type questions (Q. no. 19 to 22) with internal choice (from section A and B) carrying 5 marks each. Answer of each question should be given within 150-200 word.

4×5=20 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of Question	**Marks of per Question**	**No. of Questions**	**Section-wise Distribution of Questions**		**Total Marks**
			Section - A	**Section - B**	
Objective Type	1marks	07	3	4	07
Short Answer Type	3marks	11	6	5	33
Essay Type	5marks	04	2	2	20
Total Questions		22	11	11	60

SYLLABUS
PART-A

I. Definition of dance, its importance in human life.

II. Knowledge of basic technical terms used in Kathak dance such as Theka, Laya, Taal, Tatkar, That, Amad, Salami, Tihai.

III. Critical study of Natya and Naritya.

IV. Comparative study of the folk and classical dance.

V. Knowledge of the following:

Asnyukta hast Mudras, their function in dance-Pataka, Tripataka, Ardhapataka, Mayur, Ardhachandra, Ara Shuktund, Mushti, Shikhar, Kapittha Rallamukh, Suchi, Chander kala, Padma Kosh, Sarpshrish.

VI. Short account of Raags and their importance in dance.

VII. Short history of Kathak-dance.

VIII. Survey and essential characteristics of Kathak dance.

PART-B

I. Definition and description of prescribed Taals.

II. Recognition of Taals through some Bols.

III. Notation of all material prescribed in practical course.

IV. Notation of prescribed Taals in single, Dugun and Chougun Laykaries.

PAPER-B

PRACTICAL (DANCE)

STRUCTURE OF QUESTION PAPER

There should not be more than 9 (nine) students in a batch of practical examination. The question paper will set by the examiner on the spot. While setting the question paper in practical, the examiner must consider the syllabus in theory and will follow the following instructions.

1. A systematic dance performance in any Taal from the prescribed syllabus as per choice of the student. It will be for 6 minutes and shall carry 7½ marks.
2. A systematic dance performance in any Taal from the prescribed syllabus as per choice of the examiner. It will be for 4 minutes and shall carry 7½ marks.
3. Demonstration/performance of any Taal in Ekgun and Dugun layakaries. It will be for 4 minutes and carry 5 marks.

1. Student will be given some bols of the prescribed Taals He/She will have to recognise two out of these. It will be for 2 minutes and will carry 5 marks.
2. Demonstration /performance of any two Gat nikas and palta of Tatkar. It will be for 4 minutes and carry 5 marks.

SYLLABUS (PRACTICAL)

I. Systematic dance performance of the following Taals on the material given below:-

A) Teen Taal : (16 Matras)
- One Thaat
- One Amad
- One Salami
- Two Toras
- One Kavit
- One Tihai
- One Paran
- Two Paltas

B) Taal Rupak (7 Matras)

One Thaat
One Amad
One Salami
One Tihai
One Tukra
One Paltai

II. Advance Tatkar in single, Dugun and Chougun Laykaries in the Teen Taal, Rupak Taal.

III. Two Gat nikas in Teen Taal.

IV. Description of Dadra and Kehrva Taals.

Recognition of prescribed Taals through some Bol.

CLASS - XI
24. PHILOSOPHY

Time: 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

1. All questions are compulsory.
2. The question paper will comprise of 4 sections A, B, C and D of four questions with 32 sub parts to be attempted.
3. **All units of the syllabus should be given adequate representation in the question paper.**

SECTION- A

Objective Type Questions: Question No. 1 will have ten Parts (I to X) and each Part will carry 1 mark. This section will include questions with one word answer/ fill in the blank/ true or false/multiple choice type questions.

1×10= 10

SECTION- B

Very Short Answer Type Questions: Question No. 2 comprises of 10 sub parts (questions I to X) carrying 2 marks each. Answer to each question should be in about 20-30 words. All Questions are compulsory. **2×10= 20**

SECTION- C

Short Answer Type Questions: Question No. 3 comprises of 6 sub parts (I to VI) out of which students have to attempt any 6 question carrying 4 marks each. Answer to each question should be in about 50-60 words.

4×6= 24

SECTION- D

Long Answer Type Questions: Question No. 4 comprises of 6 sub parts (questions I to VI) carrying 6 marks each. Answer to each question should be in about 100-150 words. Three will be 100% internal choice in these questions. **6×6= 36**

Note:- Weightage to each unit must be given in each type of questions as appropriate.

Typology of Questions	Number of questions	Marks Division	Division of Syllabus Part A Unit 1,2,3,4	Part B Unit 5,6,7,8	Total marks
A. Objective Type Questions	10	01 mark	5	5	10 Marks
B. Short Answer Type questions Type- I	10	02 marks	5	5	20 Marks
C. Short Answer Type Questions Type-II	06	04 marks	3	3	24 Marks
D. Long Answer Type Questions	06	06 marks	3	3	36 Marks
Total	**32**	**---**	**16**	**16**	**90**

SYLLABUS

PART-A

Unit-I Elementary Philosophy: Meaning, Definition and Uses of Philosophy.

Unit-II Branches of Philosophy: Metaphysics, Epistemology, Logic, Aesthetics and Psychology.

Unit-III (a) Logic: Definition, Meaning and Scope of Logic. The place of Logic as a Science. Relationship of Logic as Compared to that of Psychology and Grammar. Uses of Studying Logic.

(a) Fundamental Laws of Thought

(b) Terms: Their meaning, Connotation and Denotation.

Unit-IV Logical Definition: Its Rules. Fallacies Arising out of Violation of Rules. Limits of Logical definition. Practical Exercises in Fallacies of logical definitions.

PART-B

Unit-V (a) Induction, its meaning and definition

Difference between Induction and Deduction.

(b) Kinds of Induction: Proper and Improper Induction.Scientific Induction, Perfect Induction, Simple Enumeration and Analogy.

(c) Formal Grounds of Induction: Law of Causation, Law of uniformity of nature-various uniformities.

Unit-VI Material Grounds of Induction: Observation: Testimony Experiment: Advantages of Experiment over Observation and advantages of Observation over Experiment. Regulative Principles of Observation and Experiment.

Unit-VII Relation of Philosophy to science and Religion.

Unit-VIII Dharma, Artha, Karma, Moksha, Varnashrama, Doctorine of Karma acacording to Indian Philosophy.

CLASS - XI
25. EDUCATION

Time: 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

1. All questions are compulsory.
2. The question paper will comprise of 4 sections A, B, C and D of four questions with 32 sub parts to be attempted.
3. **All units of the syllabus should be given adequate representation in the question paper.**

SECTION- A

Objective Type Questions: Question No. 1 will have ten Parts (I to X) and each Part will carry 1 mark. This section will include questions with one word answer/ fill in the blank/ true or false/multiple choice type questions.

1×10= 10

SECTION- B

Very Short Answer Type Questions: Question No. 2 comprises of 10 sub parts (questions I to X) carrying 2 marks each. Answer to each question should be in about 20-30 words. All Questions are compulsory. **2×10= 20**

SECTION- C

Short Answer Type Questions: Question No. 3 comprises of 6 sub parts (I to VI) out of which students have to attempt any 6 question carrying 4 marks each. Answer to each question should be in about 50-60 words.

4×6= 24

SECTION- D

Long Answer Type Questions: Question No. 4 comprises of 6 sub parts (questions I to VI) carrying 6 marks each. Answer to each question should be in about 100-150 words. Three will be 100% internal choice in these questions. **6×6= 36**

Note:- Weightage to each unit must be given in each type of questions as appropriate.

Typology of Questions	Number of questions	Marks Division	Division of Syllabus Part A Unit 1and 2	Part B Unit 3 and 4	Total Marks
A. Objective Type Questions	10	01 mark	5	5	10 Marks
B. Short Answer Type questions Type I	10	02 marks	5	5	20 Marks
C. Short Answer Type Questions TypeII	06	04 marks	3	3	24 Marks
D. Long Answer Type Questions	06	06 marks	3	3	36 Marks
Total	**32**	**---**	**16**	**16**	**90**

SYLLABUS

PART-A

Principles of Education

Unit-I Meaning and concept of Education. Needs for Education. Aims of Education: Industrial aim, Social aim, Vocational aim and Cultural aim.

Unit-II Curriculum Its Meaning and Importance, Defects in the Traditional Curriculum. Co-curricular Activities and their Importance in Education.

PART-B

Unit-III Agencies of Education-Home, School, Community.

Unit-IV Organisations of Education: Directorate of Education-D.P.I. and State Board of education.

Problems of Education:- Adult Education, Environment Education, Population Education, Women Education, Special Education

CLASS-XI

26. ਭੂਗੋਲ

ਸਮਾਂ: 3 ਘੰਟੇ **ਲਿਖਤੀ ਪੇਪਰ : 7● ਅੰਕ**

ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ : 1● ਅੰਕ

ਪ੍ਰੈਕਟੀਕਲ : 2● ਅੰਕ

ਕੁੱਲ: 1●● ਅੰਕ

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

1. ਪਹਿਲੇ ਪ੍ਰਸ਼ਨ ਦੇ ਅੱਠ ਉਪ ਭਾਗ ਹੋਣਗੇ ਜਿਨ੍ਹਾਂ ਦੇ ਉੱਤਰ **objective type** ਹੋਣਗੇ। ਹਰ ਉੱਪ ਭਾਗ ਇਕ ਅੰਕ ਦਾ ਹੋਵੇਗਾ ਤੇ ਹਰ ਉੱਤਰ ਦੀ ਲੰਬਾਈ ਇਕ ਸ਼ਬਦ ਤੋਂ ਇਕ ਵਾਕ ਤੱਕ ਜਾਂ **multiple choice** ਕਿਸਮ ਦੀ ਹੋ ਸਕੇਗੀ। ਉਪ ਭਾਗ ਦੇ ਘੱਟੋ-ਘੱਟ ਦੋ ਪ੍ਰਸ਼ਨ ਹਰ ਯੂਨਿਟ ਵਿੱਚੋਂ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ। **1×8=8**
2. ਦੂਸਰੇ ਪ੍ਰਸ਼ਨ ਦੇ ਅੱਠ ਉਪ ਭਾਗ ਹੋਣਗੇ ਅਤੇ ਹਰ ਉਪ ਭਾਗ 2 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਉੱਤਰ ਦੀ ਲੰਬਾਈ 2 ਤੋਂ 3 ਵਾਕਾਂ ਵਿਚਾਲੇ ਹੋਵੇਗੀ ਤੇ ਉਪ ਭਾਗ ਦੇ 2 ਪ੍ਰਸ਼ਨ ਹਰ ਯੂਨਿਟ ਵਿੱਚੋਂ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ। **2×8=16**
3. ਤੀਸਰੇ ਪ੍ਰਸ਼ਨ ਦੇ ਅੱਠ ਉਪ ਭਾਗ ਹੋਣਗੇ ਜਿਨ੍ਹਾਂ ਵਿੱਚੋਂ ਪੰਜ ਦੇ ਉੱਤਰ 6● ਤੋਂ 8● ਸ਼ਬਦਾਂ ਵਿੱਚ ਦੇਣੇ ਹੋਣਗੇ। ਹਰ ਉਪ ਭਾਗ 4 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ ਤੇ ਘੱਟੋ-ਘੱਟ ਦੋ ਪ੍ਰਸ਼ਨ ਹਰ ਯੂਨਿਟ ਵਿੱਚੋ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ। **4×5=2●**
4. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 4 ਤੋਂ 6 ਤੱਕ ਜੋੜੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ ਜਿਨ੍ਹਾਂ ਦੇ ਹਰ ਜੋੜੇ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਦਾ ਜਵਾਬ ਦੇਣਾ ਜ਼ਰੂਰੀ ਹੋਵੇਗਾ। ਹਰ ਪ੍ਰਸ਼ਨ ਛੇ ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ ਤੇ ਉੱਤਰ ਦੀ ਲੰਬਾਈ 15● ਤੋਂ 25● ਸ਼ਬਦਾਂ ਵਿੱਚ ਰੱਖਣੀ ਹੋਵੇਗੀ। ਹਰ ਜੋੜੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਘੱਟੋ-ਘੱਟ ਦੋ ਜੋੜੇ ਇੱਕ ਯੂਨਿਟ ਵਿੱਚੋਂ ਜ਼ਰੂਰ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ। **6×3=18**
5. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 7, ਭਾਰਤ ਦੇ ਨਕਸ਼ੇ ਨਾਲ ਸਬੰਧਤ ਹੋਣਗੇ। **1×4=4**
6. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 8, ਸੰਸਾਰ ਦੇ ਨਕਸ਼ੇ ਨਾਲ ਸਬੰਧਤ ਹੋਵੇਗਾ। **1×4=4**

ਨੋਟ: ਨੇਤਰਹੀਣ ਵਿਦਿਆਰਥੀ ਨਕਸ਼ਾ ਭਰਨ ਦੀ ਥਾਂ ਇਹਨਾਂ ਸਥਾਨਾਂ, ਕੇਂਦਰਾਂ ਦੀ ਸਥਿਤੀ ਸਪਸ਼ਟ ਰੂਪ ਵਿੱਚ ਲਿਖਣਗੇ।

Forms of Questions	Objective type Multiple choice Questions	Short Answer-I	Short Answer-II	Map work	Long Answer Questions
Number of Questions	08	08	05	08	03
Marks allotted	08	16	20	08	18
Percentage of Marks	12.5	23	27	12.5	25

SYLLABUS (THEORY)

Unit-1 Solar System-

i. **Earth-** Position of Earth in Solar System, Size & Shape, Movements of Earth and Effects, Longitudes and Latitudes, Time: Local, Standard and International Dateline.

ii. **Rocks-** Origin, Classification and Characteristics

iii. **Factors of Change-** Weathering and Denudation: River, Glacier, Wind, Oceans and Underground Water

Unit-2 Lithosphere

iv. **Landforms-** Mountains, Plateaus and Plains; Origin, Classification and their significance to mankind

v. **Earthquake-** Causes and Effects, Types and Distribution; Volcanoes- Causes and Effects of Volcanic Activities

Unit-3 Atmosphere

vi. **Extents, Layers and Composition,** Temperature and Factors Controlling Temperature, Distribution and range of Temperature; Pressures- Factors Controlling Pressures, Horizontal and Vertical Distribution

vii. **Winds-** Planetary, Seasonal and Local, Shifting of Wind Belts and Impact their of, Cyclones and Anti-cyclones

viii. **Humidity and Precipitation**- Relative Humidity and Specific Humidity, Precipitation types; Rainfall types and distribution.

Unit-4 Hydrosphere

ix. **Oceans-** Ocean basins and Sub-marine relief, Ocean Water and their Circulation, Temperature, Salinity, Waves, Currents and Tides.

x. Special reference Geo-Political importance of Indian Ocean

Note:-(a) Examples as far as possible be given from India.

(b) Answers be illustrated with maps and diagrams.

Practical Map Work

Maps: Necessity of maps, Classification their of**.**

Scales of Maps: R.F., Linear Scale; Its use in maps, Reduction and Enlargement through square method.

Direction: Finding direction in the field and on the map, Orientation of Local map in the field, Methods of showing direction on the map.

Atlas map Symbols: Identification and Recognition of Symbols or conventional signs used in atlas, topographic sheet and weather maps.

Methods of showing relief on maps: Contours, Interpolation of Contours identification of simple relief features from contours on a map, Drawing of cross section

Observing and Recording of various weather elements with the help of following instruments:

a) Six's Minimum and Maximum Thermometer

b) Aneroid Barometer

c) Wind Vane

d) Wet and Dry bulb Thermometer

e) Rain Gauge

f) Drawing of Isotherms, Isobars and Isohyets.

CLASS - XI

27. DEFENCE STUDIES

Time : 3 Hrs **Theory : 70 Marks**
Practical: 20 Marks
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTIONS PAPER (THEORY)

1. There will be 20 Questions in all.
2. All questions are compulsory.
3. There will be 10 questions of one Mark each & these questions will be objective type. **10×1= 10 Marks**
4. There will be 8 questions of 5 Marks each. **8×5=40 Marks**
5. There will be 2 questions of 10 Marks each with internal choice. **2×10=20 Marks**

SYLLABUS

1. Definition and scope of Defence Studies, its relationship with other social and Physical Sciences.
2. Warfare: Evolution of warfare since primitive time to modern times. Definition and concepts of war, origin of war, Feudal war, Dynastic war, People's war, Modern war.
3. (a) Give Strategic importance of following places:
   - (i) Suez-canal
   - (ii) Panama Canal
   - (iii) Straits of Malacca
   - (iv) Korakoram-Sinking Highway.
   - (v) Laddakh.
   - (vi) Kathmandu.
   - (vii) Kodari Highway.
   - (viii) Chumbi Valley.

   (b) Defence Potential of India:

   (i) Strategic location frontiers of India;

   (ii) Boundaries;

   (iii) India's strategic Mineral Commodities;

   (iv) Industrial potentials, transport and communication in India;

Physical and Cultural factors determining the defence potential.

4. Psychological Aspects of War:-
   - (i) Morale: Concept and definition, factors, controlling to morale and importance of morale.
   - (ii) Discipline: Definition, importance factors contributing to discipline, relation of discipline to morale.Leadership: Definition, Importance, Types and Qualities of leadership.

(iii) Fear and Panic: Causes and effects of fear and panic, methods of recovery from fear and panic.

(iv) Man Management: What is man management and its purpose.

PAPER-II

VIVA-VOCE

Note: In viva voca paper the lecture will be 10 marks and interview of 10 marks. The students will give a lecture in presence of audience for 5-10 minutes on the topic of his own choice out of the topics given in the syllabus.

1. Lecture: Each student will be required to give a talk (and not paper reading) for 5-10 minutes on any one of the under-mentioned topic:

   (i) Suez Canal (ii) Geo-strategic location of India (iii) Modern War

   (iv) Morale (v) Defence Studies (vi) Korakoram-Sinking Highway (vii) Leadership

2. Interview: The examiner may ask the candidate any question from topic mentioned in the list of topics for lecture.

CLASS - XI
28. PSYCHOLOGY

Time: 3 Hrs **Theory: 70 Marks**
Time: 3 Hrs **Practical: 20 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

1. The Question paper will comprise of 26 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of four parts:

Part-I will consist of eight (8) objective type questions (Q.No.1 to 8) carrying 1 mark each. Objective type questions may include questions with one word to one sentence answer **or** fill in the blank **or** true/false **or** multiple choice type questions. **8×1=8**

Part-II will consist of eight (8) short answer type I, questions (Q. No. 9 to 16) carrying 2 marks each. Answer of each question should be given in 50-60 words. **8×2=16**

Part-III will consist of seven (7) short answer type II, questions (Q. No. 17 to 23) carrying 4 marks each. Answers of each question should be given in 80-90 words. Out of seven, two internal choice questions will be asked. **7×4=28**

Part-IV will consist of three (3) long answer type questions with internal choice (Q. No. 24 to 26) carrying 6 marks each. Answer of each question should be given in approximately two pages of the answer sheet. **3×6=18**

UNITWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of question	**Marks per question**	**No. of questions**	**Unitwise Distribution Of Questions**								**Total Marks**
			Unit-I	**Unit-II**	**Unit-III**	**Unit-IV**	**Unit-V**	**Unit-VI**	**Unit-VII**	**Unit-VIII**	
Objective type	1 Mark	8	1	1	1	1	1	1	1	1	**8**
Short answer type-I	2 Marks	8	1	1	1	1	1	1	1	1	**16**
Short answer type-II	4 Marks	7	1	1	1	1	-	1	1	1	**28**
Long answer type	6 Marks	3	-	-	1	-	1	-	1	-	**18**
Total		**26**	**3**	**3**	**4**	**3**	**3**	**3**	**4**	**3**	**70**

SYLLABUS

PART-A

Unit-I Psychology as a Science of Behaviour:

Nature of psychology, Importance of psychology in life. Its concept and Definition-Fields of Psychology-Relationship of Psychology with Physiology, Sociology and Education.

Unit-II Methods of Psychology:

Introspection, observation, Experimental and Case History Methods.

Unit-III Psychological Basis of Behaviour:

Response Mechanism: Meaning, Definition and Parts, i.e. Receptors, Effectors and Connections- Basic Unit of Nervous System: The Neurons and its kinds-Nerve Impulse and Reflex Action-Classification of Receptors according to Position and Function. Major Parts of Brain and their functions-The structure and function of Spinal Cord-The structure and function of Autonomic Nervous System, Endocrine glands and the effect of their Harmones on Behaviour.

Unit-IV Sensory Processes

Definition, Meaning, Threshold and characteristics of Sensations-kinds of sensations with special reference to visual sensation.
-Eye as a Sense Organ-Colour Blindness and After Images.

Unit-V: **Perception:** Nature and Meaning. Difference between Illusions and Hallucinations.

Unit-VI: **Attention:** Meaning, Definition and characteristics of Attention-Factors affecting attention-span, Division and Distraction of Attention.

Unit-VII: **Learning:** Meaning, Definition and views regarding Nature of Learning- Characteristics of Learning-Methods and theories of Learning: Leaning through trial and error, Insight theory of Learning. Laws of lemming.

Unit-VIII: **Memory:** Meaning, Definition and characteristics of Memory-Kinds of Memory-Processes of Memory: Recognition, Retention, Recall, Memorization-Forgetting and its Causes.

EXPERIMENTS

1. Negative After image
2. Mapping of Sensory Spots in the skin
3. Mapping of blind spot
4. Span of Attention
5. Mirror Drawing Experiment
6. Retention by Recall
7. Immediate Memory Span
8. Division of Attention

CLASS - XI

29. HOME SCIENCE

Time: 3 Hrs **Theory: 60 Marks**
Time: 3 Hrs **Practical: 30Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (Theory)

The question paper will comprise of 22 questions in total.

All questions will be compulsory to attempt.

The question paper will consist of three parts with each part representing both sections.

Part-I will consist of 7 objective type questions (Q. no. 1 to 7) carrying one mark each. Objective type questions may include questions with one word to one sentence answer **or** fill in the blank **or** true/false **or** multiple choice type questions. **7×1=7 Marks**

Part-II will consists of 11 short answer type questions (Q. no. 8 to 18) carrying 3 marks each.Any four questions out of 11 will carry internal choice (two from each section). Answer of each question should be given within 60-80 words. **11×3=33 Marks**

Part-III will consist of 4 long answer type questions (Q. no.19 to 22) with internal choice (from the same section) carrying 5 marks each. Answer of each question should be given within 150-200words.

4×5=20 Marks

SECTIONWISE DISTRIBUTION OF QUESTIONS AND MARKS

Type of question	**Marks per question**	**No. of Questions**	**Section wise Distribution of questions**		**Total Marks**
			Section A	**Section B**	
Objective type	1 Mark	7	3	4	**7**
Short answer type	3 Marks	11	6	5	**33**
Long answer type	5 Marks	04	2	2	**20**
Total		**22**	**11**	**11**	**60**

SYLLABUS (THEORY)

SECTION – A

(Family Resource Management)

1. Meaning and Scope of Home Science

i. Meaning

ii. Five major areas of home science

iii. Significance of home science in improving quality of life

2. Management Concepts

i. Meaning of management

ii. Purpose of home management

iii. Management process- planning, controlling, evaluation

iv. Motivational factors of management (values, goals, standards and decision making)

v. Qualities of an efficient home manager

3. Management of Resources in day to day Living

i. Meaning, type and characteristics of resources

ii. Time and energy management

- Steps in time and energy management
- Work simplification techniques

iii. Money management

- Steps in money management
- Methods of supplementing family income
- Wise buying and saving practices
- Saving and investment

4. Cleaning and Maintenance of House and Household Items

i. General principles for cleaning and cleaning schedule

ii. Cleaning tools and cleansing materials

iii. Cleaning of different metals/materials used in household

iv. Eco friendly substitutes for cleaning household items and surfaces

5. Interior decoration and Space Management

i. Importance and objectives of interior decoration

ii. Use of art principles in home decoration

iii. Spaces managements through use of colour, light, accessories and furniture

6. Consumer Protection & Education

i. Need and importance for consumer education

ii. Consumer problems related to purchase of household items

iii. Consumer aids- labels, standardization marks, labels, advertisements

iv. Consumer's rights and responsibilities

v. Consumer Protection Act, 1986 and seeking redressal for grievances.

SECTION – B
(Apparel and Textile Science)

1. Fibre Science

i. Classification of fibres

ii. Sources, characteristics and suitability for use of cotton, wool, silk and nylon

2. Fabric Construction and Finishes

i. Yarns-

a. Simple

b. Novelty

ii. Weaving-

a. Basic weave mechanism

b. Plain, twill, satin and sateen weaves

iii. Knitting, knotting, crocheting, braiding, felting and bonding

iv. Purpose and classification of finishes

v. Brief introduction to mercerization, bleaching, stiffening, tentering, calendaring, scouring

3. Dyeing and Printing

i. Purpose and types

ii. Plain dyeing

iii. Tie and dye

iv. Batik, block, stencil and spray printing

4. Elements and Principles of Design and their Impact

5. Selection, Care, Maintenance and Storage of Clothes

i. Factors influencing selection of apparel

ii. Check points before buying readymade garments

iii. Care labels on fabric and readymade garaments.

iv. Soaps and detergents

v. Stain Removal

vi. Care and storage

STRUCTURE OF QUESTION PAPER (PRACTICAL)

Time: 3 Hours **Marks: 30**

There should not be more than 25 candidates in a group. The Practical question paper will consist of two sections. Distribution of Marks will be as follows:

1. Viva Voce, Notebook & Record 5 Marks

Section-A (Family Resource Management)

2. Any one practical from practical no. 1, 2, 3, 4, 5,9 and 10 5 Marks

3. Any one practical from practical no. 6, 7 and 8 5 Marks

Section-B (Apparel and Textile Science)

4. Any one sample from practical no. 1 and 2

or

Any one sample from practical no. 3 and 4 5Marks

5. Any one sample from practical no. 5 and 6

or

Any one sample from practical no. 7, 8 and 9 5 Marks

6. Any one stain removal from practical no. 10. 5 Marks

SYLLABUS (PRACTICAL)

SECTION – A (Family Resource Management)

1. Organisation and Evaluation of work centers
2. Preparation of family budget
3. Opening and Operating a bank account
4. Identification of food adulterants through simple tests
5. Cleanning of Household articles/Surfaces
6. Flower arrangement
7. Tables setting and table etiquettes
8. Floor decoration
9. Critical analysis of labels
10. Practical experience of seeking redressal under consumer Act, 1986

SECTION – B (Apparel and Textile Science)

1. To identify different fibres by burning test
2. Preparation of paper samples for plain, twill, satin and sateen weaves.
3. Preparation of three knitting sample- knit stitch, purl stitch, combination of knit and purl stitch.
4. Preparation of two samples of crocheting
5. Preparation of five samples of tie and dye
6. Preparation of two samples of batik in at least three different colours
7. Preparation of two samples of block printing in at least two different colours
8. Preparation of one sample of spray printing
9. Preparation of one sample of stencil printing
10. Stain removal – ball pen, blood, grease, tea, curry

ਸ਼੍ਰੇਣੀ–ਗਿਆਰ੍ਹਵੀਂ
3●. ਮਾਡਲਿੰਗ ਅਤੇ ਮੂਰਤੀਕਲਾ (ਬੁੱਤਕਾਰੀ)
Modelling and Sculpture

ਸਮਾਂ : 8 ਘੰਟੇ **ਕੁੱਲ ਅੰਕ : 1●●**

ਨੋਟ :– ਇਹ ਪੇਪਰ ਪੂਰਨ ਪ੍ਰਯੋਗੀ ਹੈ ਅਤੇ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਰਾਹੀਂ ਬੋਰਡ ਵੱਲੋਂ ਨਿਯਤ ਡੇਟ–ਸ਼ੀਟ ਅਨੁਸਾਰ ਲਿਆ ਜਾਵੇਗਾ।

ਅੰਕਾਂ ਦੀ ਵੰਡ

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	= 9● ਅੰਕ
ਸੀ.ਸੀ.ਈ.	= 1● ਅੰਕ
ਕੁੱਲ ਅੰਕ	= 1●● ਅੰਕ
ਪਾਸ ਅੰਕ	= 33 ਅੰਕ

ਪਹਿਲਾ ਪੇਪਰ (ਭਾਗ–I) **ਸਮਾਂ: 4 ਘੰਟੇ** **ਸੈਸ਼ਨ: ਸਵੇਰ**

ਦੂਜਾ ਪੇਪਰ (ਭਾਗ–II) **ਸਮਾਂ: 4 ਘੰਟੇ** **ਸੈਸ਼ਨ: ਸ਼ਾਮ**

ਭਾਗ–I **ਅੰਕ: 38**

ਤਿਆਰ ਕੀਤੀ ਮਿੱਟੀ ਦੁਆਰਾ ਆਪਣੀ ਯਾਦ ਸ਼ਕਤੀ ਅਨੁਸਾਰ ਪੰਛੀ, ਜੰਗਲੀ ਜਾਨਵਰ, ਪਸ਼ੂ ਅਤੇ ਮਨੁੱਖੀ ਸਰੀਰ ਦੇ ਮਾਡਲ ਤਿਆਰ ਕਰਨੇ।

ਭਾਗ–II **ਅੰਕ: 38**

ਅਸਲ ਸ਼ਕਲ ਦਰਸਾਉਂਦੇ ਕੰਨ, ਨੱਕ, ਬੁੱਲ੍ਹ, ਅੱਖ, ਹੱਥ, ਪੈਰ, ਚਿਹਰਾ ਅਤੇ ਸਿਰ ਦੇ ਮਾਡਲ ਬਣਾਉਣੇ।

ਭਾਗ–III **ਅੰਕ: 14**

ਸੈਸ਼ਨਲ ਕੰਮ

ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੀਆਂ ਘੱਟੋ–ਘੱਟ ਵੀਹ ਕਲਾਕਰਿਤੀਆਂ (ਬੁੱਤ) ਜੋ ਕਿ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਚੈੱਕ ਕਰੇਗਾ ਅਤੇ ਅੰਕ ਲਾਵੇਗਾ। ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਦੁਆਰਾ ਵਿਸ਼ੇ ਸਬੰਧੀ ਜਬਾਨੀ ਪ੍ਰਸ਼ਨ ਵੀ ਪੁੱਛੇ ਜਾ ਸਕਦੇ ਹਨ।

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ–ਰੇਖਾ/Structure of Question Paper
ਮਾਡਲਿੰਗ ਅਤੇ ਮੂਰਤੀਕਲਾ (ਬੁੱਤਕਾਰੀ)/Modelling and Sculpture

ਕੁੱਲ ਅੰਕ : 1●●

ਭਾਗ–I **ਅੰਕ : 38**

ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟ ਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰੀਖਿਅਕ ਰਾਹੀਂ ਲਿਆ ਜਾਵੇਗਾ। ਇਹ ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਹੋਵੇਗਾ ਅਤੇ ਇਸਦੇ 38 ਅੰਕ ਹੋਣਗੇ। ਇਸ ਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਹੋਵੇਗਾ। ਇਸ ਵਿੱਚ ਪੱਤੇ, ਫੁੱਲ, ਪੰਛੀ, ਜਾਨਵਰ ਅਤੇ ਮਨੁੱਖੀ ਸ਼ਰੀਰ ਮਿੱਟੀ ਦੁਆਰਾ ਤਿਆਰ ਕੀਤੇ ਜਾਣਗੇ।

ਭਾਗ–II **ਅੰਕ: 38**

ਇਹ ਪੇਪਰ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਹੋਵੇਗਾ। ਇਸ ਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਅਤੇ ਇਹ ਪੇਪਰ 38 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸ ਵਿੱਚ ਮਿੱਟੀ ਦੁਆਰਾ ਕੰਨ, ਨੱਕ, ਅੱਖ, ਹੱਥ, ਬੁੱਲ੍ਹ, ਪੈਰ, ਚਿਹਰਾ ਅਤੇ ਸਿਰ ਦਾ ਅਸਲ ਸ਼ਕਲ ਦਰਸਾਉਂਦਾ ਮਾਡਲ ਤਿਆਰ ਕੀਤਾ ਜਾਵੇਗਾ।

ਭਾਗ–III **ਅੰਕ: 14**

ਸੈਸ਼ਨਲ ਕੰਮ

ਦੋਨਾਂ ਸੈਸ਼ਨਾਂ ਦੇ ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੀ ਛੁੱਟੀ ਹੋਵੇਗੀ। ਉਸ ਦੌਰਾਨ ਸੈਸ਼ਨਲ ਕੰਮ ਚੈਕ ਕਰਕੇ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ। ਇਹ 14 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸ ਵਿੱਚ ਪਾਠ–ਕ੍ਰਮ ਅਨੁਸਾਰ ਕੋਈ ਵੀਹ ਮਿੱਟੀ ਦੇ ਮਾਡਲ ਜੋ ਕਿ ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਤਿਆਰ ਕੀਤੇ ਹੋਣ ਦਾ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ।

ਸ਼੍ਰੇਣੀ–ਗਿਆਰ੍ਹਵੀਂ

31. ਜਿਉਮੈਟਰੀਕਲ ਪਰਾਸਪੈਕਟਿਵ ਅਤੇ ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਇੰਗ
Geometrical Perspective and Architectural Drawing

ਸਮਾਂ : 4 ਘੰਟੇ **ਕੁੱਲ : 1●● ਅੰਕ**

ਅੰਕਾਂ ਦੀ ਵੰਡ

ਥਿਊਰੀ	= 9● ਅੰਕ
ਸੀ.ਸੀ.ਈ.	= 1● ਅੰਕ
ਕੁੱਲ ਅੰਕ	= 1●● ਅੰਕ
ਪਾਸ ਅੰਕ	= 33 ਅੰਕ

ਭਾਗ–I **ਅੰਕ : 45**

ਜਿਉਮੈਟਰੀਕਲ ਅਤੇ ਵਿੱਥ ਸੋਝੀ ਡਰਾਇੰਗ
Geometrical Perspective Drawing

1. ਜਿਉਮੈਟਰੀਕਲ ਡਰਾਇੰਗ **ਅੰਕ : 16**

ਨੋਟ : ਇਸ ਭਾਗ ਵਿੱਚ ਚਾਰ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕੀਤੇ ਜਾਣਗੇ। ਜਿਹਨਾਂ ਵਿੱਚੋਂ ਦੋ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਲਾਜ਼ਮੀ ਹੋਣਗੇ।

(1) ਰੇਖਾਵਾਂ ਅਤੇ ਕੋਣਾਂ ਸਬੰਧੀ ਪ੍ਰਸ਼ਨ।

(2) ਤਿਕੋਣਾਂ ਅਤੇ ਚਤੁਰਭੁਜਾਂ ਸਬੰਧੀ ਸੌਖੇ ਪ੍ਰਸ਼ਨ।

(3) ਬਹੁ–ਭੁਜਾਂ ਸਬੰਧੀ ਪ੍ਰਸ਼ਨ (ਪੰਜ ਭੁਜ ਤੋਂ ਅੱਠ ਭੁਜ ਤੱਕ)

(4) ਅੰਤਰੀ ਅਤੇ ਬਾਹਰੀ ਆਕਾਰਾਂ ਸਬੰਧੀ ਪ੍ਰਸ਼ਨ। ਇਸ ਵਿੱਚ ਤਿਕੋਣਾਂ, ਵਰਗ, ਸਮਚਤੁਰਭੁਜ ਅਤੇ ਬਹੁ–ਭੁਜਾਂ ਸਬੰਧੀ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ।

(5) ਤਿਕੋਣਾਂ, ਆਇਤ ਅਤੇ ਚੱਕਰਾਂ ਦੇ ਖੇਤਰਫਲ ਬਾਰਬਰ ਆਕਾਰਾਂ ਸਬੰਧੀ ਪ੍ਰਸ਼ਨ।

2. ਠੋਸ ਅਤੇ ਨਿੱਗਰ ਜਿਉਮੈਟਰੀ (Solid Geometry) (ਜ਼ਰੂਰੀ) **ਅੰਕ : 9**

i) ਠੋਸ ਆਕਾਰ ਜਿਵੇਂ ਤਿਕੋਣ, ਵਰਗ, ਬਹੁਭੁਜਾਵਾਂ ਅਤੇ ਗੋਲ਼ੇ ਦੇ ਤਲ ਅਤੇ ਮੱਥਾ ਬਣਾਉਣਾ।

ii) XY ਰੇਖਾ ਨਾਲ ਕੋਣ ਬਣਾਉਂਦੇ ਆਕਾਰਾਂ ਦਾ ਤਲ ਅਤੇ ਮੱਥਾ ਬਣਾਉਣਾ।

3. ਵਿੱਥ ਸੋਝੀ ਡਰਾਇੰਗ (Perspective Drawing) (ਜ਼ਰੂਰੀ) **ਅੰਕ 2●**

i) **ਵਿੱਥ ਸੋਝੀ ਦੀ ਪਰਿਭਾਸ਼ਾ ਜਿਵੇਂ** :– ਸਮਾਨੰਤਰ ਵਿੱਥ ਸੋਝੀ, ਕੋਣਿਕ ਵਿੱਥ ਸੋਝੀ, ਚਿੱਤਰ ਤਲ, ਚਿੱਤਰ ਧਰਾਤਲ, ਦਰਸ਼ਕ ਦੀ ਅੱਖ, ਮਾਪ ਬਿੰਦੂ, ਲੋਪ ਬਿੰਦੂ, ਕੇਂਦਰ ਬਿੰਦੂ ਆਦਿ।

ii) ਘਣ (Cube) ਘਣ ਖੇਤਰ (Prism) ਅੰਗਰੇਜ਼ੀ ਦੇ ਵੱਡੇ ਅੱਖਰ ਜਿਹਨਾਂ ਦੇ ਨਾਪ ਦਿੱਤੇ ਹੋਏ ਹੋਣ ਦੇ ਸਮਾਨਾਂਤਰ ਅਤੇ ਕੋਣਿਕ ਵਿੱਥ ਸੋਝੀ ਚਿੱਤਰ ਬਣਾਉਣੇ।

ਭਾਗ–II **ਅੰਕ : 45**

ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਇੰਗ
Architectural Drawing

ਕਿਸੇ ਇੱਕ ਮੰਜ਼ਲੇ ਰਿਹਾਇਸ਼ੀ ਅਤੇ ਘੱਟ ਖਰਚੀਲੇ ਮਕਾਨ (ਘਰ) ਦਾ ਮੱਥਾ (Elevation) ਪਾਸਾ (Side) ਅਤੇ ਤਲ (Plan) ਬਣਾਉਣਾ। ਜਿਵੇਂ ਮਕਾਨ ਦਾ ਚਿੱਤਰ ਪੇਪਰ ਸੈਟਰ ਵੱਲੋਂ ਲੰਬਾਈ, ਚੌੜਾਈ, ਉਚਾਈ ਅਤੇ ਹੋਰ ਮਾਪਾਂ ਅਨੁਸਾਰ ਦਿੱਤਾ ਜਾਵੇਗਾ।

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ (Structure of Question Paper)

ਜਿਉਮੈਟਰੀਕਲ ਪਰਾਸਪੈਕਟਿਵ ਅਤੇ ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਇੰਗ

Geometrical Perspective and Architectural Drawing

ਸਮਾਂ : 4 ਘੰਟੇ **ਥਿਊਰੀ : 9● ਅੰਕ**

ਸੀ.ਸੀ.ਈ. : 1● ਅੰਕ

ਕੁੱਲ : 1●● ਅੰਕ

ਭਾਗ–I **ਅੰਕ : 45**

ਜਿਉਮੈਟਰੀਕਲ ਅਤੇ ਵਿੱਥ ਸੋਝੀ ਡਰਾਇੰਗ

ਜਿਉਮੈਟਰੀਕਲ ਡਰਾਇੰਗ **ਅੰਕ : 16**

ਇਸ ਭਾਗ ਵਿੱਚ ਪੇਪਰ ਸੈਟਰ ਚਾਰ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰੇਗਾ, ਜਿਹਨਾਂ ਵਿੱਚੋਂ ਪ੍ਰੀਖਿਆਰਥੀ ਨੇ ਦੋ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਹਨ ਜੋ 8–8 ਅੰਕਾਂ ਦੇ ਹੋਣਗੇ।

ਠੋਸ ਅਤੇ ਨਿੱਗਰ ਜਿਉਮੈਟਰੀ **ਅੰਕ : 9**

ਇਸ ਭਾਗ ਵਿੱਚ ਪੇਪਰ ਸੈਟਰ ਦੋ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰੇਗਾ ਜਿਹਨਾਂ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਜ਼ਰੂਰੀ ਹੋਵੇਗਾ, ਜੋ 9 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ।

ਵਿੱਥ ਸੋਝੀ ਡਰਾਇੰਗ **ਅੰਕ : 2●**

ਇਸ ਭਾਗ ਵਿੱਚ ਪੇਪਰ ਸੈਟਰ ਵੱਲੋਂ ਇੱਕ ਹੀ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕੀਤਾ ਜਾਵੇਗਾ, ਜੋ ਕਰਨਾ ਜ਼ਰੂਰੀ ਹੋਵੇਗਾ।

ਅੰਕਾਂ ਦੀ ਵੰਡ:–

ਬਣਾਵਟ	= 9 ਅੰਕ
ਠੀਕ ਗਿਣਤੀਆਂ ਅਤੇ ਠੀਕ ਡਰਾਇੰਗ	= 5 ਅੰਕ
ਸਕੇਲ ਡਰਾਇੰਗ	= 3 ਅੰਕ
ਰੇਖਾਵਾਂ	= 3 ਅੰਕ
ਕੁੱਲ	=2● ਅੰਕ

ਭਾਗ–II **ਅੰਕ : 45**

ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਇੰਗ

ਇਸ ਭਾਗ ਵਿੱਚ ਪੇਪਰ ਸੈੱਟਰ ਵੱਲੋਂ ਇੱਕ ਹੀ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕੀਤਾ ਜਾਵੇਗਾ, ਜੋ ਕਰਨਾ ਜ਼ਰੂਰੀ ਹੋਵੇਗਾ।

ਅੰਕਾਂ ਦੀ ਵੰਡ:–

ਮੱਥਾ (Elevation)	= 13 ਅੰਕ
ਪਾਸਾ (Side)	= 13 ਅੰਕ
ਤਲ (Plan)	= 13 ਅੰਕ
ਲਿਖਾਈ ਅਤੇ ਮਾਪ (W + S)	= 6 ਅੰਕ
ਕੁੱਲ	=45 ਅੰਕ

ਕਾਗਜ਼ ਦਾ ਮਾਪ:– ¼ (35 ਸੈਂ.ਮੀ. × 25 ਸੈਂ.ਮੀ.)

ਸ਼੍ਰੇਣੀ–ਗਿਆਰ੍ਹਵੀਂ

32. ਕਮਰਸ਼ੀਅਲ ਆਰਟ
Commercial Art

ਸਮਾਂ : 8 ਘੰਟੇ **ਕੁੱਲ ਅੰਕ : 1●●**

ਨੋਟ :– ਇਹ ਪੇਪਰ ਪੂਰਨ ਪ੍ਰਯੋਗੀ ਹੈ ਅਤੇ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਰਾਹੀਂ ਬੋਰਡ ਵੱਲੋਂ ਨਿਯਤ ਡੇਟ–ਸ਼ੀਟ ਅਨੁਸਾਰ ਲਿਆ ਜਾਵੇਗਾ।

ਅੰਕਾਂ ਦੀ ਵੰਡ:–

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	= 9● ਅੰਕ
ਸੀ.ਸੀ.ਈ.	= 1● ਅੰਕ
ਕੁੱਲ ਅੰਕ	= 1●● ਅੰਕ
ਪਾਸ ਅੰਕ	= 33 ਅੰਕ

ਪਹਿਲਾ ਪੇਪਰ (ਭਾਗ–I) **ਸਮਾਂ: 4 ਘੰਟੇ**
ਸੈਸ਼ਨ: ਸਵੇਰ
ਦੂਜਾ ਪੇਪਰ (ਭਾਗ–II) **ਸਮਾਂ: 4 ਘੰਟੇ**
ਸੈਸ਼ਨ: ਸ਼ਾਮ

ਭਾਗ–I **ਅੰਕ: 38**

ਲੇ–ਆਉਟ ਡੀਜਾਇਨਿੰਗ (Layout Designing)

i) ਹਿੰਦੀ, ਪੰਜਾਬੀ ਜਾਂ ਅੰਗਰੇਜ਼ੀ ਵਿੱਚ ਵੱਡੇ ਵੱਡੇ ਅੱਖਰਾਂ ਵਿੱਚ ਲਿਖਾਈ ਕਰਨਾ।
ਜਿਵੇਂ :– ਜੀ ਆਇਆ ਨੂੰ, स्वागत्म्, WELCOME

(ii) ਸਾਧਾਰਨ ਕਿਤਾਬਾਂ ਦੇ ਕਵਰ ਚਿੱਤਰਾਂ ਦੇ ਸਾਧਾਰਨ ਲੇ–ਆਊਟ ਤਿਆਰ ਕਰਨੇ।

ਮੀਡੀਅਮ :– ਪੋਸਟਰ ਕਲਰ।

ਭਾਗ – II **ਅੰਕ : 38**

ਪੋਸਟਰ ਬਣਾਉਣੇ (Poster Making)

ਵਪਾਰਕ ਵਸਤੂਆਂ ਦੀ ਮਸ਼ਹੂਰੀ ਸੰਬੰਧੀ ਪੋਸਟਰ ਤਿਆਰ ਕਰਨੇ।

ਜਿਵੇਂ – ਰੈੱਡ ਲੇਬਲ ਚਾਹ (Red Label Tea)
ਲਕਸ ਸਾਬਣ (LUX SOAP)
ਕਾਗਜ਼ ਦਾ ਮਾਪ :– ਪੂਰੇ ਕਾਗਜ਼ ਦਾ $^{1}/_{4}$ ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ. × 25 ਸੈਂ.ਮੀ.)

ਭਾਗ – III **ਅੰਕ : 14**

ਸੈਸ਼ਨਲ ਕੰਮ

ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੀਆਂ ਘੱਟੋ–ਘੱਟ 2● ਕਲਾ ਕ੍ਰਿਤੀਆਂ ਜੋ ਕਿ ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਤਿਆਰ ਕੀਤੀਆਂ ਹੋਣ ਦਾ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ।

ਨੋਟ : ਡਰਾਇੰਗ ਸ਼ੀਟਾਂ ਅਤੇ ਪੇਂਟਿੰਗ ਦਾ ਸਾਰਾ ਸਮਾਨ ਪ੍ਰੀਆਿਰਥੀ ਖੁਦ ਨਾਲ ਲੈ ਕੇ ਆਵੇਗਾ।

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ–ਰੇਖਾ (Structure of Question Paper)
ਕਮਰਸ਼ੀਅਲ ਆਰਟ (Commercial Art)

ਸਮਾਂ : 8 ਘੰਟੇ **ਕੁੱਲ : 1●● ਅੰਕ**

ਅੰਕਾਂ ਦੀ ਵੰਡ

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 9● ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 1● ਅੰਕ
ਕੁੱਲ	: 1●● ਅੰਕ
ਪਾਸ ਅੰਕ	: 33 ਅੰਕ

ਭਾਗ–I **ਅੰਕ : 38**

1. ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟ-ਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ। ਪਹਿਲੇ ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਲੇ-ਆਊਟ ਡਿਜ਼ਾਈਨਿੰਗ ਸਬੰਧੀ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ। ਇਹ ਪੇਪਰ ਚਾਰ ਘੰਟੇ ਦਾ ਹੋਵੇਗਾ। ਇਸ ਦੇ ਕੁੱਲ 38 ਅੰਕ ਹੋਣਗੇ। ਇਸ ਵਿੱਚ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰਨੇ ਹੋਣਗੇ। ਵਿਦਿਆਰਥੀ ਵੱਲੋਂ ਕੋਈ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਹੋਵੇਗਾ।

ਭਾਗ–II **ਅੰਕ : 38**

2. ਦੂਜੇ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਪੋਸਟਰ ਡਿਜਾਈਨਿੰਗ ਦਾ ਪੇਪਰ ਹੋਵੇਗਾ। ਇਹ ਪੇਪਰ ਵੀ ਉਪਰੋਕਤ ਅਨੁਸਾਰ 38 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸ ਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਹੋਵੇਗਾ। ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਕੋਈ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਹੋਵੇਗਾ।

3. **ਪੇਪਰ ਦਾ ਸਾਈਜ਼ः- ਪੂਰੇ ਕਾਗਜ਼ ਦਾ $^{1}/_{4}$ ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ. × 25 ਸੈਂ.ਮੀ.)**

ਭਾਗ–III **ਅੰਕ : 14**

ਸੈਸ਼ਨਲ ਕੰਮ

ਦੋਨਾਂ ਸੈਸ਼ਨਾਂ ਦੇ ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੀ ਛੁੱਟੀ ਹੋਵੇਗੀ। ਉਸ ਦੌਰਾਨ ਸੈਸ਼ਨਲ ਕੰਮ ਚੈਕ ਕਰਕੇ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ। ਇਹ 14 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੀਆਂ ਘੱਟੋ-ਘੱਟ 20 ਕਲਾ ਕ੍ਰਿਤੀਆਂ ਜੋ ਕਿ ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਤਿਆਰ ਕੀਤੀਆਂ ਹੋਣ ਦਾ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ।

ਨੋਟः- ਡਰਾਇੰਗ ਸ਼ੀਟਾਂ ਅਤੇ ਪੇਟਿੰਗ ਦਾ ਹੋਰ ਸਾਰਾ ਸਾਮਾਨ ਪ੍ਰੀਖਿਆਰਥੀ ਖ਼ੁਦ ਨਾਲ ਲੈ ਕੇ ਆਵੇਗਾ।

ਸ਼੍ਰੇਣੀ–ਗਿਆਰ੍ਹਵੀਂ

33. ਡਰਾਇੰਗ ਅਤੇ ਚਿੱਤਰਕਲਾ
Drawing and Painting

ਸਮਾਂ : 8 ਘੰਟੇ **ਕੁੱਲ ਅੰਕ : 1●●**

ਨੋਟ: ਇਹ ਪੇਪਰ ਪੂਰਨ ਪ੍ਰਯੋਗੀ ਹੈ ਅਤੇ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਰਾਹੀਂ ਬੋਰਡ ਵੱਲੋਂ ਨਿਯਤ ਡੇਟ–ਸ਼ੀਟ ਅਨੁਸਾਰ ਲਿਆ ਜਾਵੇਗਾ।

ਅੰਕਾਂ ਦੀ ਵੰਡ:–

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 9● ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 1● ਅੰਕ
ਕੁੱਲ	: 1●● ਅੰਕ
ਪਾਸ ਅੰਕ	: 33 ਅੰਕ

ਪਹਿਲਾ ਪੇਪਰ (ਭਾਗ–I) **ਸਮਾਂ: 4 ਘੰਟੇ** **ਸੈਸ਼ਨ: ਸਵੇਰ**

ਦੂਜਾ ਪੇਪਰ (ਭਾਗ–II) **ਸਮਾਂ: 4 ਘੰਟੇ** **ਸੈਸ਼ਨ: ਸ਼ਾਮ**

ਭਾਗ–I **ਅੰਕ : 38**

ਫਰੀਹੈਂਡ ਸੁਤੰਤਰ ਸਵੈ–ਪ੍ਰਗਟਾਵਾ ਅਤੇ ਡੀਜ਼ਾਈਨ (Free Hand Self Expression and Design)

ਸਕੈਚਿੰਗ ਅਤੇ ਬਣਾਵਟ :– ਕੁਦਰਤ ਅਤੇ ਜੀਵਨ ਅਨੁਸਾਰ ਪੰਛੀ, ਜਾਨਵਰ, ਮਨੁੱਖੀ ਆਕਾਰ ਦੇ ਚਿੱਤਰ ਤਿਆਰ ਕਰਨੇ।

ਜਾਂ

ਧਰਤੀ ਦ੍ਰਿਸ਼ ਚਿੱਤਰਨ (Landscape Painting)

ਆਪਣੀ ਯਾਦ ਸ਼ਕਤੀ ਦੁਆਰਾ ਪਹਾੜ, ਝੀਲ, ਝੌਂਪੜੀ, ਦਰਿਆ, ਘਰ ਅਤੇ ਦਰੱਖ਼ਤ ਆਦਿ ਦੇ ਚਿੱਤਰਾਂ ਨੂੰ ਪ੍ਰਯੋਗ ਕਰਕੇ ਕੁਦਰਤੀ ਦ੍ਰਿਸ਼ ਤਿਆਰ ਕਰਨੇ।

ਮੀਡੀਅਮ :– ਪੇਸਟਲ, ਪਾਣੀ ਵਾਲੇ ਰੰਗ ਅਤੇ ਤੇਲ ਵਾਲੇ ਰੰਗ

ਜਾਂ

ਡੀਜ਼ਾਇਨ (Design)

ਜਿਉਮੈਟਰੀਕਲ ਆਕਾਰ ਜਿਵੇਂ ਵਰਗ, ਆਇਤ, ਤਿਕੋਣ ਅਤੇ ਚੱਕਰ ਵਿੱਚ ਫੁੱਲ–ਪੱਤੀਆਂ, ਡੋਡੀਆਂ ਅਤੇ ਟਾਹਣੀਆਂ ਪ੍ਰਯੋਗ ਕਰਕੇ ਸੁੰਦਰ ਡਿਜ਼ਾਈਨ ਬਣਾਉਣੇ।

ਨੋਟ : ਸਿਰਫ਼ ਪਾਣੀ ਵਾਲੇ ਰੰਗ।

ਭਾਗ – II **ਅੰਕ: 38**

ਮਾਡਲ ਡਰਾਇੰਗ (Still Life)

ਕੋਈ ਤਿੰਨ ਵਸਤੂਆਂ ਨੂੰ ਇਕੱਠੀਆਂ ਰੱਖਕੇ ਚਿੱਤਰਨ ਕਰਨਾ। ਇਹਨਾਂ ਵਿੱਚ ਇੱਕ ਵਰਗਾਕਾਰ ਜਾਂ ਆਇਤਾਕਾਰ ਅਤੇ ਬਾਕੀ ਦੋ ਵਸਤੂਆਂ ਗੋਲ, ਅੰਡਾਕਾਰ ਜਾਂ ਸਲੰਡਰ ਆਕਾਰ ਹੋਣ। ਮਾਡਲ ਦੇ ਪਿੱਛੇ ਡਰਾਪਰੀ ਸੈੱਟ ਕੀਤੀ ਜਾਵੇ। ਮਾਡਲ ਡਰਾਇੰਗ ਵਿੱਚ ਛਾਇਆ ਤੇ ਪਰਛਾਇਆ (Light and Shade) ਦਿਖਾਈ ਜਾਵੇ।

ਮਾਧਿਅਮ – ਪੈਨਸਿਲ ਰੰਗ, ਪੇਸਟਲ ਰੰਗ, ਪਾਣੀ ਵਾਲੇ ਰੰਗ, ਤੇਲ ਵਾਲੇ ਰੰਗ।

ਭਾਗ – III **ਅੰਕ : 14**

ਸੈਸ਼ਨਲ ਕੰਮ

ਘੱਟੋ–ਘੱਟ 2● ਮਾਡਲ ਜੋ ਕਿ ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੇ ਹੋਣ ਦਾ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ।

ਨੋਟ :– ਡਰਾਇੰਗ ਸ਼ੀਟਾਂ ਅਤੇ ਰੰਗ ਪ੍ਰੀਖਿਆਰਥੀ ਖ਼ੁਦ ਨਾਲ ਲੈ ਕੇ ਆਵੇਗਾ।

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ–ਰੇਖਾ (Structure of Question Paper)
ਡਰਾਇੰਗ ਅਤੇ ਚਿੱਤਰਕਲਾ (Drawing and Painting)

ਸਮਾਂ : 8 ਘੰਟੇ **ਕੁੱਲ : 1●● ਅੰਕ**

ਅੰਕਾਂ ਦੀ ਵੰਡ

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 9● ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 1● ਅੰਕ
ਕੁੱਲ	: 1●● ਅੰਕ
ਪਾਸ ਅੰਕ	: 33 ਅੰਕ

ਭਾਗ–I **ਅੰਕ : 38**

1. ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟ-ਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ। ਇਸ ਭਾਗ ਵਿੱਚ ਪਾਠ-ਕ੍ਰਮ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਸਕੈਚਿੰਗ, ਫਰੀਹੈਂਡ ਡਰਾਇੰਗ ਅਤੇ ਡਿਜ਼ਾਈਨ ਸਬੰਧੀ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰੇਗਾ, ਜਿਸ ਵਿੱਚੋਂ ਪ੍ਰੀਖਿਆਰਥੀ ਆਪਣੀ ਚੋਣ ਅਨੁਸਾਰ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰੇਗਾ ਜੋ 38 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸਦਾ ਸਮਾਂ 4 ਘੰਟੇ ਦਾ ਹੋਵੇਗਾ। ਇਹ ਪੇਪਰ ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਸੈੱਟ ਕੀਤਾ ਜਾਵੇਗਾ।
ਪੇਪਰ ਦਾ ਸਾਈਜ਼ਃ– ਪੂਰੇ ਕਾਗਜ਼ ਦਾ $^{1}/_{4}$ ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ. × 25 ਸੈਂ.ਮੀ.)

ਭਾਗ–II **ਅੰਕ : 38**

2. ਇਹ ਪੇਪਰ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਹੋਵੇਗਾ। ਇਸਦਾ ਸਮਾਂ 4 ਘੰਟੇ ਅਤੇ ਇਹ 38 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸ ਵਿੱਚ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਕੋਈ ਤਿੰਨ ਵਸਤਾਂ ਇਕੱਠੀਆਂ ਰੱਖ ਕੇ ਮਾਡਲ ਸੈੱਟ ਕਰੇਗਾ ਅਤੇ ਪਿੱਛੇ ਡਰਾਪਰੀ ਸੈੱਟ ਕਰੇਗਾ। ਇਸ ਪੇਪਰ ਵਿੱਚ 13–13 ਵਿਦਿਆਰਥੀਆਂ ਦੇ ਗਰੁੱਪ ਬਣਾਏ ਜਾਣਗੇ। ਗਰੁੱਪ ਅੱਧ ਚੱਕਰ ਵਿੱਚ ਹੋਵੇਗਾ। ਪਹਿਲੇ ਲਾਈਨ ਵਿੱਚ ਸੱਤ ਵਿਦਿਆਰਥੀ ਅਤੇ ਦੂਜੀ ਲਾਈਨ ਵਿੱਚ ਛੇ ਵਿਦਿਆਰਥੀ ਬਠਾਏ ਜਾਣਗੇ। ਇਹ ਯਕੀਨੀ ਬਣਾਇਆ ਜਾਵੇ ਕਿ ਹਰ ਵਿਦਿਆਰਥੀ ਨੂੰ ਮਾਡਲ ਅਸਾਨੀ ਨਾਲ ਦਿਖਾਈ ਦੇ ਸਕੇ। ਪੇਪਰ ਦਾ ਸਾਈਜ਼ਃ– ਪੂਰੇ ਕਾਗਜ਼ ਦਾ $^{1}/_{4}$ ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ. × 25 ਸੈਂ.ਮੀ.)

ਭਾਗ–III **ਅੰਕ : 14**

3. ਦੋਨਾਂ ਸੈਸ਼ਨਾਂ ਦੇ ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੇ ਸਮੇਂ ਦੌਰਾਨ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਪ੍ਰੀਖਿਆਰਥੀਆਂ ਦੇ ਸੈਸ਼ਨਲ ਕੰਮ ਦਾ ਮੁਲਾਂਕਣ ਕਰੇਗਾ। ਇਸਦੇ 14 ਅੰਕ ਹੋਣਗੇ। ਪ੍ਰੀਖਿਅਕ ਕੀਤੇ ਕੰਮਾਂ ਅਨੁਸਾਰ ਅੰਕ ਦੇਵੇਗਾ।

ਅੰਕਾਂ ਦੀ ਵੰਡਃ

ਸਕੈਚਿੰਗ ਅਤੇ ਬਣਾਵਟ	: 10 ਅੰਕ
ਪ੍ਰਭਾਵ	: 10 ਅੰਕ
ਠੀਕ ਡਰਾਇੰਗ	: 10 ਅੰਕ
ਰੰਗ ਯੋਜਨਾ	: 8 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 38 ਅੰਕ

ਧਰਤੀ ਦ੍ਰਿਸ਼ ਚਿੱਤਰਨ (Land Scape)

ਬਣਾਵਟ	: 14 ਅੰਕ
ਸਮੁੱਚਾ ਪ੍ਰਭਾਵ	: 7 ਅੰਕ
ਠੀਕ ਡਰਾਇੰਗ	: 7 ਅੰਕ
ਰੰਗ ਯੋਜਨਾ	: 10 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 38 ਅੰਕ

ਡਿਜ਼ਾਈਨ (Design)

ਡਿਜ਼ਾਈਨ ਦੀ ਇਕਾਈ	: 10 ਅੰਕ
ਪੇਪਰ ਤੇ ਡਿਜ਼ਾਈਨ ਦੀ ਸੈਟਿੰਗ	: 14 ਅੰਕ
ਰੰਗ ਯੋਜਨਾ ਅਤੇ ਪ੍ਰਭਾਵ	: 14 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 38 ਅੰਕ

ਭਾਗ–II

ਮਾਡਲ ਡਰਾਇੰਗ

ਬਣਾਵਟ	: 7 ਅੰਕ
ਅਨੁਪਾਤ ਅਤੇ ਸਮਾਨੁਪਾਤ	: 7 ਅੰਕ
ਵਿੱਥ ਸੋਝੀ	: 6 ਅੰਕ
ਠੀਕ ਡਰਾਇੰਗ	: 10 ਅੰਕ
ਛਾਇਆ ਤੇ ਪ੍ਰਛਾਇਆ	: 8 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 38 ਅੰਕ

ਸ਼੍ਰੇਣੀ–ਗਿਆਰ੍ਹਵੀਂ

34. ਕਲਾ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਪ੍ਰਸ਼ੰਸਾ
HISTORY AND APPRECIATION OF ART

ਸਮਾਂ : 3 ਘੰਟੇ **ਕੁੱਲ : 1●● ਅੰਕ**

ਅੰਕਾਂ ਦੀ ਵੰਡ:

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 9● ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 1● ਅੰਕ
ਕੁੱਲ	: 1●● ਅੰਕ
ਪਾਸ ਅੰਕ	: 33 ਅੰਕ

ਨੋਟ : ਇਹ ਪੇਪਰ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਬਾਕੀ ਥਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੰਟ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ।

ਭਾਗ–I

ਕਲਾ ਦਾ ਇਤਿਹਾਸ (History of Art)

1. ਪੂਰਵ ਇਤਿਹਾਸ–ਗੁਫ਼ਾਵਾਂ ਦੀ ਚਿੱਤਰਕਾਰੀ।
2. ਸਿੰਧ ਘਾਟੀ ਦੀ ਸੱਭਿਅਤਾ ਦੇ ਚਿੱਤਰ।
3. ਮੌਰੀਆ ਯੁੱਗ ਦੇ ਚਿੱਤਰ।
4. ਸੰਘਾ ਕਲਾ ਦੇ ਚਿੱਤਰ।
5. ਗੰਧਾਰ ਕਲਾ ਦੇ ਚਿੱਤਰ।
6. ਗੁਪਤਕਾਲ ਦੀ ਕਲਾ

ਭਾਗ–II

ਕਲਾ ਦੀ ਪ੍ਰਸੰਸ਼ਾ (Appreciation of Art)

1. ਕਲਾ ਦੀ ਪਰੀਭਾਸ਼ਾ।
2. ਕਲਾ ਦੀ ਉੱਤਪਤੀ।
3. ਪਰੀਭਾਸ਼ਾਵਾਂ :– ਰੇਖਾਵਾਂ, ਥਾਂ, ਰੰਗ, ਟੈਕਸਚਰ (Texture), ਵਿੱਥ ਸੋਝੀ।
4. ਡਿਜ਼ਾਇਨ ਅਤੇ ਇਸ ਦੀਆਂ ਕਿਸਮਾਂ

ਨੋਟ :– ਇਹ ਪੇਪਰ ਬਾਕੀ ਥਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੰਟ ਦੀ ਹਾਜ਼ਰੀ ਵਿੱਚ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਹੋਵੇਗਾ।

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ–ਰੇਖਾ (Structure of Question Paper)
ਕਲਾ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਪ੍ਰਸੰਸ਼ਾ (History and Appreciation of Art)

ਸਮਾਂ : 3 ਘੰਟੇ

ਅੰਕਾਂ ਦੀ ਵੰਡ	**ਕੁੱਲ ਅੰਕ**	**ਪਾਸ ਅੰਕ**
ਥਿਊਰੀ	**9●**	**3●**
ਸੀ.ਸੀ.ਈ.	**1●**	**3**
ਕੁੱਲ ਅੰਕ	**1●●**	**33**

1. ਇਹ ਪੇਪਰ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਬਾਕੀ ਥਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੰਟ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ।
2. ਇਸ ਪੇਪਰ ਦੇ ਦੋ ਭਾਗ ਹੋਣਗੇ। ਪਹਿਲੇ ਭਾਗ ਵਿੱਚ ਪੰਜ ਪ੍ਰਸ਼ਨ ਅਤੇ ਦੂਜੇ ਭਾਗ ਵਿੱਚ ਵੀ ਪੰਜ ਪ੍ਰਸ਼ਨ ਪਾਏ ਜਾਣਗੇ।

   ਪਹਿਲੇ ਭਾਗ ਵਿੱਚੋਂ ਕੋਈ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਹਨ ਅਤੇ ਦੂਜੇ ਭਾਗ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਹਨ।
3. ਹਰ ਪ੍ਰਸ਼ਨ ਦੇ 18 ਅੰਕ ਹੋਣਗੇ।
4. ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਬੋਰਡ ਵੱਲੋਂ ਨਿਰਧਾਰਿਤ ਕੀਤੇ ਗਏ ਪਾਠ–ਕ੍ਰਮ ਵਿੱਚੋਂ ਹੀ ਹੋਣਗੇ।
5. ਪੇਪਰ ਸੈਟਰ ਵੱਲੋਂ ਪੇਪਰ ਦਾ ਮੁਲਾਂਕਣ ਕਰਨ ਲਈ ਮੁੱਖ ਅਤੇ ਉਪ–ਪ੍ਰੀਖਿਅਕਾਂ ਲਈ ਹਦਾਇਤਾਂ ਭੇਜੀਆਂ ਜਾਣਗੀਆਂ।

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35. ਸਰੀਰਿਕ ਸਿੱਖਿਆ ਅਤੇ ਖੇਡਾਂ

ਸਮਾਂ : 3 ਘੰਟੇ **ਥਿਊਰੀ ਭਾਗ-5● ਅੰਕ**

ਪ੍ਰਯੋਗੀ ਭਾਗ - 4● ਅੰਕ

ਸੀ.ਸੀ.ਈ - 1● ਅੰਕ

ਕੁੱਲ - 1●● ਅੰਕ

ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਵਿੱਚ ਕੁੱਲ 23 ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ ਅਤੇ ਇਹ ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਜ਼ਰੂਰੀ ਹਨ।
2. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 1 ਤੋਂ 1● ਤੱਕ ਇੱਕ-ਇੱਕ ਅੰਕ ਵਾਲ਼ੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ, ਇਹ ਓਬਜੈਕਟਿਵ ਟਾਈਪ ਵੀ ਹੋ ਸਕਦੇ ਹਨ ਅਤੇ ਇਹਨਾਂ ਦਾ ਉੱਤਰ 1● ਸ਼ਬਦਾਂ ਤੱਕ ਦਾ ਹੋ ਸਕਦਾ ਹੈ। **1●×1=10 ਅੰਕ**
3. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 11 ਤੋਂ 15 ਤੱਕ ਦੋ- ਦੋ ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ ਉੱਤਰ ਲਗਪਗ 2● ਸ਼ਬਦਾਂ ਤੱਕ ਹੋ ਸਕਦਾ ਹੈ। **5×2=10 ਅੰਕ**
4. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 16 ਤੋਂ 2● ਤੱਕ ਤਿੰਨ-ਤਿੰਨ ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ। ਜਿਨ੍ਹਾਂ ਦਾ ਉੱਤਰ ਲਗਪਗ 3● ਤੋਂ 5● ਸ਼ਬਦਾਂ ਤੱਕ ਹੋ ਸਕਦਾ ਹੈ। **5×3=15 ਅੰਕ**
5. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 21 ਤੋਂ 23 ਪੰਜ-ਪੰਜ ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ, ਇਹਨਾਂ ਵਿੱਚ ਕੁੱਲ 5 ਪ੍ਰਸ਼ਨ ਦਿੱਤੇ ਜਾਣਗੇ ਜਿਨ੍ਹਾਂ ਵਿੱਚੋਂ ਕੁੱਲ 3 ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਜ਼ਰੂਰੀ ਹਨ। **3×5=15 ਅੰਕ**

ਪਾਠਕ੍ਰਮ (ਲਿਖਤੀ ਭਾਗ)

ਪਾਠ ਪਹਿਲਾ ਸਿਹਤ ਸਿੱਖਿਆ

(ੳ) ਸਿਹਤ ਦੀ ਪਰਿਭਾਸ਼ਾ (ਅ) ਸਿਹਤ ਦੀਆਂ ਕਿਸਮਾਂ (ਏ) ਸਿਹਤ ਦੇ ਉਦੇਸ਼ (ਸ) ਸਿਹਤ ਦੇ ਸਿਧਾਂਤ (ਹ) ਸਿਹਤ ਸੰਬੰਧੀ ਉਪਾਅ (ਕ) ਸਿਹਤ ਸਿੱਖਿਆ ਦਾ ਖੇਤਰ

ਪਾਠ ਦੂਜਾ ਸਰੀਰਿਕ ਸਿੱਖਿਆ ਅਤੇ ਇਸ ਦੀ ਮਹੱਤਤਾ

(ੳ) ਸਿਹਤ ਸਿੱਖਿਆ ਦਾ ਟੀਚਾ ਅਤੇ ਉਦੇਸ਼ (ਅ) ਖੇਤਰ (ਏ) ਮਹੱਤਵ

ਪਾਠ ਤੀਜਾ ਸਰੀਰਿਕ ਰਚਨਾ ਅਤੇ ਕਿਰਿਆ ਵਿਗਿਆਨ ਦੀ ਜਾਣ ਪਛਾਣ

(ੳ) ਸਰੀਰਿਕ ਰਚਨਾ ਵਿਗਿਆਨ (ਅ) ਸਰੀਰਿਕ ਕਿਰਿਆ ਵਿਗਿਆਨ (ਏ) ਸਰੀਰਿਕ ਸਿੱਖਿਆ ਅਤੇ ਖੇਡਾਂ ਦੇ ਖੇਤਰ ਵਿੱਚ ਸਰੀਰਿਕ ਰਚਨਾ ਵਿਗਿਆਨ ਅਤੇ ਸਰੀਰਿਕ ਕਿਰਿਆ ਵਿਗਿਆਨ ਦਾ ਯੋਗਦਾਨ

ਪਾਠ ਚੌਥਾ ਯੋਗ

(ੳ) ਪਰਿਭਾਸ਼ਾ (ਅ) ਇਤਿਹਾਸ (ਏ) ਅਰਥ (ਸ) ਮਹੱਤਤਾ (ਹ) ਯੋਗ ਕਰਨ ਸਮੇਂ ਨਿਰਧਾਰਿਤ ਦਿਸ਼ਾ ਨਿਰਦੇਸ਼ (ਕ) ਸੂਰਿਯ ਨਮਸਕਾਰ (ਖ) ਅਸ਼ਟਾਂਗ ਯੋਗ।

ਪਾਠ ਪੰਜਵਾਂ ਨਸ਼ਿਆਂ ਅਤੇ ਡੋਪਿੰਗ ਦੇ ਮਾਰੂ ਪ੍ਰਭਾਵ।

(ੳ) ਨਸ਼ਿਆਂ ਦੀਆਂ ਕਿਸਮਾਂ (ਅ) ਨਸ਼ੇ ਕਰਨ ਦੇ ਕਾਰਨ (ਏ) ਨਸ਼ਿਆਂ ਦਾ ਖਿਡਾਰੀਆਂ, ਪਰਿਵਾਰ, ਸਮਾਜ ਅਤੇ ਦੇਸ਼ 'ਤੇ ਪ੍ਰਭਾਵ (ਸ) ਡੋਪਿੰਗ ਦਾ ਅਰਥ, ਡੋਪਿੰਗ ਦੇ ਸਰੀਰ 'ਤੇ ਪ੍ਰਭਾਵ (ਹ) ਅੰਤਰਰਾਸ਼ਟਰੀ ਉਲੰਪਿਕ ਕਮੇਟੀ

ਪਾਠ ਛੇਵਾਂ ਖੇਡ ਮਨੋਵਿਗਿਆਨ

(ੳ) ਅਰਥ (ਅ) ਪਰਿਭਾਸ਼ਾ (ਏ) ਖੇਤਰ (ਸ) ਸ਼ਾਖਾਵਾਂ (ਹ) ਮਨੋਵਿਗਿਆਨਿਕ ਤੱਤ (ਕ) ਪ੍ਰੇਰਨਾ

ਪਾਠ ਸੱਤਵਾ ਟੂਰਨਾਮੈਂਟ

(ੳ) ਟੂਰਨਾਮੈਂਟ ਦੀਆਂ ਕਿਸਮਾਂ (ਅ) ਫਿਕਚਰ ਦੇਣ ਦਾ ਢੰਗ (ਏ) ਲੀਗ ਅਤੇ ਨਾਕਆਉਟ ਟੂਰਨਾਮੈਂਟ ਦੇ ਲਾਭ

ਅਤੇ ਹਾਨੀਆਂ।

ਪਾਠਕ੍ਰਮ (ਪ੍ਰਯੋਗੀ)

ਸਮਾਂ 4 ਘੰਟੇ **ਪ੍ਰਯੋਗੀ : 4● ਅੰਕ**

ੳ) ਟਰੈਕ ਅਤੇ ਫ਼ੀਲਡ ਦੀ ਈਵੈਂਟਸ (ਲੜਕੇ ਅਤੇ ਲੜਕੀਆਂ ਲਈ) ਹਰੇਕ ਈਵੈਂਟ ਦੇ 6 ਅੰਕ ਹੋਣਗੇ।

ਹੇਠ ਲਿਖਿਆਂ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਈਵੈਂਟਸ ਇੱਕ ਟਰੈਕ ਵਿੱਚੋਂ ਅਤੇ ਇੱਕ ਫੀਲਡ ਵਿੱਚੋਂ ਚੁਣੀਆਂ ਜਾ ਸਕਦੀਆਂ ਹਨ।

ਟਰੈਕ ਈਵੈਂਟਸ :- 1●● ਮੀਟਰ ਦੌੜ , 2●● ਮੀਟਰ ਦੌੜ, 4●● ਮੀਟਰ ਦੌੜ, 8●● ਮੀਟਰ ਦੌੜ, 3●●● ਮੀਟਰ ਦੌੜ ਅਤੇ ਲੜਕਿਆਂ ਲਈ 11● ਮੀਟਰ ਹਰਡਲ (ਹਰਡਲ ਦੀ ਉਚਾਈ 96.4 ਸੈ.ਮੀ. ਅਤੇ 1● ਹਰਡਲਾਂ), ਲੜਕੀਆਂ ਲਈ 1●● ਮੀਟਰ (ਹਰਡਲ ਦੀ ਉਚਾਈ 76.2 ਸੈ.ਮੀ.) ਅਤੇ 8 ਹਰਡਲਾਂ, 4×1●● ਮੀਟਰ (ਲੜਕੀਆਂ ਵਾਸਤੇ) ਅਤੇ 4×1●● ਮੀਟਰ (ਲੜਕਿਆਂ ਵਾਸਤੇ) ਰਿਲੇਅ ਦੌੜ **6 ਅੰਕ**

ਫੀਲਡ ਈਵੈਂਟਸ:- ਹੈਮਰ ਥਰੋ, ਡਿਸਕਸ ਥਰੋ, ਜੈਵਲਿਨ ਥਰੋ, ਸ਼ਾਟ ਪੁੱਟ, ਲੰਬੀ ਛਾਲ਼, ਉੱਚੀ ਛਾਲ਼, ਤੀਹਰੀ ਛਾਲ਼, ਪੋਲ ਵਾਲਟ **6 ਅੰਕ**

ਅ) ਹੇਠ ਲਿਖੇ ਦੋਨੋਂ ਗਰੁੱਪਾਂ ਵਿੱਚੋਂ ਕੋਈ ਇੱਕ-ਇੱਕ ਖੇਡ ਦੀ ਚੋਣ ਕਰਨੀ ਲਾਜ਼ਮੀ ਹੈ। ਹਰੇਕ ਖੇਡ ਦੇ 5 ਅੰਕ ਹੋਣਗੇ।

ਖੇਡਾਂ (ਲੜਕੇ ਅਤੇ ਲੜਕੀਆਂ ਲਈ)।

ਗਰੁੱਪ 1. ਹੈਂਡਬਾਲ, ਕਬੱਡੀ, ਮੁੱਕੇਬਾਜ਼ੀ, ਟੇਬਲ ਟੈਨਿਸ, ਜਿਮਨਾਸਟਿਕ, ਫੁੱਟਬਾਲ। **5 ਅੰਕ**

ਗਰੁੱਪ 2. ਬਾਸਕਟਬਾਲ, ਯੋਗ, ਗਤਕਾ, ਵਾਲੀਬਾਲ, ਐਥਲੈਟਿਕਸ, ਸਰਕਲ ਕੱਬਡੀ। **5 ਅੰਕ**

ਸ) ਖੇਡਾਂ ਵਿੱਚ ਪ੍ਰਾਪਤੀ (ਵੱਧ ਤੋਂ ਵੱਧ 1● ਅੰਕ) ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਅੰਕ ਦਿੱਤੇ ਜਾਣਗੇ।

ਸਕੂਲ ਪ੍ਰਤੀਨਿੱਧਤਾ	2 ਅੰਕ
ਜੋਨ ਪ੍ਰਤੀਨਿੱਧਤਾ	4 ਅੰਕ
ਜਿਲ੍ਹਾ ਪ੍ਰਤੀਨਿੱਧਤਾ	6 ਅੰਕ
ਰਾਜ ਪ੍ਰਤੀਨਿੱਧਤਾ	8 ਅੰਕ
ਕੌਮੀ ਪ੍ਰਤੀਨਿਧਤਾ	1● ਅੰਕ

ਹ) ਪ੍ਰੈਕਟੀਕਲ ਕਾਪੀ, ਚਾਰਟ ਜਾਂ ਮਾਡਲ 3 ਅੰਕ

ਕ) ਜ਼ੁਬਾਨੀ ਪ੍ਰਸ਼ਨ-ਉੱਤਰ 5 ਅੰਕ

ਨੋਟ : ਪ੍ਰੈਕਟੀਕਲ ਦੇਣ ਸਮੇਂ ਪ੍ਰੀਖਿਆਰਥੀ ਸਪੋਰਟਸ ਕਿੱਟ ਵਿੱਚ ਹੋਣਾ ਚਾਹੀਦਾ ਹੈ।

CLASS - XI

36. INSURANCE

Time - 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

All questions are compulsory.

The question paper will comprises 4 sections A, B, C and D of 26 questions in total. Student will attempt 24 questions. The question paper will have:

SECTION-A

Objective Type Questions: This section will include questions with one word answer/ fill in the blank/ true or false/ multiple choice type questions. Question No. 1 will have ten Parts (A to J) and each Part will carry 1 mark. **10×1= 10**

SECTION-B

Very Short Answer Type Questions: This section will have 10 questions (from Q no.2 to 11) Each question will carry 2 marks. All Questions are compulsory. Answer of each question should be in 20-30 words. **10×2= 20**

SECTION-C

Short Answer Type Questions: This section will have 11 questions from 12 to 22.Each question will carry 4 marks Student have to attempt any nine out of eleven questions Each question should be in 50-60 words. **9×4=36**

SECTION-D

Long answer Type Questions: This section will have 4 questions (23 to 36) with internal choice. Each question will carry 6 marks. Answer of each question should be in 150-200 words. There will be 100% internal choice in these questions. **6×4= 24**

Note:- Weightage to each unit must be given in each type of questions as appropriate.

Typology of Questions	**Number of questions**	**Marks Division**	**Total marks**	**Division of Syllabus**	
				Part A	**Part B**
A. Objective Type Questions A to J	1 (In Parts A to J)	10 1 mark each part	10 Marks	6	4
B. Very Short Answer questions	10	02 marks each	20 Marks	6	4
C. Short Answer Questions (To be attempted = 9)	11 To be attempted 9	04 marks	36 marks	6	5
D. Long Answer Questions (with internal choice)	4	06 marks	24 Marks	2 (Internal choice)	2 (Internal choice)
Total	**26**		**90**		

SYLLABUS

Unit-1. CONCEPT OF RISK

Types of Risks, Methods of handling risk, Functions of Insurance, Scope of Insurance. History of Insurance, Indian Market Structure, Legislative Measures, Insurance Legislation and other Legislation relating to Insurance Agency, Licensing, Commission Structure, Loss Prevention; Stamp Duty.

Unit-2. LAW OF CONTRACT

Essentials of Insurance Contracts, Validity of Contract, Basic Principles of Insurance, Utmost Good Faith, Insurable Interest, Indemnity, Subrogation, Contribution, Proximate Cause.

Unit-3. a) UNDERWRITING

New Business Procedure, Proposal from Cover Note, Certificate of Insurance, Co-Insurance; Renewal Procedure, Premium.

b) CLAIMS

Factors to be Considered, Arbitration Procedure, Methods of Settlement. Re-insurance; Method, Application.

Unit-4. ACCOUNTING PRACTICES

Forms of Accounts, Reserves for Unexpired Risks Practice, Statutory Returns.

Unit-5. SALESMANSHIP

Qualities of Salesman, Technique of Selling, Method of Canvassing.

CLASS - XI

37. RURAL DEVELOPMENT AND ENVIRONMENT

Time: 3 Hrs **Theory: 90 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER

All questions are compulsory.

The question paper will comprises 4 sections A, B, C and D of 27 questions in total. Student will attempt 25 questions. The question paper will have:

SECTION-A

Objective Type Questions: This section will include questions with one word answer/ fill in the blank/ true or false/ multiple choice type questions. Question No. 1 will have ten Parts (A to J) and each Part will carry 1 mark. **10×1= 10**

SECTION-B

Very Short Answer Type Questions: This section will have 12 questions (from Q no.2 to 13) Each question will carry 2 marks. All Questions are compulsory. Answer of each question should be in 20-30 words. **12×2= 24**

SECTION-C

Short Answer Type Questions: This section will have 10 questions from 14 to 23.Each question will carry 4 marks Student have to attempt any eight out of ten questions Each question should be in 50-60 words. **8×4=32**

SECTION-D

Long answer Type Questions: This section will have 4 questions (24 to 27) with internal choice. Each question will carry 6 marks. Answer of each question should be in 150-200 words. There will be 100% internal choice in these questions. **6×4= 24**

Note:- Weightage to each unit must be given in each type of questions as appropriate.

Typology of Questions	**Number of questions**	**Marks Division**	**Total marks**	**Division of Syllabus**	
				Part I-II	**Part III-IV**
A. Objective Type Questions A to J	1 (In Parts A to J)	10 1 mark each part	10 Marks	5	5
B. Very Short Answer questions	12	02 marks each	24 Marks	6	6
C. Short Answer Questions (To be attempted = 8)	10 To be attempted 8	04 marks	32 marks	5	5
D. Long Answer Questions (with internal choice)	4	06 marks	24 Marks	2 (Internal choice)	2 (Internal choice)
Total			**90**		

PART-I

I. General Background:

(i) Introduction: Meaning and importance of Rural Development; Its basic objectives. Overall and integrated approach to Rural Development.

(ii) Integrated Rural Development Programme (I.R.D.P.). Its working, objectives and achievements: Various schemes of I.R.D.P. for strengthening the infrastructural base in the villages.

II. Role of Community Development and Voluntary Agencies in the Rural Development (with special reference to Punjab)

(i) Role of Voluntary Agencies like Mahila Mandals, Youth Clubs, Naujwan Sabhas and Farmers' Association etc.

(ii) Role of Gram Panchayats, Panchayat Samitis and Zila Parishads.

(iii) Role of B.D.P.O. and other functionaries at the Block and village level in the execution of the various schemes for the development of rural areas.

(iv) Role of District Rural Development Agencies (D.R.D.A.)

(v) Role of Focal Points in the overall development of rural areas.

(vi) Role of SFDA/MFAL agencies.

PART-II

III. Rural Industries

(i) Development of the traditional skills in the rural artisans.

(ii) Role of village and Khadi Board Commission for setting up village and cottage industries in the rural areas.

(iii) Policy of the Government to encourage the rural people to set up their own small industries.

PART-III

IV. Role of Agriculture in Rural Development (with special reference to Punjab) Importance of agriculture for self-sustaining growth in the rural areas.

(i) Cropping Pattern in the State:-

Major Rabi and kharif crops (Food and Cereals) grown in State and their average yields as compared to other States.

(ii) Diversification of Agriculture:-

Rotation of Crops, Relay cropping, Multiple cropping, mixed cropping and dry farming.

(iii) Farm Size and Management:-

Characteristics of farms in the State; Farm size and their inadequacies in resources use. Consolidation of Holdings and Land Ceiling Legislation in the proper management of farms.

(iv) Green Revolution:-

Its basic components and achievements for increasing the agricultural production in the State. Role of Green Revolution in the Rural Development.

PART-IV

V. Rural Finance & Credit Facilities

(i) The Problem of Indebtedness.

(ii) Different sources of Rural Finance.

(iii) The Role of Cooperative Credit Societies, Agricultural Land Development Banks, Co-operative Banks, NABARD, RBI and

other Govt. agencies for the provision of finance to the rural people.

VI. Rural Storage & Marketing Facilities

(i) Problem of storage of Agricultural produce in the rural areas. Warehousing arrangement by private and Government agencies.

(ii) Location of Mandis in the rural areas. System of transportation of agricultural produce to the Mandis.

(iii) Existing system of marketing of cash crops, cereals, vegetables and other crops in the rural areas. Role of Regulated and Unregulated Markets.

(iv) Role of APEX Marketing Bodies i.e. MARKFED, MILKFED, MANDIKARAN BOARD, etc. in the State.

(v) Role of the State Government to ensure the remunerative prices to the producers.

VII. Rural Employment

(i) Problem of unemployment in the rural areas.

(ii) Rural manpower as the major asset for rural development.

(iii) Various employment programmes sponsored by the Central and State Governments for rural people with special reference to CSRE, NREP, TRYSEM and RLEGP etc.

CLASS-XI
38. MEDIA STUDIES

Time: 3 Hrs **Theory Paper: 70 Marks**
CCE: 10 Marks
Practical: 20 Marks
Total: 100 Marks

OBJECTIVES

Communication media have under gone big changes during a couple of decades and made its importance more meaningfully and abundantly felt. This has made our society awake in era of various new concepts and phenomena such as globalization, social media, civil society, new media and so on. It is being felt that communication media are playing an important role in shaping young minds, hence introductory information and practice is to be provided to students in this subject, at this stage.

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be 27 questions in all.
2. All the questions shall be compulsory which shall be set keeping in mind that the subject matter is for beginners.
3. Part-1 of the question paper shall consist of 8 questions of 1 mark each all objective type, to be set from whole of syllabus.

1×8=8

4. Part-II of the question paper shall consist of 10 short answer questions of 2 marks each. The answer to such questions may run into two to three sentences. All questions shall cover whole of the syllabus. **2×10=20**
5. Part-III of the question paper shall consist of 6 question of 4 marks each, of a paragraph or two in size or length, selecting three each from each unit. **4×6=24**
6. Fourth part of the question paper shall contain 3 questions of 6 marks each, with 100% internal choice, atleast 3 chosen from each unit. Each answer shall run into 300 words minimum.

6×3=18

Forms of Questions	Objective type Multiple choice Questions	Short Answer-I	Short Answer-II	Long Answer Questions	Any other
Number of Questions	08	10	06	03	
Marks allotted	08	20	24	18	
Percentage of Marks	12.5	27	35.5	25	

THEORY
SYLLABUS

Unit I Introduction to Communication

I. Communication: Meaning, Definition and Types: Intrapersonal, Interpersonal, Group, Public and Mass Communication.
II. Media of Communication: Body language, Spoken word, Printed word, Symbols and Pictures.
III. Language in Media Writing: Basic difference between Media Writing and Literary Writing, Words & Terms generally used wrong in Punjabi & English.
IV. Types of Media: Traditional, Newspaper, Radio, Television, Cinema and Cyber.

Unit II News Media

V. Understanding Newspapers: News Stories, Editorial, Articles, Features, Letters to editor, Advertisements.
VI. Subject Matter for Newspapers: News and its types, Views and its types, Advertisement and its types.
VII. Magazines: Difference between books & magazines, Types of write ups in general and Punjabi Magazines in particular (Special emphasis on Primary Sikheya, Pankhriyan, Akhar, Changi Kheti & Kahani Punjab).
VIII. Introduction to Public Relation: Definition and Tools of P.R.

VIVA VOCE (Practical)
Paper- II

1. Clipping file : Each student shall require to submit a clipping file consisting of 12 items, 2 each from following topics; Development News , Political Report, Photo Feature, Middle, News Analysis , Advertisement.

2. Teleboard display and news reading

3. Viva: The examiner shall ask the candidate questions on visit to any news paper office and Current Affairs (national and regional) related to running academic session period.

CLASS-XI

39. PHYSICS

Time: 3 Hrs **Theory: 70Marks**

Practical: 20 Marks

C.C.E.: 10 Marks

Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be one theory paper comprising of 26 questions.
2. Question no. 1 to 8 will be of one mark each.
3. Question no.9 to 16 will be of two marks each.
4. Question no. 17 to 23 will be of four marks each. There will be internal choice in any two questions.
5. Question no. 24 to 26 will be of six marks each. There will be100% internal choice in them.
6. Distribution of marks over different dimensions of the paper will be as follows:

LEARNING OUTCOMES	MARKS	PERCENTAGE OF MARKS
KNOWLEDGE	26	36%
UNDERSTANDING	30	44%
APPLICATION	14	20%
Total	**70**	**100%**

7. In the category of one (1) mark question there will be four (4) questions of the objective type such as Yes/No, tick/cross, fill in the blanks, multiple choice, true/false etc.
8. Use of un-programmable calculator is allowed. The log tables can be used.
9. Total weightage of numerical will be 20% i.e 14 marks. There will be three numerical of 2 marks each & 2 numericals of 4 marks each.

UNIT WISE DISTRIBUTION OF MARKS

UNIT	TITLE	MARKS
UNIT-I	Physical world and measurement	05
UNIT-II	Kinematics	07
UNIT-III	Laws of motion	07
UNIT-IV	Work, Energy & Power	07
UNIT-V	Motion of System of Particles & Rigid body	09
UNIT-VI	Gravitation	06
UNIT-VII	Properties of Bulk matter	12
UNIT-VIII	Thermodynamics	05
UNIT-IX	Behaviour of perfect gas and kinetic theory of gases	05
UNIT-X	Oscillation & waves	07
Total Marks		**70**

SCHEMATIC DISTRIBUTION OF MARKS

UNIT	TITLE	1 MARK QUESTION	2 MARKS QUESTION	4 MARKS QUESTION	6 MARKS QUESTION	TOTAL MARKS
1	Physical world & measurement	1	2	-	-	05
2	Kinematics	1	1	1	-	07
3	Laws of motion	1	1	1	-	07
4	Work, Energy & Power	1	1	1	-	07
5	Motion of System Particles & Rigid body	1	1	-	1	09
6	Gravitation	-	1	1	-	06
7	Properties of matter	-	1	1	1	12
8	Thermodynamics	1	-	1	-	05
9	Behaviour of Perfect gas & Kinetic theory of gases	1	-	1	-	05
10	Oscillation & waves	1	-	-	1	07
Total Questions		**08**	**08**	**07**	**03**	**26**
Total Marks		**08**	**16**	**28**	**18**	**70**

INSTRUCTIONS FOR PAPER SETTER

Note:

1. There will be one theory paper consisting of total 26 questions.
2. Question no.1 to 8 will be of 1 mark each.There will be 4 questions of the objective type such as yes/no,multiple choice questions, fill in the blanks.
3. Question no.9 to 16 will be of 2 marks each. There will be 3 numerical questions of 2 marks each.
4. Question no. 17 to 23 will be of 4 marks each. There will be two four marks questions of internal choice. Each of these questions will have one theory question & other part will be numerical from the same unit.These questions should not be lengthy.
5. Question No.24 to 26 will be 6 marks and their will be 100% internal choice in them. These questions must have two parts: part (a) will be of one mark and part (b) will be of 5 marks. Part (a) may cover any topic from same unit as of long 5 marks question of part (b).
6. Questions paper should cover all the syllabus.
7. No question or topic should be repeated in the question paper.
8. Questions in the paper can be asked only from mentioned PSEB syllabus. Questions from any topic which is not mentioned in the syllabus will be considered as out of syllabus question.
9. All 3 sets must be of equal standard and difficulty level questions.
10. At the end of each question, paper setter must write detailed distribution of marks of each sub-question.
11. Vague, many possible answer questions, confusing answer question etc type of question will not be asked in the paper. One mark questions, answer should be of one word or one line only.
12. Language used should be clearly understood & specific.
13. Time and length limit of paper should be kept in mind.
14. Time and length limit of paper should be kept in mind while setting the paper.

SYLLABUS (THEORY)

Unit I : Physical World and Measurement

Physics-scope and excitement; nature of physical laws; Physics, technology and society.

Need for measurement: Units of measurement; systems of units; SI units, fundamental and derived units. Length, mass and time measurements; accuracy and precision of measuring instruments; errors in measurement, significant figures.

Dimensions of physical quantities,dimensional formula and dimensional equation dimensional analysis and its applications.

Unit II : Kinematics

Frame of reference. 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, position-time graphs, relations for uniformly accelerated motion (graphical treatment).

Elementary concepts of differentiation and integration for describing motion, Scalar and vector quantities: Position and displacement vectors, general vectors 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 vectors.* Motion in a plane. Cases of uniform velocity and uniform acceleration-projectile motion. Uniform circular motion.

Unit III : Laws of Motion

Intuitive concept of force. 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. Static and kinetic friction, laws of friction. rolling friction, lubrication.

Dynamics of uniform circular motion: Centripetal force, examples of circular motion (vehicle on level circular road. vehicle on banked road).

Unit -IV: Work, Energy and Power

Scalar product, Work done by a constant force and a variable force; kinetic energy, work-energy theorem, power.

Notion of potential energy, potential energy of a spring, conservative forces: conservation of mechanical energy (kinetic and potential energies); non-Conservative forces, various forms of energy, motion in a vertical circle; elastic and inelastic collisions in one and two dimensions.

Unit-V: Motion of System of Particles and Rigid Body

Centre of mass of a two-particle system, momentum conversation and centre of mass motion. Centre of mass of a rigid body; linear momentum of system of particles, vectory product of two vectors, centre of mass of uniform rod. Angular velocity and its relation with linear velocity.

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 moments of inertia for simple geometrical objects (no derivation). Statement of parallel and perpendicular axes theorems and their applications. Kinematics of rotational motions about a fixed axis, dynamics of rotational motions about a fixed axis, angular momentum in case of rotation about a fixed axis, rolling motion.

Unit-VI: Gravitation

Keplar's laws of planetary motion. The universal law of gravitation.

Acceleration due to gravity and its variation with altitude and depth.

Gravitational potential energy; gravitational potential. Escape velocity, Orbital velocity of a satellite. Geo-stationary satellites. Energy of an orbiting satellite, Geo- stationary satellites and polar satellites, weigtht lessness.

Unit-VII: Properties of Bulk Matter

Elastic behaviour, of solids, Stress-strain relationship, Hooke's law, Young's modulus, determination of Young's modulus of the material of a wire, shear, bulk modulus shear, modulus of rigidity,applications of elastics behavious of materials,Poisson s-ratio; elastic energy.

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

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

Surface energy and surface tension, angle of contact, excess of pressure, application of surface tension ideas to drops, bubbles and capillary rise, Detergents and surface tension.

Heat, temperature, measurement of temperature, ideal gas equation and absolute temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion, specific heat Capacity: Cp, Cv-colorimetry; change of state-latent heat.

Heat transfer-conduction, convection radiation and thermal Conductivity, *Qualitative idea of Blackbody radiation,* Newton's law of cooling and Stefan's law, Wein's displacement law, Green House effect.

Unit-VIII: Thermodynamics

Thermal equilibrium and definition of temperature (zeroth law of thermodynamics). Heat, work and intemal energy. First law of thermodynamics. Specific heat capacity, thermodynamic state variables and equation of state, thermodynamic processes, Isothermal and adiabatic processes. Second law of thermodynamics: reversible and irreversible processes. Heat engines and refrigerators, Carnot engine.

Unit-IX: Behaviour of Perfect Gas and Kinetic Theory

Molecular nature of matter, Equation of state of a perfect gas, work done on compressing a gas. Kinetic theory of an ideal gases. Assumptions, concept of pressure. 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, solids and water: concept of mean free path, Avogadro's number.

Unit-X: Oscillations and Waves

Periodic and oscillatory motions, Periodic motion - period, frequency, displacement as a function of time.Periodic functions.Simple harmonic motion (S.H.M) and its equation; þhase; oscillations of a spring-restoring force and force constant; energy in S.H.M.-kinetic and potential energies: some systems executing simple harmonic motion 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 superposition of waves, reflection of waves, standing waves in strings and organ pipes, fundamental mode and harmonics, Beats, Doppler effect.

NOTE:- TOPICS GIVEN BELOW ARE IN PRESCRIBED SYLLABUS OF P.S.E.B. BUT NOT MENTIONED IN BOOK SURSCRIBED BY PSEB. SO THESE TOPICS ARE TO BE DONE WITH STUDENTS AND PAPER WILL INCLUDD THESE TOPICS AND QUESTIONS FROM THESE TOPICS TOPICS ARE NOT CONSIDERD AS OUT OF SYLLABUS.

1. Motion in a vertical circle
2. Centre of mass of uniform rod
3. Poiwsson'-ratio; elastic energy
4. Terminal ve;ocity
5. Qualitative idea of Blackbody radiation,
6. Stefan'a law, Wein's displacement law, Green House effect.
7. Definition of temperature
8. Work done on compressing a gas
9. Avogadro's number.

STRUCTURE OF PAPER (PRACTICAL)

Time : 3 hrs.	**Total : 20 Marks**
Two experiment	10
Record of Activities	2
Viva on Activities	3
Record of Experiments	2
Viva of Experiments	3
Total	**20**

PRACTICAL SYLLABUS

Experiments

1. Use of Vernier Callipers
   (i) To measure diameter & volume and volume of a small spherical/cylindrical body.
   (ii) To measure the dimenscons of given rectangular body of known mass and hence to determine its density.
   (iii) 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 & volume of a given wire,
   (ii) to measure thickness of a given sheet
   (ii) 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 addition.
5. Using a simple pendulum, plot L-T and L-T^2 graphs. Hence find the effective length of second's pendulum using appropriate graph.
6. To study the relationship between force of limiting friction and normal reaction and to find co-efficient of friction between a block and a horizontal surface.
7. To find the downward force, along an inclined plane, acting on a roller due to gravitational pull of the earth and study its relationship with the angle of inclination (θ) by plotting graph between force and $\sin\theta$.
8. To determine the mass of two different objects using a beam balance.

SECTION-B

1. To determine young's modulus of a given wire by using searle's apparatus.
2. To find out the spring constant of a helical spring from its load-extension graph.

3. To find force constant and effective mass of a helical spring by plotting T^2 -m graph using method of oscillation.
4. To study the variation in volume (V) with pressure (P) for a sample of air at constant temp. by plotting graphs between P&V and between P & 1/V.
5. To determine the surface tension of water by capillary rise method.
6. To determine the coefficient of viscosity of a given liquid by measuring the terminal volume of spherical body.
7. To study the relationship between the temperature of a hot body and time by plotting a cooling curve.
8. To determine the specific heat capacity of a given (i) solid (ii) liquid by method of mixtures.
9. (i) To study the relation between frequency and length of a given wire under constant tension using sonometer.

   {ii) To study the relation between the length of a given wire and tension for constant frequency using sonometer.
10. To find the speed of sound in air at room temperafure using a resonance tube by two-resonançe positions.

Activities

1. To make a paper scale of given least count, e.g. 0.2cm, 0.5 cm.
2. To determine mass of a given body using a metre 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 a jet of water with angle of projection.
6. To study the conservation of energy of a ball rolling down on inclined plane (using a double inclined plane).
7. To study dissipation of energy of a simple pendulum by plotting a graph between square of amplitude and time.
8. To observe change of state and plot a cooling curve for molten wax.
9. To observe and explain the effect of heating on a bi-metallic strip.
10. To nóte the change in level of liquid in a container on heating and interpret the observations.
11. To study the effect of detergent on surface tension of water by observing capillary rise.
12. To stúdy the factors affecting the rate of loss of heat of a liquid.
13. To study the effect of load on depression of a suitably clamped metre scale loaded.

(i) at its end (ii) in the middle.

14. To determine the radius of gyration about the centre off mass of a metre scale used as a bar pendulum.
15. To demonstrate uniform motion in a straight line of a body in glycerine (any viscous liquid) in a glass plastic tube in a burette.
16. To show that a centripetal force is necessary for moving a body with a uniform speed along a circle and that magnitude of the force increases with angular speed using glass tube & slotted weights.
17. To show interconversion of potential & kinetic energy using Maxwell's wheel.
18. To show conservation of momentum using bipilar pendulums.
19. To show that moment of inertia of a rod changes with the change of positions of a pair of equal weights attached to the rod.
20. To show the rise of water in capillary tubes of different diameters with the help of glass sheet.

CLASS - XI

40. CHEMISTRY

Time: 3 Hrs **Theory: 70 Marks**

Practical: 20 Marks

C.C.E.: 10 Marks

Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1 There will be one theory paper comprising of 26 questions. All questions are compulsory.

2 Question no. 1 to 8 will be of one mark each. All questions are compulsory.

3 Question no. 9 to 16 will be of two marks each. All questions are compulsory.

4 Question no.17 to 23 will be of four marks each. There will be internal choice in two questions.

5 Question no.24 to 26 will be of six marks each. There will be internal choice in them.

6 Distribution of marks over different dimensions of the paper will be as follows.

LEARNING OUTCOMES	**PERCENTAGE OF MARKS**
KNOWLEDGE	36%
UNDERSTANDING	44%
APPLICATION	20%
Total	100%

7 There will be question of the objective type such as Yes/No, tick/cross, fill in the blanks, multiple choice, true/false and definition etc.

8 Use of un-programmable calculator is allowed. The log tables can be used.

9 Total weightage of numerical will be 20%

UNITWISE DISTRIBUTION OF MARKS

SR.NO	**UNIT**	**TOTAL MARK**
1	Some Basic Concept of Chemistry	05
2	Structure of Atom	06
3	Classification of Elements and Periodicity in Properties	05
4	Chemical Bonding and Molecular Structure	06
5	Hydrogen	05
6	S-Block Elements (Alkali and Alkaline Earth Metals)	05
7	Organic Chemistry- Some Basic Principles and Techniques	05
8	Status of Matter: Gases and Liquids	05
9	Thermodynamics	05
10	Equilibrium	06
11	Redox Reaction	04
12	Some p-Block Elements, General introduction to p-Block Elements	05
13	Hydrocarbons	06
14	Environmental Chemistry	02
	TOTAL QUESTIONS &TOTAL MARKS	**T.Q=26 T.M=70**

Total Question in paper =26 including 5 choice questions

SCHEMATIC DISTRIBUTION OF MARKS

Sr. No	UNIT	1 MARK	2 MARK	4 MARK	6 MARK	TOTAL MARK
1	Some Basic Concept of Chemistry	1	-	1	-	05
2	Structure of Atom	-	-	-	1	06
3	Classification of Elements and Periodicity in Properties	1	2	-	-	05
4	Chemical Bonding and Molecular Structure	-	-	-	1	06
5	Hydrogen	1	-	1	-	05
6	S-Block Elements (Alkali and Alkaline Earth Metals)	1	-	1	-	05
7	Organic Chemistry- Some Basic Principles and Techniques	1	-	1	-	05
8	Status of Matter: Gases and Liquids	1	-	1	-	05
9	Thermodynamics	1	-	1	-	05
10	Equilibrium	-	1	1	-	06
11	Redox Reaction	-	2	-	-	04
12	Some p-Block Elements, General introduction to p-Block Elements	1	2	-	-	05
13	Hydrocarbons				1	06
14	Environmental Chemistry	-	1	-	-	02
	TOTAL QUESTIONS &TOTAL MARKS	T.Q=8 T.M=8	T.Q=8 TM=16	T.Q=7 T.M=28	T.Q=3 T.M=18	T.Q=26 T.M=70

Total Question in paper =26 including 5 choice questions

INSTRUCTIONS FOR PAPER SETTER

Note:

1. There will be one theory paper consisting of total 26 questions.
2. Question no.1 to 8 will be of 1 mark each.There will be 4 questions of the objective type such as yes/no,multiple choice questions, fill in the blanks.
3. Question no.9 to 16 will be of 2 marks each. There will be 3 numerical questions of 2 marks each.
4. Question no. 17 to 23 will be of 4 marks each. There will be two four marks questions of internal choice. These questions should not be lengthy.
5. Question No.24 to 26 will be 6 marks and their will be 100% internal choice in them. These questions must have two parts: part (a) will be of one mark and part (b) will be of 5 marks. Part (a) may cover any topic from same unit as of long 5 marks question of part (b).
6. Questions paper should cover all the syllabus.
7. No question or topic should be repeated in the question paper.
8. Questions in the paper can be asked only from mentioned PSEB syllabus. Questions from any topic which is not mentioned in the syllabus will be considered as out of syllabus question.
9. All 3 sets must be of equal standard and difficulty level questions.
10. At the end of each question, paper setter must write detailed distribution of marks of each sub-question.

11. Vague, many possible answer questions, confusing answer question etc type of question will not be asked in the paper. One mark questions, answer should be of one word or one line only.
12. Language used should be clearly understood & specific.
13. Time and length limit of paper should be kept in mind.
14. Time and length limit of paper should be kept in mind while setting the paper.
15. Questions paper should be made to according to knowledge, understanding and applications part marks distribution.

SYLLABUS (THEORY)

Unit-I Some Basic Concepts of Chemistry

General introduction: Importance and scope of chemistry. Historical approach to particulate nature of matter, laws of chemical combination. Dalton's atomic theory: concept of elements, atoms and molecules. Atomic and molecular masses. Mole concept and molar mass: percentage composition, empirical and molecular formula; chemical reactions, stoichiometry and calculations based on stoichiometry.

Unit-II Structure of Atom

Discovery of electron, proton and neutron; atomic number, isotopes and isobars. Thomson's model and its limitations, Rutherford's model and its limitations. Bohr's model and its limitations, concept of shells and subshells, dual nature of matter and light, De Broglie's relationship, Heisenberg uncertainty principle, concept of orbitals, quantum numbers, shapes of s, p, and d orbitals, rules for filling electrons in orbitals - Aufbau principle, Pauli exclusion principle and Hund's rule, electronic configuration of atoms, stability of half filled and completely filled orbitals.

Unit-III Classification of Elements and Periodicity in Properties

Significance of classification, brief history of the development of periodic table, modern periodic law and the present form of periodic table, periodic trends in properties of elements -atomic radii, ionic radii, Inert gas radii. lonization enthalpy, electron gain enthalpy, electronegativity, valence, Nomenclature of elements with atomic number greater than 100.

Unit-IV Chemical Bonding and Molecular Structure

Valence electrons, ionic bond, bond parameters, covalent bond. Lewis structure, polar character of covalent bond, covalent character of ionic 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 diatomic molecules(qualitative idea only), hydrogen bond.

Unit-V States of Matter: Gases and Liquids

Three states of matter. Intermolecular interactions, types of bonding, melting and boiling points. Role of gas laws in elucidating the concept of the molecule, Boyle's law. Charles' law, Gay Lussac's law, Avogadro's law. Ideal behaviour, empirical derivation of gas equation, Avogadro's number. Ideal gas equation. Derivation from ideal behaviour, liquifaction of gases, critical temperature, kinetic energy and molecular speeds (elementary idea) derivation from ideal behaviour, liquification of gasses, critical temperature

Liquid State - Vapour pressure, viscosity and surface tension (qualitative idea only, no mathematical derivations).

Unit-VI Thermodynamics

Concepts of System, types of systems, surroundings. Work, heat, energy, extensive and intensive properties, state functions.

First law of thermodynamics - internal energy and enthalpy heat capacity and specific heat measurement of ΔU and ΔH, Hess's law of constant heat summation, enthalpy of: bond dissociation, combustion, formation, atomization, sublimation. Phase transition, ionization, solution and dilution.

Introduction of entropy as a state function, Gibbs energy change for spontaneous and non-spontaneous processes, criteria for equilibrium.

Second law of thermodynamics, third law of thermodynamics (Brief introduction).

Unit-VII Equilibrium

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, ionization of polybasic acids, acid strength, concept of pH, Henderson Equation. Hydrolysis of salts (elementary idea). Buffer solutions, solubility product, common ion effect (with illustrative examples).

Unit-VIII Redox Reactions

Concept of oxidation and reduction, redox reactions, oxidation number, balancing redox reactions in terms of loss and gain of electrons and change in oxidation number, application of redox reaction.

Unit-IX Hydrogen

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, structure and use; hydrogen as a fuel.

Unit-X S Block Elements (Alkali and Alkaline earth metals)

Group 1 and Group 2 elements

General introduction, electronic configuration, occurrence, anomalous properties of the first element of each group, diagonal relationship, trends in the variation of properties (such as ionization enthalpy, atomic and ionic radii), trends in chemical reactivity with oxygen, water, hydrogen 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 use of lime and limestone, biological importance of Mg and Ca.

Unit-XI Some p-Block Elements, General introduction to p-Block Elements

Group 13 elements: General introduction, electronic configurations, occurrence. Variation of properties, oxidation states, trends in chemical reactivity, anomalous properties of first element of the group; Boron-physical and chemical properties, some important compounds: borax, boric acid, boron hydrides. Aluminium: reactions with acids and alkalies and uses.

Group 14 elements : General introduction, electronic configurations, occurrence, variation of properties, oxidation states, trends in chemical reactivity, anomalous behaviour of first element, Carbon - catenation, allotropic forms, physical and chemical properties; uses of some important compounds: oxides.

Important compounds of silicon and a few uses: silicon tetrachloride silicones, silicates and Zeolites, their uses.

Unit-XII Organic Chemistry Some Basic Principles and Techniques

General introduction, methods of purification, qualitative and quantitative analysis, classification and IUPAC nomenclature of organic compounds. Electronic displacements in a covalent bond:- inductive effect, electromeric effect, resonance and hyper conjugation.

Homolytic and heterolytic fission of a covalent bond: free radicals, carbocations, carboanion; electrophiles and nucleophiles, types of organic reactions

Unit-XIII Hydrocarbons

Classification of hydrocarbons

Aliphatic Hydrocarbon

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, physical properties, methods of preparation; chemical reactions: addition of hydrogen, halogen, water, hydrogen halides (Markovnikov'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 mono-substituted benzene; carcinogenicity and toxicity.

Unit-XIV Environmental Chemistry

Environmental pollution - air, water and soil pollution, chemical reactions in atmosphere, smog, major atmospheric pollutants; acid rain, ozone and its reactions, effects of depletion of ozone layer; greenhouse effect and global warming - pollution due to industrial wastes: green chemistry as an alternative tool for reducing pollution, strategy for control of environmental pollution.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

Time: 3.00 hrs. **Marks: 20**

1.	Volumetric Analysis	06
2.	Salt Analysis	05
3.	Content based experiment	05
4.	Class record and Viva	04
	Total Marks	20

PRACTICAL SYLLABUS

Micro Chemical Methods are available for several of the practical experiments where ever possible such techniques should be used.

A. Basic Laboratory Techniques

- **a.** Cutting glass tube and glass rod
- **b.** Bending a glass tube
- **c.** Drawing out a glass jet
- **d.** Boring a cork

B. Experiments related to pH change

- **a.** Anyone of the following experiments:
  - Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator.

- Comparing the pH of solutions of strong and weak acid of same concentration.
- Study the pH change in the titration of a strong base using Universal indicator.

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

C. Qualitative Analysis

Determination of one anion and one cation in a given salt

Cations- Pb^{2+}, Cu^{+2}, As^{3+}, $A1^{3+}$, Fe^{3+}, Mn^{2+}, Ni^{2+}, Zn^{2+}, Co^{2+} Ca^{2+}, Sr^{2+}, Ba^{2+}, Mg^{2+}, NH_4^+

Anions-

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

(Note: insoluble salts excluded)

D. Detection of nitrogen, sulphur, chlorine in organic compounds.

PROJECTS

- Investigation of foaming capacity of different washing soaps and the effect of addition of Sodium carbonate on them.
- Study of the acidity of different samples of the tea leaves.
- Determination of the rate of evaporation of different liquids.
- Study of the effect of acids and bases on the tensile strength of fibers.
- Analysis of fruit and vegetable juices for their acidity.

Note: Any other investigatory project, which involves about 10 period of work can be chosen with the approval of the teacher.

A. Characterization and purification of chemical substances

1. Determination of melting point of an organic compound
2. Determination of boiling point of an organic compound
3. Crystallization of impure sample of anyone of the following: Alum, copper sulphate, Benzoic acid.

B. Chemical Equilibrium

One of the following experiments:

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

b) Study the shift in equilibrium between $[Co(H_2O)_6]^{2+}$ and chloride ions by changing he concentration of either of the ions.

C. Quantitative Estimation

- Using a chemical balance.
- Preparation of standard solution of oxalic acid.
- Determination of strength of a given solution of sodium hydroxide by titrating it against standard solution of oxalic acid.
- Preparation of standard solution of sodium carbonate.

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

PROJECT

Scientific Investigations involving A few suggested Projects

- Checking the bacterial contamination in drinking water by testing sulphide ion. Study of the methods of p.
- Testing the hardness, presence of iron floride, chloride etc. depending upon the regional variation in drinking water and the study of causes of presence of these ions above permissible limit (if any).
- Study the method of purification of water.

CLASS - XI

41. BIOLOGY

Time: 3 Hrs **Theory: 70 Marks**

Practical: 20 Marks

CCE: 10 Marks

Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be one theory paper comprising of 26 questions in all.
2. Question no. 1 to 8 will be of one mark each. All are compulsory.
3. Question no. 9 to 16 will be of two marks each. All are compulsory.
4. Question no.17 to 23 will be of four (4) marks each. Question no.17 to 21 will be compulsory (1 question from each unit) There will be 100% Internal choice in question no 22 and 23. Question no. 22 will be from unit IV and Question 23 will be from unit V.
5. Question no.24 to 26 will be of six (6) marks each. There will be 100% internal choices.
6. Distribution of marks over different dimensions of the paper will be as follows.

LEARNING OUTCOMES	**MARKS**	**PERCENTAGE OF MARKS**
KNOWLEDGE	25	36%
UNDERSTANDING	31	44%
APPLICATION	14	20%
Total	**70**	**100%**

7. Out of eight one mark questions, 4 questions can be of the objective type such as Yes/No, tick/cross, fill in the blanks, multiple choice, true/false etc.Other four should be of statement type.

UNITWISE DISTRIBUTION OF MARKS

Unit	**Title**	**Marks**
I	Diversity in living World	07
II	Structural Organization in animals & plants	11
III	Cell structure and functions	16
IV	Plant physiology	18
V	Human anatomy and physiology	18
Total Marks		**70**

SCHEMATIC DISTRIBUTION OF MARKS

Unit	**1 mark questions**	**2 mark questions**	**4 mark questions**	**6 mark questions**	**Total marks**
Unit-I	1	1	1	-	**07**
Unit-II	1	3	1	-	**11**
Unit-III	2	2	1	1	**16**
Unit-IV	2	1	1+1or1	1	**18**
Unit-V	2	1	1+1or1	1	**18**
Total questions	**8**	**8**	**7**	**3**	**26**
Total Marks	**8**	**16**	**28**	**18**	**70**

INSTRUCTIONS FOR PAPER SETTER

Note:

1. There will be one theory paper consisting of total 26 questions.
2. Question no.1 to 8 will be of 1 mark each. All questions are compulsory.
3. Question no.9 to 16 will be of 2 marks each. All questions are compulsory.
4. Question no. 17 to 23 will be of 4 marks each. Questions 17 to 21 are compulsory (should be one from each unit) and 22 and 23 questions will have 100% internal choice and will be from IV and V unit.
5. Question no 24 to 26 will be of 6 mark each and will have 100% internal choice.
6. Questions in the paper can be asked only from mentioned PSEB syllabus. Questions from any topic which is not mentioned in the syllabus but the topic is included in the books published by Punjab School Education Board will be considered as a part of syllabus.
7. All 3 sets must be of equal standard and difficulty level questions.
8. At the end of each question, paper setter must write detailed distribution of marks of each sub-question.
9. Vague, many possible answer questions, confusing answer question etc type of question will not be asked in the paper. One mark questions, answer should be of one word or one line only.
10. Language used should be clearly understood & specific.
11. Time and length limit of paper should be kept in mind.

SYLLABUS (THEORY)

1. Diversity in Living World

What is living?; Biodiversity; Need for classification; Three domain of life; Taxonomy & Systematic; Concept of species and taxonomical hierarchy; Binomial nomenclature; Tools for study of Taxonomy-Museums, Zoos, Herbaria, Botanical gardens.

Five Kingdom classification; Salient features and classification of Monera; Protista and Fungi into major groups; Lichens; Viruses and Viroids.

Salient features and classification of plants into major groups-Algae, Bryophytes, Pteridophytes, Gymnosperm and Angiosperm (three to five salient and distinguishing features and at least two examples of each category); Angiosperms-classification up to class, characteristics features and examples.

Salient features and classification of Animals-non chordate up to phyla level and chordate up to classes level (three to five salient features and at least two examples)

2. Structural Organization in Animals and Plants

Morphology and modifications; Tissues; Anatomy and functions of different parts of flowering plants: Root, steam, leaf, inflorescence-cymose and racemose, flower, fruit and seed (To be dealt along with the relevant practical of the practical syllabus).

Animal tissues; Morphology, anatomy and functions of different systems (digestive, circulatory, respiratory, nervous and reproductive) of an insect (cockroach). (Brief account only)

3. Cell Structure and Function

Cell theory and cell as the basic unit of life; Structure of prokaryotic and eukaryotic cell; Plant cell and animal cell; Cell envelope, cell membrane, cell wall; Cell organelles-structure and function; Endomembrane system-endoplasmic reticulum, Golgi bodies, lysosomes, vacuoles; mitochondria, ribosomes, plastids, microbodies; Cytoskeleton, cilia, flagella, centrioles (ultra structure and function); Nucleus-nuclear membrane, chromatin, nucleolus.

Chemical constituents of living cells: Biomolecules- structure and function of proteins, carbodydrates, lipid, nucleic acid; Enzymes-types, properties, enzyme action.

Cell division: Cell cycle, mitosis, meiosis and their significance.

4. Plant Physiology

Transport in plants: Movement of water, gases and nutrients; Cell to cell transport- Diffusion, facilitated diffusion, active transport; Plant- water relations-Imbibition, water potential, osmosis, plasmolysis; Long distance transport of water- Absorption, apoplast, symplast, transpiration pull, rootpressure and guttation; Transpiration-Opening and Closing of stomata; Uptake and translocation of mineral nuterients- Transport of food; Phloem transport, Mass flow hypothesis; Diffusion of gases (brief mention).

Mineral nutrition: Essential minerals, macro and micronutrients and their role; Deficiency symptoms; Mineral toxicity; Elementary idea of Hydroponics as a method to study mineral nutrition; Nitrogen metabolism-Nitrogen cycle, biological nitrogen fixation.

Photosynthesis: Photosynthesis as a means of Autotrophic nutrition; Where does photosynthesis take place; How many pigments are involved in Photosynthesis (Elementary idea); Photochemical and biosynthetic phases of photosynthesis; Cyclic and non cyclic photophosphorylation; Chemiosmotic hypothesis; Photorespiration; C_3 and C_4 pathways; Factors affecting photosynthesis.

Respiration: Exchange of gases; Cellular respiration- glycolysis, fermentation (anaerobic), TCA cycle and electron transport system (aerobic);

Energy relations- Number of ATP molecules generated; Amphibolic pathways; Respiratory quotient.

Plant growth and development: Seed germination; Phases of plant growth and plant growth rate; - Conditions of growth; Differentiation, dedifferentiation and redifferentiation, Sequence of developmental process in a plant cell; Growth regulators-auxin, gibberellin, cytokinin, ethylene, ABA; Seed dormancy; Vernalisation; Photoperiodism.

5. Human Physiology

Digestion and Absorption: Alimentary canal and Digestive glands; Role of digestive enzymes and gastrointestinal hormones; Peristalsis, Digestion, absorption and assimilation of proteins, carbohydrates and fats, Calorific value of proteins, carbohydrates and fats (for box item not to be evaluated); Egestion; Nutritional and digestive disorders - PEM, indigestion, constipation, vomiting, jaundice, diarrhea.

Breathing and Respiration: Respiratory organs in animals (Recall only); Respiratory system in humans; Mechanism of Breathing and its regulation in humans - Exchange of gases, transport of gases and regulation of respiration, Respiratory volumes; Disorders related to respiration - Asthma, Emphysema, Occupational Respiratory disorders.

Body fluids and Circulation: Composition of blood, Blood groups, Coagulation of blood; Composition of Lymph and its function; Human circulatory system - Structure of human heart and blood vessels; Cardiac cycle, Cardiac output, ECG; Double circulation; Regulation of cardiac activity; Disorders of circulatory system - Hypertension, Coronary artery disease, Angina pectoris, heart failure.

Excretory products and their elimination: Modes of excretion - Ammonotelism, ureotelism; Uricotelism; Human excretory system - structure and function; Urine formation, Osmoregulation; Regulation of kidney-function - Renin-angiotensin, Atrial Natriuretic Factor, ADH and Diabetes insipidus; Role of other organs in excretion; Disorders - Uraemia, Renal failure, Renal calculi, Nephritis; Dialysis and artificial kidney.

Locomotion and Movement: Types of movement - ciliary, flagellar, muscular; Skeletal muscle - contractile proteins and muscle contraction; Skeletal system and its functions. (To be dealt with the relevant practical of Practical Syllabus); Joints; Disorders of muscular and skeletal system – Myasthenia gravis, Tetany, Muscular dystrophy, Arthritis, Osteoporosis, Gout.

Neural control and coordination: Neuron and nerves; Nervous system in humans - central nervous system, Peripheral nervous system and visceral nervous system; Generation and conduction of nerve impulse; Reflex action;

Sense organs; Sensory Perception; Elementary structure and function of eye and ear.

Chemical coordination and regulation: Endocrine glands and hormones; Human endocrine system - Hypothalamus, Pituitary, Pineal, Thyroid, Parathyroid, Adrenal, Pancreas, Gonads; Mechanism of hormone action (Elementary idea); Role of hormones as messengers and regulators, Hypo- and hyperactivity and related disorders. (Common disorders eg. Dwarfism, Acromegaly, Cretinism, goiter, exopthalmic goiter, diabetes, Addison's disease).

Imp: Diseases related to all the human physiology systems to be taught in brief.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

Time: 3.00 hrs. **Total 20 : Marks**

1.	Experiment and Spotting	12
2.	Record of one investigatory and Viva based on the project	4
3.	Class record and Viva based on experiments	4
	Total	20

SYLLABUS (PRACTICALS)

A. List of Experiments

1. Study and describe three locally available common flowering plants from each of the following families (Solanaceae, Fabaceae and Liliaceae) including dissection and display of floral whorls and anther and ovary to show number of chambers. Types of root (Tap and Adventitious); Stem (Herbaceous and woody); Leaf (arrangement, shape, venation, simple and compound).
2. Preparation and study of T.S. of dicot and monocot roots and stems (primary).
3. Study parts of a compound microscope.
4. Study of the specimens and identification with reasons- Bacteria,Oscillatoria, Spirogyra, Rhizopus, mushroom, Yeast, liverwort, moss, fern, Pine, one monocotyledonous plant and one dicotyledonous plant and one lichen.
5. Study of specimens and identification with reasons-Amoeba, Hydra, Liverfluke, Ascaris, leech, earthworm prawn, silkworm, honeybee, snail, starfish, shark, Rohu, frog, lizard, pigeon and rabbit.
6. Study of tissues, and diversity in shapes and sizes of plant and animal cells (e.g palisade cells, guard cells, parenchyma, collenyma,

sclerenchyma, Xylem, Phloem, Squamous epithelium, muscle fibers and mammalian blood smear) through temporary/permanent slides.

7. Study of different modifications in root, stem and leaves.
8. Study and identification of different types of inflorescence.
9. Study of osmosis by potato osmometer.
10. Study of plasmolysis in epidermal peels (e.g. Rhoeo leaves).
11. Study of distribution of stomata in the upper and lower surface of leaves.
12. Comparative study of the rates of transpiration in the upper and lower surface of leaves.
13. Test for the presence of sugar, starch, protein and fats. To detect them in suitable plant and animal materials.
14. Separation of plant pigments through paper chromatography.
15. To study the rate of respiration in flower buds/leaf tissue and germinating seeds.
16. To test the presence of urea in urine.
17. To detect the presence of sugar in urine/blood sample
18. To detect the presence of albumin in urine.
19. To detect the presence of bile salts in urine.
20. Study of imbibition in seeds/raisins.
21. Observation and comments on the experimental set up for showing.
    a. Anaerobic respiration
    b. Phototropism
    c. Apical bud removal
    d. Suction due to transpiration
22. Study of human skeleton and different types of joints.
23. Study of external morphology of earthworm, cockroach and frog through models.
24. Study of mitosis in onion root tip cells and animals cells (grasshopper) from permanent slildes.

Note:- The subtopics which are printed in the books published by Punjab School Education Board but are not mentioned in syllabus, should be considered as part of syllabus.

CLASS - XI
42. GEOLOGY

Time: 3 hrs **Theory: 60 Marks**
Practical: 30 Marks
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be one theory paper comprising of 28 questions. All questions will be compulsory.
2. Marks for each question are indicated against it.
3. Question Nos. 1-10 are objective type questions carrying 1 mark each. Answer to each question will be in one line or few words only. **1×10=10**
4. Question Nos. 11-20 are very short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words. **2×10=20**
5. Question Nos. 21-25 are short answer type questions carrying 3 marks each. Answer to each question will be in 80-100 words. **3×5=15**
6. Question Nos. 25-28 are long answer type questions carrying 5 marks each. There will be 100% internal choice. **5×3=15**
7. There will be no objective type questions such as yes/no, tick/cross, fill in the blanks, multiple choice, true/false etc.
8. The question paper should be strictly from the prescribed syllabus subject to the above mentioned guidelines.
9. Candidates will be provided with one answer book of 32 pages only. No extra/continuation sheet will be provided.

(PRACTICAL)

Time : 3 Hrs **Marks: 30**

The examiner will set the question paper on the spot. The distribution of marks in the paper will be as follows:

1. At least 8 minerals will be given to the students for identification. Students are required to attempt/identify 4 minerals out of these. The question will carry 4 marks.

2. 8 fossils will be given to the students for identification. Student will identify 4 fossils out of these. The question will carry 4 marks.

3. The examiner will ask the student to plot an outline map of India the distribution of deposits of any two minerals. The student will attempt any one. The question will carry 4 marks.

4. The examiner will give two geographical maps for study and for the identification of their various features. Students are required to attempt any one of these two maps. The question will carry 5 marks.

5. 3 marks are reserved for notebook and record.

A group of students for practical should not be more than 20 students.

SYLLABUS
THEORY
PART-A

Geology:

Aims of Geology, historical development of Geo science, its branches and their outline.

A general outline of the following:

The Earth:

Its setting, part of the solar system, The origin of the solar system and the earth. The earth's major features-The ocean basins, the continents, Origin of the continents and ocean basins.

The Earth's Crust

Nature, material of the crust, minerals, classification of the some common rock-forming minerals, Rocks: Igneous, sedimentary and metamorphic rocks, common primary features and structure of rocks, the phenomenon of igneous activity, volcanoes, varieties of volcanoes.

Earthquakes

Causes of earthquake, earthquake waves. Some Indian examples. Nature of the earth's structure - the crust, the mantle and core. Summary of the physical properties of the earth's parts.

Uniformitarianism

Principles of Stratigraphy, Geological Time-scale, Indexfossils, Correlation Homotaxis. Facies concept in stratigraphy, palaeography. Basic idea about geological maps.

PART-B

A general outline of the following:

The Geological force: Internal forces, Earth Movement, External forces. The Hydrological cycle, weathering and erosion, formation of soils and their types and utility.

The Force of the wind: Movement of the atmosphere, wind erosion and deposition by wind.

The Ground water: Principles of ground water, origin and Occurrence/ movement of the ground water acquifers and wills, Geologic work of groundwater.

River at Work: Run off, factors controlling run off, drainage system and system patterns. Erosion and transportation by running water. Changes in river with time. River deposits. The cycle of erosion with Indian examples.

- Land sculptures by glaciers. Growth and movement of glaciers; Kinds of glaciers with some Indian examples, glacier regiment and former glacier regiment and former glaciers. Geologic work of glaciers.

- Wave action and shore lines. Mechanism of wave action, geologic work of wave deposition. Shorelines and sea level.
- Types of fossils, modes of preservation, uses of fossils, brief idea about important fossil groups such as branchiopods, molluscs, trilobites, graptolities, echinoderms. Some idea about plant fossils.

PRACTICAL

(i) Identification of some important minerals like quartz, peldspars, mica, magnetite, copper ores etc. in landspecimen.

(ii) Identification of important fossils like Terebratula, Spirifer, Products Trionia, pecten, Murex, Trochus, Belemnities, Ceratities, Calymene, phacops, mono, gruptus, Microster.

(iii) Determination of specific gravity and study of rocks in land specimen. Granite, sandstone, quartzite, limestone, marble, basalt, etc. Indentification of important characters.

(iv) Study of geological map and identification of various features shown on topographical sheets and relief of oceans and continents.

CLASS - XI

43. BIOTECHNOLOGY

Time: 3 hrs **Theory:60Marks**
Time: 3 hrs **Practical: 30 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be one theory paper comprising of 28 questions. All questions will be compulsory.
2. Marks for each question are indicated against it.
3. Question Nos. 1-10 are objective type questions carrying 1 mark each. Answer to each question will be in one line or few words only.
4. Question Nos. 11-20 are very short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
5. Question Nos. 21-25 are short answer type questions carrying 3 marks each. Answer to each question will be in 80-100 words.
6. Question Nos. 26-28 are long answer type questions carrying 5 marks each. There will be 100% internal choice.
7. There will be no objective type questions such as yes/no, tick/cross, fill in the blanks, multiple choice, true/false etc.
8. The question paper should be strictly from the prescribed syllabus subject to the above mentioned guidelines.
9. Candidates will be provided with one answer book of 32 pages only. No extra/continuation sheet will be provided.

PRACTICAL

Time : 3 Hours **Marks : 30**

Distribution of marks:

1.	One Experiment	8 marks
2.	Practical record	5 marks
3.	Viva on practical	5 marks
4.	Project work	
	(a) Write up	6marks
	(b) Viva	6 marks

A group of students for practical should not be more than 20 students.

SYLLABUS

Time: 3 hrs **Theory: 60Marks**

UNIT-1 INTRODUCTION TO BIOTECHNOLOGY

Fundamentals of Biochemical Engineering
Biotechnology and Society.

UNIT-II BIOMOLECULES

Building Blocks of Biomolecules-Structure and dynamics.
Structures and function of Macromolecules.

Biochemical Techniques.

UNIT-III CELL AND DEVELOPMENT

The basic unit of life

Cell Growth and Development

Cellular Techniques

UNIT-IV GENETICS AND MOLECULAR BIOLOGY

Principles of Genetics

Genome Function

Genetical Techniques

PRACTICAL

Time: 3 hrs **Practical: 30 Marks**

Note:- Every student is required to do the following experiments in the academic session. List of Experiments (Numbering is according to syllabus).

1. Preparation of buffers and pH determination.
2. Sterilization techniques (Wet and Dry Sterilization, Chemical Sterilization and Ultra filtration.
3. Media preparation (Solid and Liquid L.B. medium)
4. Isolation of bacteria from curd and staining of bacteria.
5. Determination of bacterial growth curve.
6. Isolation of milk protein (casein).
7. Estimation of protein by Burette method.
8. Study of various stages of mitosis and calculation of mitotic index.
9. Preparation of Karyotype.
10. Cell viability assay (Using Evans blue stain)
11. Cell counting (Using haemocytometer)
12. Determinaion of blood groups.
13. Isolation of genomic D.N.A.
14. Detection of D.N.A. by gel electrophoresis.
15. Estimation of D.N.A.
16. Assaying the enzyme acid phosphate.

CLASS-XI
44. Computer Application
Instructions (Theory Paper)

Time: 3 hours **Theory : 60 Marks**
CCE : 10 Marks
Practical : 30 Marks

Structure of Question Paper

1. There will be four sections of Question Paper (Part- A, Part- B, Part- C and Part- D).
2. In Part- A , there will be 6 objective type question from Question No. 1 to 6 , each question will be of one marks each.
3. In Part -B, there will be 6 Questions from Question no. 7 to 12, each questions will be of two marks.
4. In Part -C , there will be 6 Questions from Question no. 13 to 18, each questions will be of four marks.
5. In Part –D, there will be three questions from Question no. 19 to 21 , each question will be of 6 marks.
6. All questions of Part-A, Part-B, Part-C and Part-D are compulsory. However internal choice may be given in part-D.

Sr. No	Chapter	Total Marks	Marks 1 question	Marks 2 question	Marks 4 question	Marks 6 question
1a	Introduction to C	10			1	1
2a	Constant Variable and data types	7	1	1	1	
3a	Operators and Expressions	7	1	1	1	
4a	Control and Expressions	8		1		1
5a	Arrays	7	1	1	1	
6a	String Handling Functions	7	1	1	1	
7a	User defined functions	7	1	1	1	
8a	Internet & E-Governance	7	1			1
	Total Marks	**60**	**6**	**12**	**24**	**18**

Lesson 1: Introduction to C
- 1.1 Introduction
- 1.2 Distinctive Features of C Language
- 1.3 Character set of C Language
- 1.4 Structure of C Program
- 1.5 Function
- 1.6 Compilation and execution of C program
- 1.7 Starting with Programming

Lesson 2: Constants, Variables and Data Types
- 2.1 Introduction
- 2.2 Identifiers
- 2.3 Keywords

PRACTICAL

Time: 3 hrs **Marks: 30**

EVALUATION SCHEME FOR PRACTICAL

1. **Programming in C**

   There will be 4 questions / Program will be set from which candidate has to attempt any Three program/ Questions. Each Program or Question will be of 5 marks. Marks for the programming are to be given on the basis of program documentation / indentation, algorithm and result (output) 5 × 3=15 Marks

2. **Viva-Voce** 10 Marks

3. **Practical record file:** 5Marks

Record of at least 20 programs in C (with listing and Outputs) based on programming concepts and on data base concepts

SYLLABUS: All the relevant practical exercise will be based upon the relevant chapters mentioned in the Theory Syllabus.

CLASS – XI

45. ELEMENTS OF ELECTRONICS ENGINEERING

Time: 2 hrs **Theory : 40 Marks**
Time:3 hrs **Practical: 50 Marks**
CCE: 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. In all, 20 Questions will be set in the question paper. Out of which students will have to attempt 16 questions.
2. The question paper will comprise of three parts (Part-I, Part-II and Part- III).
3. The questions will be evenly distributed from the prescribed syllabus.

Part-I will consist of seven objective type questions carrying 1 mark each. All questions will be compulsory to attempt.The answer of each question should not exceed more than one sentence.

Part-II will consist of eight short answer type questions carrying 3 marks each. Candidate will attempt any six questions out of these. A question may have two or more parts.The answer of each question should not be more than one page of the answer sheet.

Part–III will consist of five questions carrying 5 marks each. Candidate will attempt any three question out of these.The answer of each question should not be more than Two pages of the answer sheet.

SYLLABUS

1. Introduction to semi-conductors and their symbolic representation.
2. Introduction to integrated circuits.
3. Advantages and limitations of integrated circuits.
4. Introdiction to monolithic, Photography, Film Technology.
5. Introduction to Electronic Components.
   - (i) Resistors
   - (ii) Capacitors
   - (iii) Transistors
   - (iv) Diodes
   - (v) Coils
   - (vi) Transformers
   - (vii) IFT's
   - (viii) P.C.B's
6. Introduction to Digital Electronics
   - (i) Number system,their conversion
   - (ii) Basic Boolean Algebra
   - (iii) Basic, Logic, Circuits and their symbols. OR, AND, NOT, NAND, NOR, EX-OR.
7. Introduction to Computer and Microporcessor
8. Introduction to TV Receivers and Transmitters.
9. Fundamentals of measuring instruments.
   - (i) Voltmeter
   - (ii) Ammeter

(iii) Mulitimeter

(iv) Oscilloscopes.

PRACTICAL (STRUCTURE OF QUESTION PAPER)

Time: 3 Hrs **Max: 50 Marks**

The description of Marks will be as followes:

1.	Viva-Voce	10 marks
2.	Notebook/SessionalWork	10 marks
3.	ActualPerformance	30 marks

(a) Major Practical : 20 marks

The examiner shall set any three practicals from the practical Nos1,2,3 and 4, The candidate shall choose any two from these. The examiner will ask the student to perform any one from the two chosen by him.

(b) Minor Practical : 10 marks

The examiner shall set any three practicals from the practical Nos.5,6,7,8 and 9. The Candidate shall choose any two from these. The examiner will ask the student to perform any one from the two chosen by him.

SYLLABUS

1. Classification, description and use of soldering iron, soldering and desoldering. Do's and Don'ts.
2. Assembly of the power supply (i) Full wave rectification (ii) Using I.C.723.
3. Assembly of regulated power supply (i) Full wave (ii) using I.C. 723.
4. Verification of Ohm's law. Kirchoff law.
5. Assembly of various projects from I.C.555
6. Assembling an amplifier, oscillator and Radio receiver using Transistors and I.C.
7. Checking the validity of the undermentioned gates.

   OR

   AND

   NOT

   NAND

   NOR

   EX OR
8. Measurements of A.C;D.C. Current using voltmeter, ammeter and multimeter.
9. Use of computer and microprocessor.

CLASS - XI

46. BUSINESS STUDIES–I
(COMMERCE GROUP)

Time : 3 Hrs **Theory: 65 Marks**
CCE: 10 Marks
Total: 75 Marks

STRUCTURE OF QUESTION PAPER

1. The question paper will cover whole of the syllabus.
2. 20 Questions will be set in the question paper.
3. All units of the syllabus should be given adequate representation in the question paper.

SECTION -A

4. Question No. 1 consist of 5 sub part of 1 mark each. Answer of each part should be given in 1-15 words. Objective type questions may include questions with one word or one sentence answer / fill in the blanks / multiple choice type questions/true or false.

SECTION -B

5. Question No 2 to 8 will carry 2 marks each. Answer of each question should be given in 5-10 lines.

SECTION -C

6. Do any seven questions from this section.Question No 9 to 17 will carry 4 marks each. Answer of each question should be given in 15-20 lines.

SECTION -D

7. Questin No. 18 to 20 will carry 6 marks each with internal choice. Anwser of each question should be given in 3-5 pages. Internal choice questions shuld not be set from the same unit.

DETAIL OF QUESTIONS SET FROM EACH UNIT

		Section-A	Section-B	Section-C	Section-D
Unit No.	**Name of the unit**	**1 mark question**	**2marks question**	**4 marks questions**	**6 marks question**
1	Nature and Purpose of Business	1Q. from unit1 & 2		1	(i)1Q from unit 1&2 with 1Qfrom 3& 4 as internal choice
2	Structure of Business		1	1	(ii) 1Q from 7 & 8 with 1Q from 9 & 10 Q. as internal choice.
3	Service Sector and Business			1	(iii) 1Q from unit 5 with 1Q from unit 6 as internal choice.
4	Social Responsibility of Business and Business Ethics	1		1	
5	Forms and Formation of Business Enterprises		1	1	
6	Sectoral Organisation of Business	1	1		
7	Formation of a Company	1	1	1	
8	Internal Trade		1	1	
9	Sources of Business Finance	1	1	1	
10	External Trade		1	1	
	Total	**05**	**07**	**09**	**03**

SYLLABUS
FOUNDATION OF BUSINESS

UNIT-1 NATURE AND PURPOSE OF BUSINESS

(a) Concept and Characteristics of Business.

(b) Business Profession and Employment-Distinctive Features.

(c) Objectives of Business-Economic, Social and Human.

(d) Business Risks-Nature and Causes.

(e) Role of Profit in Business.

(f) A brief outline of the Evolution of Business Activities in India.

UNIT-2 STRUCTURE OF BUSINESS

(a) Classification of Business Activities, Industry and Commerce.

(b) Industry and Types: Primary and Secondary.

(c) E-commerce-Meaning, Opportunities and Benefits, Resources required for successful E-Commerce Implementation, Security and Safety for Business Transactions.

(d) Outsourcing of Services: Nature, Need and Types, Financial Services, Advertising, Courier Services, Customer Support Services.

UNIT-3 SERVICE SECTOR AND BUSINESS

(a) Banking; Types of Banks and Functions of Commercial Banks.

(b) Insurance; Principles, Types: Life and General, Fire and Marine and Insurance of other Risks, Health Insurance, Fidelity Insurance.

(c) Communication: Postal & Telecommunication.

(d) Warehousing: Types and Functions.

UNIT-4 SOCIAL RESPONSIBILITY OF BUSINESS AND BUSINESS ETHICS

(a) Concept of Social Responsibility.

(b) Case for Social Responsibility and Human Rights.

(c) Responsibility towards Consumers, Government and Community in General.

(d) Business and Environment Protection.

(e) Business Ethics: Concepts and Elements.

UNIT-5 FORMS AND FORMATION OF BUSINESS ENTERPRISES

(a) Meaning, Features, Merits and Limitations of following Forms:-

i. Sole Proprietorship.

ii. Joint Hindu Family Business.

iii. Partnership-Partnership Deed (main clauses), Types of Partners and Partnership Formation, Registration.

iv. Co-operative Societies.

v. Company; Types of Companies- Private, Public and Deemed Public Company, Privileges of Private Company.

(b) Choice of Form of Business Enterprise.

(c) Factors to be considered for starting a Business.

(d) Scope for setting up Small Business Enterprises.

UNIT-6 SECTORAL ORGANISATION OF BUSINESS

(a) Meaning, Features, Merits and Limitations of following:

— Private Sector, Public Sector and Joint Sector.

(b) Forms of Public Sector Enterprises:

i. Departmental Undertaking.

ii. Co-operative Organisation.

iii. Government Company.

(c) Global Enterprise (Multi National Companies).

CORPORATE ORGANISATION, FINANCE AND TRADE

UNIT-7 FORMATION OF A COMPANY

a) Stages in the Formation of the Company.

i. Promotion

ii. Incorporation

iii. Commencement of Business

UNIT-8 INTERNAL TRADE

a) Meaning and Types.

b) Wholesale Trade-Functions and Services.

c) Retail Trade Organisation: Meaning, Types, Features, Merits and Demerits.

i. Itinerant and Fixed Shop.

ii. Departmental Stores, Chain Shop, Mail Order Business, Franchise.

iii. Consumers Co-operative Store (including super bazar).

c) Direct Marketing, Tele-Marketing, Internal Marketing.

UNIT-9 SOURCES OF BUSINESS FINANCE

a) Nature and Significance

b) Sources and Finance

i) Equity and Preference Shares

ii) Debentures/Bonds-Types; Secured, Unsecured, Convertible, Non-Convertible.

iii) Retained Profits.

iv) Public Deposits.

v) Loan from Financial Institutions.

c) International Sources: GDR's, FDI.

UNIT-10 EXTERNAL TRADE

a) Nature and Importance.

b) Meaning of Export Promotion.

c) Incentives Available.

d) Export-Import Procedure and Documentation.

e) Nature and Importance of Export Processing Zones and Special Economic Zones (SEZ).

CLASS - XI

47. ACCOUNTANCY-I

(COMMERCE GROUP)

Time: 3 Hrs **Theory: 50 Marks**

Project work/ Practical:15 Marks

CCE: 10 Marks

Total: 75 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. The question paper will cover whole of the syllabus.
2. There are 4 sections in the question paper i.e. A, B,C and D.
3. 16 Questions will be set in the question paper. Out of which students will have to attempt 14 questions.
4. All units of the syllabus should be given adequate representation in the question paper.
5. There is no word, line or Page limit for numerical questions.
6. The use of non-programmable simple calculator is allowed.

SECTION-A

7. Question No. 1 consists of 6 subparts carrying 1 mark each. Answer of each part should be given in 1-15 words. Objective type questions may include questions with one word or one sentence answer/fill in the blanks/true or false/multiple choice type questions.

SECTION-B

8. Question No. 2 to 7 (of which 3 questions will be numerical and 3 question will be theoretical) will carry 2 marks each. Answer of theoretical questions should be given in 5 to 10 lines.

SECTION-C

9. Question No. 8 to 14 will carry 4 marks each. Question No.8 to 11 (of which 2 questions will be numerical and 2 questions will be theoretical) will be set from unit 2,3,4 and 5 and students will attempt any 3 questions out of these 4 questions.

   Question No. 12 to 14 (of which 2 questions will be numerical and 1 question will be theoretical) will be set from unit 6,7 and 8 and students will attempt 2 question out of these 3 questions. Answer of theoretical questions should be given in 15-20 lines.

SECTION-D

10. Question No. 15 and 16 will carry 6 marks each with internal choice. Out of these questions, 1 question will be numerical with numerical question as internal choice and 1question will be theoretical with numerical question as internal choice. Answer of theoritical questions should be given in 3-4 pages of the answer book.

DETAIL OF QUESTIONS SET FROM EACH UNIT

Unit No.	Name of the unit	1 Mark Question	2 Marks Question	4 Marks Question	6 Marks Question
11.	Introduction to Accounting				
12.	Theory Base of Accounting	1	1	1	1
13.	Recording of Business transactions	1	1	1	
14.	Trial Balance and Rectification of errors	1	1	1	1
15.	Depreciation, Provisions and Reserves		1	1	
16.	Bank Reconciliation Statement	1	1	1	1
17.	Accounting for bill of exchange transaction				
18.	Financial Statements	1	1	1	1
19.	Computer in Accounting	1		1	
20.	Accounting and Data Base System				

Project work

Time Allowed: 1½ Hours **Max Marks: 15**

1. The syllabus of project work is same as prescribed for the theory paper.
2. Project Note book will consist of at least one comprehensive project and some short answer questions based on the prescribed syllabus.
3. Division of Marks:

   Project Note Book 3 marks

   Total five questions of 3 marks each will be set. The students are required to attempt any three. (3×3) 9 marks

   Viva Voce 3 marks

SYLLABUS

Unit –1 Introduction to Accounting

i) Accounting-Meaning, Objectives, Accounting as Source of Information, Internal and External Users of Accounting Information and their Needs, Advantages and Limitations of Accounting, Difference between Book-Keeping and Accountancy.

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: Cash and Trade Discount, Transaction, Drawings, Equity.

Unit-2 Theory Base of Accounting

i) Accounting Concepts: Entity Money Measurement, Going Concern, Accounting Period, Cost Concept, Dual Aspect, Revenue Recognition (realisation), Matching, Accrual.

ii) Accounting Conventions-Full Disclosure, Consistency, Conservatism, Materiality, Objectives.

iii) Accounting Standards-Meaning, Nature, Need and List of Indian Accounting Standards.

iv) Accounting Mechanism-Single Entry and Double Entry.

v) Accounting Cycle-From Recording of Business Transaction to Preparation of Trial Balance and Final Accounts.

vi) Bases of Accounting-Cash Basis, Accrual Basis.

Unit-3 Recording of Business Transactions

i) Voucher and Transactions: Origin of Transactions-Source Documents and Vouchers, Preparation of Voucher; Accounting Equation Approach-Meaning and Analysis of Transaction using Accounting Equation; Rules of Debit and Credit.

ii) Recording of Transactions: Books of Original Entry-Journal, Special Purpose Books:

(a) Cash Book-Simple, Cash book with Bank column and Petty Cash Book,

(b) Purchase Book, Sales Book, Purchase Returns Book, Sales Return Book, Bill Receivable Book. Bills Payable Book;

(c) Ledger - Meaning, Utility, Format; Posting from Journal and Subsidiary Books; Balancing of Accounts.

Unit-4 Trial Balance and Rectification of Errors

i) Trial-Balance; Meaning, Objectives, Advantages and Methods of Preparation.

ii) Errors: Types of Errors; 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

i) Depreciation: Meaning and Need of 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) Provision and Reserves: Meaning, Importance, Difference between Provisions and Reserves, Type of Reserve; Revenue Reserve, Capital Reserve, General Reserve, Specific Reserve and Secret Reserves.

Unit-6 Bank Reconciliation Statement

i) Meaning, Need and Preparation, Correct Cash Balance.

Unit-7 Accounting for Bills of Exchange Transaction

i) Bills of Exchange and Promissory Note: Definition, Feature, Parties, Specimen and Distinction.

ii) Important Terms: Term of Bill, Concept of Accommodation Bill, Days of Grace, Date of Maturity, Bill at Sight, Bill after Date, Negotiation, Endorsement, Discounting of Bill.

Dishonor, Retirement and Renewal of a Bill, Insolvency of Acceptor.

iii) Accounting Treatment of Bill Transaction.

Unit-8 Financial Statements

i) Financial Statements: Meaning and Objectives.

ii) Distinction between Capital Expenditure and Revenue Expenditure.

iii) Balance Sheet: Need, Grouping, Marshaling of Assets and Liabilities, Vertical Presentation of Financial Statement.

iv) Adjustments in Preparation of Financial Statements with respect to Closing Stock, Outstanding Expenses, Prepaid Expenses, Accrued Income, Income received in Advance, Depreciation, Bad Debts, Provision for Doubtful Debts, Provision for Discount on Debtors, Managers Commission,

v) Preparation of Trading and Profit & Loss Account and Balance Sheet of Sole Proprietorship.

Unit-9 Computer in Accounting

i) Introduction to Computer and Accounting Information System (AIS)

ii) Applications of Computers in Accounting:- Automation of Accounting Process, Designing Accounting Reports, MIS reporting Data Exchange with other Information Systems.

iii) Comparison of Accounting Processes in Manual and Computerized Accounting, Highlighting Advantages and Limitation of Automation.

iv) Sourcing of Accounting System: Readymade and Customized and Tailor made Accounting Systems. Advantages and Disadvantages of each option.

Unit-10 Accounting and Database System

i) Accounting and Database Management System.

ii) Concept of Entity and Relationship: Entities and Relationships in an Accounting System: Designing and creating Simple Tables, Forms, Queries and Reports in the context of Acçounting System.

CLASS - XI
48. BUSINESS ECONOMICS & QUANTITATIVE METHODS-I
(COMMERCE GROUP)

Time: 3 Hrs **Theory:65 Marks**
CCE: 10 Marks
Total: 75 Marks

STRUCTURE OF QUESTION PAPER

1. The question paper will cover whole of the syllabus.
2. 20 Questions will be set in the question paper.Student will have to attempt 18 questions.
3. All units of the syllabus should be given adequate representation in the question paper.

SECTION-A

4. Question No. 1 consists of 5 subparts carrying 1 mark each. Answer of each part should be given in 1-15 words. Objective type questions may include questions with one word or one sentence answer/fill in the blanks/true or false/multiple choice type questions.

SECTION -B

5. Question No. 2 to 8 will carry 2 marks each. Answer of each question should be given in 5-10 lines.

SECTION -C

6. Question No. 9 to 17 will carry 4 marks each. Out of 9 questions 4 questions will be numerical and 5 questions will be theoretical. Do any 7 questions out of 9 questions. Answer of each question should be given in 15-20 lines.

Section -D

7. Question No. 18 to 20 will carry 6 marks each with internal choice .Answer of each question should be given in 3-5 pages. Internal choice question should not be set from the same unit.
8. There is no word, line or page limit for numerical questions.
9. The use of non- programmable simple calculater is allowed.

DETAIL OF QUESTIONS SET FROM EACH UNIT

		Section-A	**Section-B**	**Section-C**	**Section-D**
Syllabus	**Units**	**1Mark Questions**	**2 Mark Question**	**4Mark Question**	**6 Marks questions**
PART - I Business Statistics	1	1Q. from unit 1&2	1	1	(i)1Q. from unit 1& 2 with 1 Q. from unit 3 & 4 as internal choice.
	2		1	1	
	3	1Q. from unit 3&4	1	1	
	4			1	
PART – II Introductory Micro Economics	5	1Q. from unit 5 & 6	1	1	(ii) 1Q. from unit 5 & 6 with 1Q. from unit 7 & 8 as internal choice. (iii)1 Theory Q. with numerical Q. as internal choice from any part.
	6		1	1	
	7	1	1	2	
	8	1	1	1	
Total questions	8	5	7	9	3

SYLLABUS

PART-I

BUSINESS STATISTICS

Unit-1 Introduction to Statistics.

Statistics: Meaning, Definition; Its Need and Importance in Business, Functions and Distrust of Statistics.

Unit-2 Collection of Data.

Meaning of Data, Sources of Data, Primary and Secondary Data, Methods of Collecting Primary and Secondary Data, Construction of Questionnaire.

Unit-3 Theory of Sampling

Census and Sampling Methods, Principles of Sampling, Qualities of Good Sampling, Methods or Techniques of Sampling.

Unit-4 Presentation to Data.

Classification of Data, Tables, Bar diagrams, Histograms and Ogives.

PART-II

INTRODUCTORY MICROECONOMICS

Unit-5 Introduction to Managerial Economics

Introduction, Definition, Characteristics of Managerial Economics, Difference between Managerial Economics and Economics; Its Scope, Uses and Role & Responsibility of Managerial Economics.

Unit-6 Consumer Behaviour and Demand

i. Consumer's Equilibrium-Meaning and Attainment of Equilibrium through Utility Approach; one and two commodity cases.

ii. Demand, Market Demand, Determinants of Demand, Demand Schedule, Demand Curve, Movement along and Shifts in Demand Curve, Law of Demand, Price Elasticity of Demand, Measurement of Price Elasticity of Demand-Percentage, Total Expenditure and Geometric Method.

Unit-7 Producer Behaviour and Supply

(i) Production Function: Returns to a Factor and Returns to Scale.

(ii) Supply, Market Supply, Determiners of Supply, Supply Schedule, Supply Curve, Law of Supply, Movement along and Shifts to Supply Curve, Price Elasticity of Supply, Measurement of Price Elasticity of Supply-Percentage and Geometric Method.

(iii) Cost and Revenue: Concept of Costs, Short Run Cost Curves (fixed and variable costs; total average and marginal cost); Concepts or Revenue, Total, Average and Marginal Revenue and their Relationship.

(iv) Producer's Equilibrium-with the help of MC and MR.

Unit-8 Forms of Market and Price Determination

Forms of Market-Perfect Competition, Monopoly, Monopolistic Competition-Their

Meaning and Features, Price Determination under Perfect Competition-Equilibrium Price, Effects of Shifts in Demand and Supply.

CLASS - XI

49. MODERN OFFICE PRACTICE
(COMMERCE GROUP)

Time: 3 Hrs **Theory: 50 Marks**
CCE: 10 Marks
Practical: 15 Marks
Total: 75 Marks

STRUCTURE OF QUESTION PAPER

1. The Question Paper will cover whole of the Syllabus.
2. 16 Questions will be set in the Question paper. Do any five questions from Section-C.
3. All units should be given adequate representation in the question paper.
4. The Question paper will have 4 sections i.e. A, B, C & D.

SECTION-A

5. Question No. 1 consists of 6 subparts carrying 1 mark each. Answer of each part should be given in 1-15 words. Objective type questions may include questions with one word or one sentence answer/fill in the blanks/true or false/multiple choice type questions. Three Questions will be set from Part-1 and another three questions will be set from Part-2 of the syllabus.

SECTION-B

6. Question No. 2 to 7 will carry 2 marks each. Three questions will be set from Part-1 and remaining three questions will be set from Part-2 of the syllabus. Answer of these questions should be given in 5 to 10 lines.

SECTION-C

7. Question No. 8 to 14 will carry 4 marks each. Attempt total five questions from this section. Attempt any two questions from (**Q.No. 8 to Q.No. 10)** which will be set from Part -I and attempt any three questions from (**Q.No. 11 to Q.No. 14**) which will be set from Part-II. Answer of these questions should be given in 15 to 20 lines.

SECTION-D

8. Question No. 15 to 16 will carry 6 marks each with internal choice. Q.No.15 will be set from Units I to II with internal choice and Q.No. 16 will be set from Units III to IV with internal choice. Each question will carry six marks each. Answer of these questions should be given in 3-4 pages of the answer book.

UNIT WISE DIVISION OF THE MARKS

Part	Unit No.	Name of the Unit	1 Marks Questions	2 Marks questions	4 Marks Questions	6 Marks Questions	Total no. of questions set from Unit wise	Weightage of Questions Unit wise (in %)
Part-I	I	Introduction of Office and Office Management	1	1	1	1 (with internal choice)	3.5	16.66 %
	II	Office Machines	2	2	2		6.5	30.95 %
Part-II	III	Office Communication	1	2	2	1 (with internal choice)	5.5	26.19 %
	IV	Office Record Management	2	1	2		5.5	26.19 %
	Total Questions		**6**	**6**	**7**	**2**	**21**	**100%**

Note:

1. **Do any five questions out of seven questions of 4 marks from Section-C.**

SYLLABUS

Rationale

The main objective of the course in modern office practice is to make the students understand the concepts and principles of office methods and procedures and develop skills in performing office operations. This subject aims at making the students well conversant with the services provided by a modern office and enables them to perform the same using modern methods and equipments.

PART-1

Unit-1 Introduction of Office

Meaning and Evolution of Modern Office, Functions of Office, Place of an Office in a Modern Business Organisation, Concept of Office Management, Department of a Large Office, Role and Qualities of a Modern Office Manager.

Unit-2 Office Machines

Meaning and Relevance of Office Automation, Types of Machines used in Office with Special Emphasis on use of Computers in Office, Hardware and Software (MS-Office-MS Word, MS Excel, MS Power Point and MS Outlook), Types and use of Printers, Scanners, Copiers and other Appliances.

PART-2

Unit-3 Office Communications

Meaning and importance of Effective Communication, Principles of Communication, Channels of Communication, Role of Manager in Effective

Communication, Types of Phone Calls, Video Conferencing, Effective Letter Writing, E-mail Writing and Report Writing.

Unit-4 Office Record Management

Meaning and Features of Record Management, Filing: Characteristics of a good filing system; Classîfication of Records for Filing (Alphabetical, Numerical etc.), Modern Methods-Vertical, Horizontal, lateral and suspensions; Equipment; Types of Files; Filing routine, Disposal of Obsolete Documents; Indexing: Importance; Types-Page Index Card Index; Strip Index; Rotary Index, Micro Filing: Merits and Demerits; Types-Roll Film, Fiche, Jackets etc. Meaning of Electronic Filing, Data Storage Management.

SYLLABUS

PRACTICAL

Communication skills (Resume Writing and Application for jobs).

Students will be imparted a practical knowledge regarding basics of computers. Operation of Scanners, Printers Photocopiers, Fax Machines and Other Office Appliances. Mail Merge.

CLASS - XI
50. AGRICULTURE

Time: 3 hrs

Theory : 60 Marks
Practical : 30 Marks
CCE : 10 Marks
Total: 100 Marks

STRUCTURE OF QUESTION PAPER (THEORY)

1. There will be one theory paper comprising of 28 questions. All questions will be compulsory.
2. Marks for each question are indicated against it.
3. Question Nos. 1-10 are objective type questions carrying 1 mark each. Answer to each question will be in one line or few words only.
4. Question Nos. 11-20 are very short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
5. Question Nos. 21-25 are short answer type questions carrying 3 marks each. Answer to each question will be in 80-100 words.
6. Question Nos. 26-28 are long answer type questions carrying 5 marks each. There will be 100% internal choice.
7. There will be no objective type questions such as yes/no, tick/cross, fill in the blanks, multiple choice, true/false etc.
8. The question paper should be strictly from the prescribed syllabus subject to the above mentioned guidelines.
9. Candidates will be provided with one answer book of 32 pages only. No extra/continuation sheet will be provided.

STRUCTURE OF QUESTION PAPER (PRACTICAL)

Time : 3 Hours **Marks: 30**

1. The question paper will be set up by the examiner on the spot.
2. A group of students for practical should not be more than 20 students.
3. There will be two sections in the question paper:
   (i) Soil and Crop Management Practices including Livestock Farming and Poultry Production.
   (ii) Agriculture Biology.
4. Practical note book — 5 marks
5. Viva-voce — 5 marks
6. 4 Practical of 5 marks each — 20 marks

SYLLABUS (THEORY)

Unit-1 SOIL AND SOIL MANAGEMENT

1. Elementary knowledge of rock and minerals, weathering of rocks, soil formation, soil profile, alkaline and acidic soils.

2. Elementary knowledge of soil texture and structure, properties of soiled separates (sand, silt and clay), textual classification of soils, Structural classification of soil, soil tillage.

3. Elementary knowledge of water, importance of water in plant growth, various methods of irrigation and water lifts, used in Punjab.

4. Elementary knowledge of soil fertility- Factors affecting soil fertility. Methods of maintaining soil fertility. Organic manures (compost, F.Y.M., oil cakes and green manures) and inorganic fertilizers (nitrogenous, phosphatic and potassic and mixed fertilizers). Introduction to micronutrients.

5. Elementary knowlede of water logging-causes and remedies.

6. Elementary knowledge of tillage, implements used.

UNIT-2 FARM CROP AND FARM MANAGEMENT
(Elementary knowledge)

1. Classification of crops, rotation of crops, crop mixture.

2. Study of the following crops with respect to their climatic and soil requirements, area, preparation of seedbed, time of sowing, seed rate, manurial requirement, spacing, interculture, irrigation, important pest diseases, harvesting, threshing, yield etc.

   (a) Wheat, barley, gram, toria, barseem, potato, peas, radish, carrot, turnip and onion.

   (b) Cotton, maize, sugarcane, rice, groundnut, bajra, sorghum, brinjal, okra, cauliflower, gourd, melons, tomato, sunflower.

3. Fruit tree-Importance of fruits and irrigatinal requirements for growing, layout of orchards: Cultivation of mango, guava, grapes, citrus, ber and peaches, important pests and diseases of fruit and their control.

4. Common weeds of the Punjab and their control.

5. Farm Management-Study of farming as business, costs of farm operations of major crops; sowing, interculture, harvesting and threshing, cost and income returns from major crops, simple farm records and accounts.

UNIT-3 AGRICULTURE BIOLOGY-BOTANY

1. Biology-its definitions, comparison of living and non-living things, difference between animals and plants.

2. Cell-structure and cell division in plants, simple tissues in plants.

3. Elements of plant classification including major groups with common examples.

4. Study of the forms, structure and functions of root, stem, leaf and flower.

5. Vegetative reproduction-natural and artificial.

6. Seed structure of gram, pea, maize and castor and germination of seed. Conditions necessary for germination. Dispersal of seed.

7. Elementary study of bacteria and fungi and their economic importance.

UNIT-4 AGRICULTURE BIOLOGY-ZOOLOGY

1. Study of animal cell-its structure and division of animals.
2. Study of simple tissues in animals.
3. Study of animal classification indicating major phyla with examples.
4. Protozoa-Study of Amoeba and Entamoeba.
5. Study of external characters of Liver fluke, Ascaris, Earthworm and their economic importance.
6. Study of general characters of insects with specific reference to the study of external characters of ak-grass hopper.
7. Study of external characters of frog, fish and rabbit.
8. Economic importance of mammals.

SYLLABUS (PRACTICAL)

Time : 3 Hrs **Marks: 30**

SOIL MANAGEMENT AND CROP CULTURE

1. Identification of soil by feel and touch method. Measurement of land.
2. Familiarity with farm implements and their handling, ploughing, preparation of seed-bed, sowing and harvesting of major field crops and vegetables and their harvesting.
3. Identification of common weeds, crops and their seed and fruit trees.

AGRICULTURE BIOLOGY

PART-A

General survey of plant kingdom, study of simple tissues of plant, structure and form of root, stem, leaf and flower. Demonstration of grafting, layering, budding, cutting,; Demonstration of studies of bacteria and fungi.

PART-B

1. General survey of animal kingdom.
2. Study of external characters of amoeba, liver fluke, ascaris, earthworm, ak-grass, hopper, frog, fish and rabbit.

Note: Students will do all the practical work of the farm attached to the school and record in the practical note book maintained for this purpose.