

**PUNJAB SCHOOL EDUCATION BOARD SYLLABI  
OF  
ACADEMIC STREAM  
CLASS - XI**



**ACADEMIC YEAR 2012-13**

**VIDYA BHAWAN, PHASE-VIII SAHIBZADA AJIT SINGH NAGAR (MOHALI)**

**CLASS - XI**  
**1. GENERAL ENGLISH**

**Time :- 3 hours**

**Theory : 50 marks**  
**CCE: 25 marks**  
**Total: 75 marks**

**STRUCTURE OF QUESTION PAPER**

**Do all questions**

**Part-A (10 marks)**

- 1 Objective type question (10 questions) based on total syllabus.
- a) Grammar 6 marks
  - b) 'I AM THE PEOPLE' 2 marks
  - c) 'STORIES, PLAYS & TALES OF ADVENTURE' 2 marks

**Part-B (I Am The People) (19 marks)**

- 2 a) Comprehension passage 8 marks
- b) Essay type question (one out of two) in about 100 words. 4 marks
- 3 a) Summary of a poem (1 out of 2 poems) 4 marks
- b) Translation from English into Vernacular. 3 marks

**Part-C (Stories, Plays & Tales of Adventure) (10 marks)**

- 4 a) Short answer type questions (3 out of 5 questions) 3x2=6 marks
- b) Essay type question (one out of two) in about 100 words. 4 marks

**Part - D (11 marks)**

- 5 a) Letter writing (personal) (one out of two) 6 marks
- b) Essay writing (Simple/Descriptive/Narrative) (one out of three) 5 marks

**MARKING SCHEME FOR COMPREHENSION**

<b>S.No.</b>	<b>Questions</b>	<b>M.M. 8</b>
1.	Name of the writer and the chapter	2 marks
2.	Short question	1 mark
3.	Short question	1 mark
4.	Short question	1 mark
5.	Match the following words with their meanings	2 marks
6.	Fill in the blanks with a suitable word from the passage	1 mark

## INSTRUCTIONS FOR OBJECTIVE TYPE QUESTION

**Objective type question will cover the whole syllabus.**

**Q1.a) Do as directed:**

- Change the Tense (2)
- Change the Voice (2)
- Change the Narration (1)
- Common Errors

Or

- Simple Idioms (1)
- b) One line answer questions from 'I AM THE PEOPLE'. (2)
- c) One line answer questions from 'STORIES, PLAYS AND TALES OF ADVENTURE' (2)

## SYLLABUS

### **Book-1: I AM THE PEOPLE**

1. The Portrait of a Lady
2. The Kite Maker
3. My Struggle for an Education
4. A Dialogue on Civilization
5. Paul Julius Reuter
6. The Appointed Day
7. No Time For Fear
8. Father Has a Bad Night
9. To Sir, with Love
10. Taming the Atom
11. Hunting Big Game with the Camera

### **Poems**

1. I am the People-the Mob
2. Success is Counted Sweetest
3. Upagupta
4. The Little Black Boy
5. The Eagle
6. Snake
7. Confessions of a Born Spectator

### **Book-II: Stories, Plays and Tales of Adventure**

1. Sparrows
2. The Last Leaf
3. My Brother, My Brother
4. The Other Side
5. My Lost Dollar
6. The Pomegranate Trees
7. The Model Millionaire
8. The Count's Revenge

9. My Ordeal in a Jungle Air Crash
10. Escape Velocity
11. "Don't Die, Graham! Don't Die!" Please

**I) GRAMMAR**

- (a) Tenses
- (b) Voice (simple)
- (c) Reported Speech (simple)
- (d) Simple idioms
- (e) Common errors

**II) COMPOSITION**

- (a) Paragraph writing
- (b) Letter writing (Personal)
- (c) Essay writing (Simple/Descriptive/Narrative)

**ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ**  
**2. ਪੰਜਾਬੀ (ਲਾਜ਼ਮੀ)**

ਸਮਾਂ : 3 ਘੰਟੇ

ਲਿਖਤੀ ਪੇਪਰ: 50 ਅੰਕ  
ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ: 25 ਅੰਕ  
ਕੁੱਲ : 75 ਅੰਕ

**ਅੰਕ ਵੰਡ ਅਤੇ ਪਾਠ-ਕ੍ਰਮ**

ਲੜੀ ਨੰ:	ਪਾਠ-ਕ੍ਰਮ	ਅੰਕ
1.	ਪੰਜਾਬੀ ਲੋਕ ਸਾਹਿਤ:- ਲੋਕ-ਗੀਤ ਅਤੇ ਲੋਕ-ਕਥਾਵਾਂ	14
2.	ਅੰਗਰੇਜ਼ੀ ਤੋਂ ਪੰਜਾਬੀ ਵਿੱਚ ਅਨੁਵਾਦ (ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ:- ਬੈਂਕ, ਰੇਲਵੇ, ਡਾਕ ਅਤੇ ਬੀਮਾ ਸੇਵਾਵਾਂ ਨਾਲ ਸੰਬੰਧਿਤ ਵਾਕਾਂ ਵਿੱਚ ਵਰਤੋਂ)	10
3.	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਲਿਖਣ ਦਾ ਹੁਨਰ:- ਅਖ਼ਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ	20
4.	ਵਿਆਕਰਨ:- ਮੁਹਾਵਰੇ	6
<b>ਕੁੱਲ ਅੰਕ</b>		<b>50</b>

**ਪਾਠ-ਕ੍ਰਮ ਦਾ ਵੇਰਵਾ**

1. **ਪੰਜਾਬੀ ਲੋਕ-ਸਾਹਿਤ**
  - (i) ਲੋਕ-ਗੀਤ :- ਸੁਹਾਗ, ਘੋੜੀ, ਸਿੱਠਣੀ, ਟੱਪਾ, ਬੋਲੀ, ਢੋਲਾ, ਮਾਹੀਆ।
  - (ii) ਲੋਕ ਕਥਾਵਾਂ :-
    1. **ਮਿੱਥ ਕਥਾਵਾਂ:**  
ਪ੍ਰਹਿਲਾਦ ਭਗਤ, ਨਲ ਦਮਿਅੰਤੀ
    2. **ਪਰੀ ਕਥਾਵਾਂ ਤੇ ਨੀਤੀ ਕਥਾਵਾਂ:**  
ਨੀਲ ਕਮਲ, ਸਬਜ਼ ਪਰੀ, ਲਾਲਸਾ ਦੀ ਚੱਕੀ
    3. **ਦੰਤ ਕਥਾਵਾਂ:**  
ਪੂਰਨ ਭਗਤ, ਰਾਜਾ ਰਸਾਲੂ, ਦੁੱਲਾ ਭੱਟੀ
    4. **ਪ੍ਰੀਤ ਕਥਾਵਾਂ:**  
ਹੀਰ ਰਾਂਝਾ, ਮਿਰਜ਼ਾ ਸਾਹਿਬਾਂ
2. **ਅੰਗਰੇਜ਼ੀ ਤੋਂ ਪੰਜਾਬੀ ਵਿੱਚ ਅਨੁਵਾਦ**
  - (i) ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ : ਦਫ਼ਤਰੀ ਸ਼ਬਦਾਵਲੀ, ਵੱਖ-ਵੱਖ ਵਿਸ਼ਿਆਂ ਨਾਲ ਸੰਬੰਧਿਤ ਸ਼ਬਦਾਵਲੀ।
  - (ii) ਬੈਂਕ ਰੇਲਵੇ, ਡਾਕ ਤੇ ਬੀਮਾ ਸੇਵਾਵਾਂ ਨਾਲ ਸੰਬੰਧਿਤ ਵਾਕ।
3. **ਅਖ਼ਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ (ਕਿਸੇ ਮਸਲੇ/ਘਟਨਾ ਬਾਰੇ)**
4. **ਇਸ਼ਤਿਹਾਰ/ਸੱਦਾ ਪੱਤਰ:**  
[ਖੁਸ਼ੀ, ਗ਼ਮੀ ਜਾਂ ਕਿਸੇ ਹੋਰ ਸਮਾਗਮ ਦਾ ਸੱਦਾ-ਪੱਤਰ, ਅਖ਼ਬਾਰਾਂ ਨੂੰ ਦੇਣ ਲਈ ਨਿੱਜੀ ਇਸ਼ਤਿਹਾਰ (ਪ੍ਰਾਈਵੇਟ ਅਤੇ ਸਰਕਾਰੀ ਸੰਸਥਾਵਾਂ ਦੇ ਇਸ਼ਤਿਹਾਰ ਨਹੀਂ ਹੋਣਗੇ)]
5. **ਪੈਰਾ ਰਚਨਾ : (ਲਗ-ਪਗ 150 ਸ਼ਬਦਾਂ ਦੀ)**
6. **ਮੁਹਾਵਰੇ (ਲਗ-ਪਗ 100 ਮੁਹਾਵਰੇ)**
- # **ਨਿਰਧਾਰਿਤ ਪਾਠ-ਪੁਸਤਕ : ਲਾਜ਼ਮੀ ਪੰਜਾਬੀ-11 ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ।**

## ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ

**ਪਰੀਖਿਆ ਪੱਖੋਂ ਅਧਿਆਪਕਾਂ, ਵਿਦਿਆਰਥੀਆਂ, ਪੇਪਰ ਸੈਂਟਰਾਂ ਅਤੇ ਪਰੀਖਿਅਕਾਂ ਲਈ ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ**

- ਪ੍ਰਸ਼ਨ ਨੰ: 1 ਸਮੁੱਚੇ ਪਾਠ-ਕ੍ਰਮ ਦੇ ਆਧਾਰ ਤੇ ਸੰਖੇਪ ਉੱਤਰਾਂ ਵਾਲੇ ਦੱਸ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ  $1/2$  ਅੰਕ ਹੋਵੇਗਾ।  
ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ :-
- (ੳ) **ਪੰਜਾਬੀ ਲੋਕ-ਸਾਹਿਤ** : 1 ਅੰਕ (ਬਹੁ-ਚੋਣ, ਠੀਕ/ਗਲਤ, ਖ਼ਾਲੀ ਥਾਂਵਾਂ ਜਾਂ ਇੱਕ ਦੋ ਸ਼ਬਦਾਂ ਦੇ ਉੱਤਰ ਵਾਲੇ ਪ੍ਰਸ਼ਨ)
- (ਅ) **ਲੋਕ-ਗੀਤ** : 1 ਅੰਕ ਦੇ ਦੋ ਪ੍ਰਸ਼ਨ - ਇੱਕ ਪ੍ਰਸ਼ਨ ਨਿਰਧਾਰਿਤ ਪਾਠ-ਸਮਗਰੀ ਵਿੱਚ ਦਿੱਤੀਆਂ ਪਰਿਭਾਸ਼ਾਵਾਂ ਅਤੇ ਇੱਕ ਪ੍ਰਸ਼ਨ ਨਿਰਧਾਰਿਤ ਪਾਠ-ਸਮਗਰੀ ਦੇ ਆਧਾਰ ਤੇ ਪੁੱਛਿਆ ਜਾਵੇਗਾ।
- (ੲ) **ਲੋਕ ਕਥਾਵਾਂ** : 1 ਅੰਕ ਦੇ ਦੋ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ ਇੱਕ ਪ੍ਰਸ਼ਨ ਭਿੰਨ-ਭਿੰਨ ਲੋਕ-ਕਥਾਵਾਂ ਦੀ ਪਰਿਭਾਸ਼ਾ ਸੰਬੰਧੀ ਅਤੇ ਇੱਕ ਪ੍ਰਸ਼ਨ ਪਾਤਰਾਂ ਸੰਬੰਧੀ ਪੁੱਛਿਆ ਜਾਵੇਗਾ।
- (ਸ) **ਅੰਗਰੇਜ਼ੀ ਤੋਂ ਪੰਜਾਬੀ ਅਨੁਵਾਦ** : 1 ਅੰਕ (ਸਿੱਧਾ ਅਰਥ ਪੁੱਛਣਾ, ਬਹੁ-ਚੋਣ, ਮਿਲਾਨ ਕਰਨਾ) ਤਕਨੀਕੀ ਸ਼ਬਦਾਵਲੀ ਤੇ ਆਧਾਰਿਤ 2 ਪ੍ਰਸ਼ਨ ਇਸ ਅਧੀਨ ਪੁੱਛੇ ਜਾਣਗੇ ਅਤੇ ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ  $1/2$  ਅੰਕ ਹੋਵੇਗਾ।
- (ਹ) **ਮੁਹਾਵਰੇ**:- 1 ਅੰਕ ( $1/2$  ਅੰਕ ਵਰਤੋਂ ਸਥਿਤੀ ਦੱਸ ਕੇ ਦੁਕਵਾਂ ਮੁਹਾਵਰਾ ਪੁੱਛਣ,  $1/2$  ਅੰਕ ਮੁਹਾਵਰੇ ਦੇ ਅਰਥ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਬਹੁ-ਚੋਣੀ ਪ੍ਰਸ਼ਨ)  $10 \times 1/2 = 5$  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।  $3+3=6$  ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 3 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। 3 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।  $6 \times 1/2 = 3$  ਅੰਕ  
(ਅ) ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੇ ਗਏ ਬੈਂਕ, ਰੇਲਵੇ, ਡਾਕ ਅਤੇ ਬੀਮਾ-ਸੇਵਾਵਾਂ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਅੱਠ ਵਾਕ ਦੇ ਕੇ ਕੋਈ ਪੰਜ ਵਾਕਾਂ ਦਾ ਪੰਜਾਬੀ ਅਨੁਵਾਦ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।  $5 \times 1 = 5$  ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 5 ਕਿਸੇ ਮਸਲੇ/ਘਟਨਾ ਬਾਰੇ ਕਿਸੇ ਅਖ਼ਬਾਰ ਦੇ ਸੰਪਾਦਕ ਨੂੰ ਪੱਤਰ ਲਿਖਣ ਲਈ ਦੋ ਵਿਸ਼ੇ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਬਾਰੇ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।  $11/2 + 4 + 11/2 = 7$  ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 6 ਪੰਜਾਬੀ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੀਆਂ ਵੰਨਗੀਆਂ ਅਨੁਸਾਰ ਇੱਕ ਇਸ਼ਤਿਹਾਰ ਜਾਂ ਸੱਦਾ ਪੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 8 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 7 ਕੋਈ ਤਿੰਨ ਵਿਸ਼ੇ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਵਿਸ਼ੇ ਬਾਰੇ ਲਗ-ਪਗ 15● ਸ਼ਬਦਾਂ ਦੀ ਪੈਰਾ-ਰਚਨਾ ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 8 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 8 ਪੰਜਾਬੀ ਪਾਠ- ਪੁਸਤਕ ਵਿੱਚੋਂ ਕੋਈ ਅੱਠ ਮੁਹਾਵਰੇ ਦੇ ਕੇ ਕਿਸੇ ਪੰਜ ਨੂੰ ਵਾਕਾਂ ਵਿੱਚ ਵਰਤਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ।  $5 \times 1 = 5$  ਅੰਕ

**Time: 3 hrs.****Theory: 50 Marks****CCE: 25 Marks****Total: 75 Marks****STRUCTURE OF QUESTION PAPER**

- There will be 20 questions in all. All questions will be compulsory.
- Question No. 1 to 10 will carry 1 mark each. Answer to each question should be in about 1 - 15 words.  $10 \times 1 = 10$
- Question No. 11 to 15 will carry 2 marks each. Answer to each question should be in about 30- 35 words.  $5 \times 2 = 10$
- Question No. 16 to 19 will carry 5 marks each with 100% internal choice. Answer to each question should be in about 75-85 words.  $4 \times 5 = 20$
- Question No. 20 will carry 10 marks with 100% internal choice. Answer to each question should be in about 250 - 300 words.  $1 \times 10 = 10$

TOPIC NO.	Questions carrying 1 mark	Questions carrying 2 marks	Questions carrying 5 marks	Questions carrying 10 marks
1, 2, 3,4	4	2	2	1
5,6,7,8,9,	6	3	2	(with 100% choice) 1
<b>Total questions</b>	10	5	4	1
<b>Total marks</b>	10	10	20	10

**Syllabus**

- The land of the people.
- The age of the Harappa Culture.
- The Age of the Vedic Aryans.
- From the Buddha to Ashoka.
- Invasions and impact.
- The Gupta-Vardhana Age.
- The Turks in the Punjab.
- Education and Literature.
- Art and Architecture.
- The Siddhas and the Sufis.

## 4. ENVIRONMENT EDUCATION

### ENVIRONMENTAL EDUCATION Annual Examination 2012-13 CLASS – XI

Time: 2 Hrs

Theory Marks : 35  
CCE : 15  
Total Marks : 50

#### Theory Structure of Question paper

1. There will be one theory paper comprising of 16 questions. All questions will be compulsory.
2. Question No. 1-5 are very short answer type questions 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 short answer type questions carrying 3 marks each. Answer to each question will be in 40-50 words.
5. Question No. 16 is long answer type question carrying 5 marks. Answer to this question will be in 80-100 words.
6. In Question No 16, 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	Marks
Unit I Man and Environment	7- Marks
Unit II Environment and Development	7- Marks
Unit III Environment Pollution of Global issues	8- Marks
Unit VI Energy	8- Marks
Unit V Safe work Environment and Occupational Hazards	5- Marks

#### Unit -1 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 Environment 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 campaigns, 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 pollution-sources and consequences.
  - 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 mitigation.

### **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 fuels and firewood, potential (Indian 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 sources-efficiency in production, transportation and utilization of energy.
- Future sources of energy-hydrogen, alcohol, fuel cells.

## **Unit-V Safe Work Environment and Occupational Hazards**

### **15. Safe Work Environment**

- Safe work environment-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 material.
- 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.

## **CCE**

### **Instructions for CEE (15 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 environment cleanliness, planting trees, developing herbal gardens, growing ornamental plants, medicinal plants and participating in environment 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. Each project will carry  $7\frac{1}{2}$  marks. So over all evaluation of the student will be based on his/ her performance and contribution to environment.

**Class-XI****5. Computer Science****Time: 3 Hrs**

**Theory : 30 Marks**  
**Practical : 40 Marks**  
**CCE : 30 Marks**  
**Total : 100 marks**

**Structure of Question Paper (Theory Paper)**

1. There will be three sections i.e. A,B,C of the question paper
2. In section A, Question No.1 to 8 are objective type questions, each question will carry 1 mark. Answer of each question should be in one word or about one line.
3. In section B, Question No. 9 to 13 will carry 2 marks each.
4. In section C, Question No. 14 to 16 will carry 4 marks each.
5. All questions of Section A and B will be compulsory. Each question in Section B & C may have two or more than two parts. In Section C, there will be 100% internal choice.

<b>Sr. No.</b>	<b>Chapter</b>	<b>Total Marks</b>	<b>1 Marks questions</b>	<b>2 Marks questions</b>	<b>4 Marks questions.</b>
1	Programming in 'C' Language	5	1	-	1
2	Constant, Variables & Data Types	3	1	1	-
3	Operators & expression	5	1	-	1
4	Control Flow (Part-I)	3	1	1	-
5	Control Flow (Part-II)	3	1	1	-
6	Arrays (Part-I)	3	1	1	-
7	Arrays (Part-II)	3	1	1	-
8	Desktop Publishing	5	1	-	1
		30	8	5	3

**SYLLABUS**  
**(Theory Paper)**

**Time: 3 Hrs**

**Theory : 30 Marks**  
**Practical : 40 Marks**  
**CCE : 30 Marks**  
**Total : 100 Marks**

**Revision of Class X**

- Review on software concepts
- System Software: Operating system, utilities software, Application software
- Review on Excel: (Data Types, Formula & Functions) Excel & Financial Data, Count if function, IF, AND, OR & NOT function (logical), V LOOK up function, V LOOK up formula.
- Review on HTML: web pages, words to know (Tag, Element, Attribute) What is HTML file, Tables & the Border attributes.
- Review of Microsoft Access: Manipulating Data, Access, Database of Objects (Table, Queries, Forms, Reports, Pages, Data Base Window)

- Review on Programming Concepts: The Various stages of a program development Cycle (Analyzing the problem, Development of Solution, coding the solution, Testing the program), Elements of Programming Language.

## **1. Programming in 'C' Language**

- Introduction
- Distinctive Features of C language
- The Character Set: Execution of Escape Characters, White space Characters.
- Structure of a C Program: Header Files, Preprocessor statement, directives, Global Declaration (main(), Braces, Declaration, Statements), Compiling and execution of C program.
- Use of Editor
- Function : Built in Function, user defined Function.
- Formatted I/O function [ scanf() & printf() function]
- starting with C programming : Installing Turbo C, Compiling the program and executing the program

## **2. Constant, Variables & DataTypes**

- Introduction
- Constants / Literals: The types of Constants (Numeric Constant, Character Constants, String Constants)
- Types of C variables: Delimiters, Declaration / Initialization of variables (data types, varlist, semicolon, assigning values to the variables), storing constant in a variable.
- Data Types: Built in data types (integer (int), Character data type (Char), Double, The void data type, The main function Header)
- Tokens (Identifiers, keywords, constants, operators): Keywords and identifiers, Type Modifier or Qualifier, unsigned int, Double long.

## **3. Operators and Expression**

- Introduction
- Operators and Expressions: Expression, Binary, Operator, Arithmetic Operators, Operations & Hierarchal order.
- Relational & Logical Operator: Relational Operator, Logical Operators (Logical AND (&&) operator, Logical OR (::), Logical NOT (!)), Assignment Operator, Increment & Decrement operators, Ternary Operator, Size of ( ) Operator, Bitwise Operator.

## **4. Control Flow (Part-I)**

- Introduction: Branching, Looping, Jumping
- Decision making statements: If statement, if else statement
- Switch Statement
- The Break statement
- Continue statement

## **5. Control Flow (Part-II)**

- Introduction
- Control loop structures: The while statement, Do while statement, For statement (Loop)

## **6. Arrays (Part-I)**

- Introduction
- Declaring and initialization of array: Initializing arrays
- Some special rule: Entering data into an Array
- Copying Array
- Accessing the value of an array.
- manipulation of array elements: sum of elements

## **7. Arrays (Part-II)**

- Introduction
- Two dimensional array: Declaration of Two dimensional arrays, Let us see representation of 2 dimensional array, initialization of 2 dimensional array, initialization of the two dimensional array elements.
- Memory occupation in two dimensional array elements
- Multidimensional Arrays character type: Accessing elements of multi dimensional arrays, initialization of char type multi dimensional arrays, tow dimensional array of char word processing
- Single Character input output
- # Define directive

## **8. Desktop Publishing**

- Introduction to DTP
- Printing Documents
- Printing Methods: Offset Printing (Lithography), Laser printing
- Fonts
- Scaling, Tracking and Leading
- Frames
- Page Layouts
- WYSIWYG (what you see is what you get)
- Advantages of DTP over word processor
- Document Planning : Page layout, Style, Margin, Header and Footer, Font

### **Computer Science (Practical Paper)**

#### **INSTRUCTIONS**

**Time: 3 Hrs**

**40 Marks**

#### **The Division of marks for examination is given below:**

Section -A	VIVA	5
Section -B	Program Record File	5
Section -C	Minor Program	10
Section -D	Major Program	20

1. There will be five questions asked from section A .Each question will carry one mark. These questions are objective types or explanation or different parts of computer and small exercises related to it. 1×5=5 Marks
2. The record of student will check from the section B. 5 Marks
3. Three questions will be set in section C in which student has to attempt two program/questions. Each program/question carrying 5 marks, for each question/program the internal division of marks will be done by paper setter. 2×5=10 Marks
4. There will be three questions/programs set in section D, In which student has to attempt only two .Each question/program will carry 10 marks, for each question/program the internal division of marks will be done by paper setter. 2×10=20 Marks

## **Revision of Class X**

- Excel
- HTML
- Microsoft Access: Manipulating Data, Access , Objects of Database

### **1. Programming in 'C' Language**

- Structure of a C Program: Compiling and execution of C program.
- Use of Editor
- Function : Built in Function, user defined Function.
- Formatted I/O function [ scanf() & printf() function]
- starting with C programming : Installing Turbo C, Compiling the program and executing the program, Installation , Operators

### **2. Control Flow (Part-I)**

- Decision making statements: If statement, if else statement
- Switch Statement
- The Break statement
- Continue statement

### **3. Control Flow (Part-II)**

- Control loop structures: The while statement, Do while statement, For statement (Loop)

### **4. Arrays (Part-I)**

- Some special rule: Entering data into an Array
- Copying Array
- Accessing the value of an array.
- Manipulation of array elements: sum of elements, Product of elements, Average of elements, finding Min & Max.

### **5. Arrays (Part-II)**

- Two dimensional array: Declaration & initialization of the two dimensional array elements.
- Multidimensional Arrays: Elements, Initialization, Two dimensional Array, Single Character input output

### **6. Desktop Publishing**

- Printing a document.
- Printing Methods: Offset Printing (Lithography), Laser printing
- Fonts
- Frames
- Page Layouts
- Document Planning : Page layout, Style, Margin, Header and Footer, Font

**ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ**  
**1. ਪੰਜਾਬੀ (ਚੋਣਵਾਂ ਵਿਸ਼ਾ)**  
**ਪਾਠ-ਕ੍ਰਮ ਅਤੇ ਅੰਕ-ਵੰਡ**

ਸਮਾਂ : 3 ਘੰਟੇ

ਲਿਖਤੀ ਪੇਪਰ: 70 ਅੰਕ  
 ਆਂਤਰਿਕ ਮੁਲਾਂਕਣ: 30 ਅੰਕ  
 ਕੁੱਲ : 100 ਅੰਕ

ਲੜੀ ਨੰ:	ਪਾਠ-ਕ੍ਰਮ	ਅੰਕ
1.	ਪੰਜਾਬੀ-ਕਾਵਿ:- ਸੂਫੀ-ਕਾਵਿ ਅਤੇ ਗੁਰਮਤਿ-ਕਾਵਿ	30
2.	ਪੰਜਾਬੀ ਵਾਰਤਕ :- ਸਫ਼ਰਨਾਮਾ ਅੰਸ਼	20
3.	ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ	12
4.	ਪੰਜਾਬੀ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ ਦੀ ਸ਼ਬਦਾਵਲੀ	8
<b>ਕੁੱਲ ਅੰਕ</b>		<b>70</b>

**ਪਾਠ-ਕ੍ਰਮ ਦਾ ਵੇਰਵਾ**

1. **ਪੰਜਾਬੀ ਕਵਿਤਾ**
  - (i) ਸੂਫੀ-ਕਾਵਿ
  - (ii) ਗੁਰਮਤਿ-ਕਾਵਿ
2. **ਪੰਜਾਬੀ ਕਵਿਤਾ ਦਾ ਸੰਖੇਪ ਇਤਿਹਾਸ**
  - (i) ਸੂਫੀ-ਕਾਵਿ
  - (ii) ਗੁਰਮਤਿ-ਕਾਵਿ
3. **ਪੰਜਾਬੀ ਸਫ਼ਰਨਾਮਿਆਂ ਦੇ ਅੰਸ਼**
4. **ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ**  
 (ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਤੇ ਗੁਰਮੁਖੀ ਲਿਪੀ ਦੇ ਨਿਕਾਸ, ਵਿਕਾਸ ਤੇ ਵਿਸ਼ੇਸ਼ਤਾਵਾਂ ਬਾਰੇ ਮੁਢਲੀ ਜਾਣਕਾਰੀ)
5. **ਪੰਜਾਬੀ ਦੀਆਂ ਉਪ-ਭਾਸ਼ਾਵਾਂ ਦੀ ਸ਼ਬਦਾਵਲੀ**  
 (ਪੋਠੋਹਾਰੀ, ਮਾਝੀ, ਦੁਆਬੀ, ਮਲਵਈ, ਪੁਆਧੀ)  
 ਉਪਭਾਸ਼ਾਵਾਂ ਦੇ 200 ਸ਼ਬਦਾਂ ਦਾ ਟਕਸਾਲੀ ਪੰਜਾਬੀ ਵਿੱਚ ਰੂਪਾਂਤਰ

**ਪਾਠ-ਪੁਸਤਕਾਂ:**

- |  |                        |
|--|------------------------|
| 1. ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) ਭਾਗ-1 | ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ |
| 2. ਅੱਖੀਂ ਡਿੱਠੀ ਦੁਨੀਆਂ                  | ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ |
| 3. ਸਾਹਿਤ-ਬੋਧ (ਭਾਗ-1)                   | ਪੰਜਾਬ ਸਕੂਲ ਸਿੱਖਿਆ ਬੋਰਡ |

**ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ**

**ਅਧਿਆਪਕਾਂ, ਵਿਦਿਆਰਥੀਆਂ, ਪੇਪਰ ਸੈਂਟਰਾਂ ਅਤੇ ਪਰੀਖਿਅਕਾਂ ਲਈ ਵਿਸ਼ੇਸ਼ ਹਿਦਾਇਤਾਂ।**

ਪ੍ਰਸ਼ਨ ਨੰ:1 ਸਮੁੱਚੇ ਪਾਠ-ਕ੍ਰਮ ਦੇ ਅਧਾਰ 'ਤੇ 10 ਅੰਕਾਂ ਦੇ ਵਸਤੂ-ਨਿਸ਼ਠ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ। ਇਹ ਪ੍ਰਸ਼ਨ ਬਹੁ-ਚੋਣ, ਠੀਕ/ਗਲਤ, ਖਾਲੀ ਥਾਂਵਾਂ ਜਾਂ ਇੱਕ ਜਾਂ ਦੋ ਸ਼ਬਦਾਂ ਵਿੱਚ ਉੱਤਰ ਦੇਣ ਵਾਲੇ ਹੋਣਗੇ। ਅੰਕਾਂ ਦੀ ਵੰਡ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਹੋਵੇਗੀ :-



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

- (ੳ) **ਸੂਫੀ-ਕਾਵਿ:** 2 ਅੰਕ (ਇੱਕ ਪ੍ਰਸ਼ਨ ਰਚਨਾ ਦਾ ਕਵੀ ਜਾਂ ਕਵੀ ਦੀ ਰਚਨਾ ਨਾਲ਼ ਸੰਬੰਧਿਤ, ਦੂਜਾ ਪ੍ਰਸ਼ਨ ਪਾਠ ਸਮਗਰੀ 'ਤੇ ਆਧਾਰਿਤ ਹੋਵੇਗਾ)।
- (ਅ) **ਗੁਰਮਤਿ -ਕਾਵਿ:** 2 ਅੰਕ (ਇੱਕ ਪ੍ਰਸ਼ਨ ਰਚਨਾ ਦਾ ਕਵੀ ਜਾਂ ਕਵੀ ਦੀ ਰਚਨਾ ਨਾਲ਼ ਸੰਬੰਧਿਤ, ਦੂਜਾ ਪ੍ਰਸ਼ਨ ਪਾਠ-ਸਮਗਰੀ 'ਤੇ ਆਧਾਰਿਤ ਹੋਵੇਗਾ)।
- (ੲ) **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)।
- (ਸ) **ਸਾਹਿਤ-ਬੋਧ(ਭਾਗ-1) :** 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। 10×1=10 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 2 ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) (ਭਾਗ-1) ਪਾਠ-ਪੁਸਤਕ ਦੇ ਸੂਫੀ-ਕਾਵਿ ਵਿੱਚੋਂ ਦੋ ਬੰਦ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 2+4=6 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 3 ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) (ਭਾਗ-1) ਪਾਠ-ਪੁਸਤਕ ਦੇ ਗੁਰਮਤਿ-ਕਾਵਿ ਭਾਗ ਵਿੱਚੋਂ ਦੋ ਬੰਦ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦੀ ਪ੍ਰਸੰਗ ਸਹਿਤ ਵਿਆਖਿਆ ਕਰਨ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 2+4=6 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 4 ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ) (ਭਾਗ-1) ਪਾਠ-ਪੁਸਤਕ ਦੇ ਸੂਫੀ-ਕਾਵਿ ਅਤੇ ਗੁਰਮਤਿ-ਕਾਵਿ ਭਾਗਾਂ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਰਚਨਾਵਾਂ ਦਾ ਪੂਰਾ ਪਾਠ ਦੇ ਕੇ ਕੇਂਦਰੀ ਭਾਵ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 4 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 5 ਪੰਜਾਬੀ-ਕਾਵਿ (ਝਲਕਾਂ ਤੇ ਇਤਿਹਾਸ)(ਭਾਗ-1) ਪਾਠ-ਪੁਸਤਕ ਦੇ 'ਪੰਜਾਬੀ ਕਵਿਤਾ ਦਾ ਸੰਖੇਪ ਇਤਿਹਾਸ' ਭਾਗ ਵਿੱਚੋਂ ਸੂਫੀ-ਕਾਵਿ ਅਤੇ ਗੁਰਮਤਿ-ਕਾਵਿ ਭਾਗਾਂ ਉੱਤੇ ਆਧਾਰਿਤ ਦੋ ਪ੍ਰਸ਼ਨ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ ਕੋਈ ਦੋ ਰਚਨਾਵਾਂ ਦਾ ਪੂਰਾ ਪਾਠ ਦੇ ਕੇ ਕੇਂਦਰੀ ਭਾਵ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 10 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 6 ਅੱਖੀਂ ਡਿੱਠੀ ਦੁਨੀਆ ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚੋਂ ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲ਼ੇ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਪੁੱਛ ਕੇ ਕਿਸੇ ਦੋ ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 4+4=8 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 7 ਅੱਖੀਂ ਡਿੱਠੀ ਦੁਨੀਆ ਵਿੱਚੋਂ ਦੋ ਸਫ਼ਰਨਾਮਾ-ਅੰਸ਼ ਦੇ ਕੇ ਕਿਸੇ ਇੱਕ ਦਾ ਸਾਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 10 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 8 ਸਾਹਿਤ-ਬੋਧ(ਭਾਗ-1) ਪਾਠ-ਪੁਸਤਕ 'ਤੇ ਆਧਾਰਿਤ, ਪੰਜਾਬੀ ਭਾਸ਼ਾ ਅਤੇ ਗੁਰਮਤਿ ਲਿਪੀ ਨਾਲ਼ ਸੰਬੰਧਿਤ ਚਾਰ ਪ੍ਰਸ਼ਨ ਪੁੱਛ ਕੇ ਕਿਸੇ ਦੋ ਦਾ ਉੱਤਰ ਲਿਖਣ ਲਈ ਕਿਹਾ ਜਾਵੇਗਾ। 5+5=10 ਅੰਕ
- ਪ੍ਰਸ਼ਨ ਨੰ: 9 ਸਾਹਿਤ-ਬੋਧ(ਭਾਗ-1) ਪਾਠ-ਪੁਸਤਕ ਵਿੱਚ ਦਿੱਤੀ ਪੰਜਾਬੀ ਦੀਆਂ ਉਪਭਾਸ਼ਾਵਾਂ ਦੀ ਸ਼ਬਦਾਵਲੀ 'ਤੇ ਆਧਾਰਿਤ ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ-  
 (ੳ) ਪੰਜ ਉਪਭਾਸ਼ਾਈ ਸ਼ਬਦ ਦੇ ਉਹਨਾਂ ਵਿੱਚੋਂ ਕਿਸੇ ਤਿੰਨ ਦੇ ਟਕਸਾਲੀ ਪੰਜਾਬੀ ਵਿੱਚ ਰੂਪਾਂਤਰ ਪੁੱਛੇ ਜਾਣਗੇ।  
 (ਅ) ਪੰਜ ਟਕਸਾਲੀ ਪੰਜਾਬੀ ਦੇ ਸ਼ਬਦ ਦੇ ਕੇ ਕਿਸੇ ਤਿੰਨ ਦਾ ਉਪਭਾਸ਼ਾ ਵਿੱਚ ਮਿਲ਼ਦਾ ਰੂਪ ਪੁੱਛਿਆ ਜਾਵੇਗਾ। 3+3=6 ਅੰਕ

## 2 . HINDI

समय : 3 घंटे	पाठ्यक्रम विषय : हिंदी कक्षा : ग्यारहवीं	पूर्णांक -70 सी.सी.ई- 30
भाग-क : अति लघूत्तर प्रश्न		10
1. संधि : स्वर संधि ,व्यंजन संधि तथा विसर्ग संधि		(4)
2. वाक्य विश्लेषण / संश्लेषण		(2)
3. पारिभाषिक शब्दावली		(4)
भाग-ख : पाठ्य -पुस्तक		26
भाग-ग : हिंदी साहित्य का इतिहास ( आदिकाल एवं भक्तिकाल)		14
भाग-घ : रचनात्मक लेखन		10
1. पत्र- लेखन		(6)
2. अनुच्छेद लेखन		(4)
भाग-ङ : व्यावहारिक ज्ञान		10
1. पंजाबी वाक्यों का हिंदी अनुवाद		(5)
2. संक्षेपीकरण अथवा रस (शृंगार,करुण,हास्य,शांत,रौद्र,वीर,अद्भुत,भयानक और वीभत्स)		(5)
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

समय : 3 घंटे	विषय : हिंदी	पूर्णांक -70
	कक्षा : ग्यारहवीं	सी.सी.ई - 30

प्रश्न-पत्र के पाँच भाग होंगे।

भाग-क : (अति लघूत्तर प्रश्न)

10

- प्रश्न-1 (i) यह प्रश्न संधि से सम्बन्धित होगा। छः शब्द देकर किन्हीं चार शब्दों की संधि/संधिविच्छेद करने के लिये कहा जायेगा। (4)
- (ii) यह प्रश्न वाक्य विश्लेषण / संश्लेषण से सम्बन्धित होगा। तीन वाक्यों में से किन्हीं दो वाक्यों का विश्लेषण / संश्लेषण करने के लिये कहा जायेगा। (2)
- (iii) अंग्रेज़ी के छः पारिभाषिक शब्द दिये जायेंगे जिनमें से किन्हीं चार शब्दों के हिंदी रूप लिखकर वाक्यों में प्रयोग करने के लिये कहा जायेगा। (4)

भाग-ख (पाठ्य -पुस्तक)

26

- प्रश्न-2 (क) हिंदी पुस्तक-12 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 3 अंक निर्धारित हैं।  $1+3= (4)$
- (ख) हिंदी पुस्तक-12 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 3 अंक निर्धारित हैं।  $1+3= (4)$
- प्रश्न-3 (क) 'प्राचीन काव्य' की विषय वस्तु से सम्बन्धित दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 40 शब्दों में लिखने के लिये कहा जायेगा। (2)
- (ख) 'आधुनिक काव्य' की विषय वस्तु से सम्बन्धित दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 40 शब्दों में लिखने के लिये कहा जायेगा। (2)
- 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 3 अंक निर्धारित हैं।  $1+3= (4)$
- 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 100 शब्दों में लिखने के लिये कहा जायेगा। (4)

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। (2)

- 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। (2)
- प्रश्न-8 पाठ्य - पुस्तक में संकलित 'एकाँकी' भाग में से दो लघूत्तर प्रश्न पूछे जायेंगे जिनमें से एक प्रश्न का उत्तर लगभग 50 शब्दों में लिखने के लिये कहा जायेगा। (2)

भाग-ग - हिंदी साहित्य का इतिहास ( आदिकाल एवं भक्तिकाल) 14

- 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 150 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 150 शब्दों में लिखने के लिये कहा जायेगा। (5)
- प्रश्न-11 इस प्रश्न में हिंदी साहित्य के 'आदिकाल' एवं 'भक्तिकाल' में से छः वस्तुनिष्ठ लघु प्रश्न पूछे जायेंगे जिनमें से चार प्रश्नों का उत्तर लिखने के लिये कहा जायेगा। (4)

भाग-घ (रचनात्मक लेखन) 10

- प्रश्न-12 यह प्रश्न पत्र- लेखन से सम्बन्धित होगा। इस प्रश्न में 100 प्रतिशत आन्तरिक विकल्प दिया जायेगा। (6)
- प्रश्न-13 यह प्रश्न अनुच्छेद लेखन से सम्बन्धित होगा । कोई तीन विषय देकर उनमें से किसी एक विषय पर लगभग 100-120 शब्दों में अनुच्छेद लिखने के लिये कहा जायेगा। (4)

भाग-ङ ( व्यावहारिक ज्ञान ) 10

- प्रश्न-14 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-15 यह प्रश्न संक्षेपीकरण से सम्बन्धित होगा । कोई एक अनुच्छेद देकर उसका संक्षेपीकरण करने के लिये कहा जायेगा।

अथवा

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

**CLASS-XI**  
**3. ENGLISH ELECTIVE**  
**STRUCTURE OF QUESTION PAPER**

**Time: 3 hours**

**Theory: 70 marks**  
**CCE: 30 marks**  
**Total: 100 marks**

**Part-A**

**Objective type question No.1 will be compulsory (16 marks)**

- It will carry 16 marks and consist of 16 questions of 1 mark each.

Objective type question will cover the whole syllabus

**APPLIED GRAMMAR 10**

I 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   | 1 |
| (viii) Transformation of sentences   | 2 |

**Note:** Question paper should be based on the exercises given in the prescribed book of grammar (A Practice book of English grammar for class XI)

**6 questions: 2 from each text-book will be asked 6**

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

**PART-B (ENGLISH READER BOOK-V) (15 marks)**

**Text for detailed study**

- II. (a) 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 |
- (b) One essay type question in about 100 words such as character-sketch, incident, episode etc. 5

**Part -C (SELECTIONS FROM ENGLISH VERSE)**

**Text for detailed study**

**(8 marks)**

- III. (a) Explanation with reference to the context( One out two stanzas) 5  
(b) Central idea of a poem 3

**Part-D (A BOOK OF ESSAYS AND STORIES)**

**(10 marks)**

**Text for detailed study**

- IV. (a) Short answer type questions from different lessons (three out of five) 3x2=6  
(b) One essay type question on incident/episode/character-sketch/theme etc. 4

**PART-E (COMPOSITION)**

**(21 marks)**

- V Application/Letter 10  
VI Essay (One out of three) 7  
VII Translation from English into Vernacular 4  
(A running passage of 4 sentences only)

**Note:** A special question in lieu of translation for foreign students: A paragraph to be developed through a given situation/outline.

**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. A Street Scene
4. Build Yourself for Leadership
5. Controlling the Mind
6. Three Questions
7. The Cabuliwallah
8. The Emperor's New Clothes
9. Gandhi's Appeal
10. The Judgement Seat of Vikramaditya
11. The Black Cat
12. The Happy Prince
13. The Bet

## **APPLIED GRAMMAR**

### **1. Sentences:**

- (a) Kinds of sentences: simplex, complex, compound
- (b) Forms of sentences: declarative, imperative, interrogative, exclamatory
- (c) Transformation of sentences: from simple to complex, exclamatory to declarative and vice-versa

### **2. Clauses:**

- (a) Kinds of clauses: principal, co-ordinate and subordinate
- (b) Use of conditional clauses and relative clauses

### **3. Phrases: The Noun Phrase**

- (a) Noun:
  - 1) Countable and uncountable
  - 2) Singular and Plural
- (b) Pronouns:
  - 1) Number
  - 2) Gender
  - 3) Person

Article and other determiners: Their sequence in the Noun phrase.

### **4. The Verb Phrase:**

- (a) The helping verbs
- (b) The main verbs and the linking verbs
- (c) Transitive and Intransitive verbs

- (d) Verbs followed by different grammatical units examples preposition, pronoun, that clause etc.
- (e) Tense
- (f) Sequence of tenses
- (g) Use of correct form of verbs in given sentences

**5. Prepositional Phrase:**

- (a) Preposition and noun that go together
- (b) Preposition and verb
- (c) Preposition and adjective
- (d) Use or omission of preposition

**6. Adjectives**

**7. Adverbs**

**8. Words:**

- (a) Recognition of different parts of speech
- (b) Change of words from one part of speech into another
- (c) Use of words as different parts of speech

**9. Voice:** Change of sentences from active to passive and *vice versa*

**10. Narration**

- (a) All forms of sentences including short dialogues
- (b) Change of sentences from direct to indirect and *vice versa*

**11. Short responses:**

Short responses to Yes/No questions as in everyday use

**12. Various concepts:**

How various concepts are expressed e.g request, wish, obligation, permission, determination, possibility etc.

**Composition**

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

**Note:** A special question in lieu of translation for foreign students. A paragraph to be developed through a given situation/outline.

Books Prescribed & Published by the Punjab School Education Board.

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



**Class-XI**  
**4. URDU**

<b>SYLLABUS OF URDU ELECTIVE</b> <b>CLASS 11th (2012-13)</b>	
<p>نصابی کتاب: گلستان ادب: (اُردو کی درسی کتاب گیارہویں جماعت کیلئے) شائع کردہ: NCERT NEW DELHI.</p> <p>امدادی کتاب: گلدستہ مضامین و انشاء پر دہائی حصہ دوم از ڈاکٹر محمد عارف خاں شائع کردہ: ایجوکیشنل بک ہاؤس علی گڑھ</p>	
<p>نوٹ: درج ذیل شعری تخلیقات نصاب میں شامل نہیں ہیں۔</p>	
1- کیانج عشق نے ظالم کوں آب آہستہ آہستہ	2- ہے غلط گرگماں میں کچھ ہے۔
3- رفنگاں میں جہاں کے ہم بھی ہیں	4- یہ آرزو تھی تجھے گل کے روبرو کرتے
5- پھر دیدہ تریا د آیا	6- مثنوی
7- قصیدہ	8- مرثیہ
<p>تحریری پرچہ نمبر: 70 داخلی تعین نمبر: 30 کل نمبر 100</p>	
I- یہ سوال لازمی ہے۔ جو تمام نصاب پر مشتمل ہوگا اس میں پانچ مختصر سوالات کے جوابات لکھنے ہوں گے۔	10
II- سیاق و سباق کے حوالے سے تین دیئے گئے نثر پاروں میں سے کسی دو کی آسان اُردو میں تشریح۔	10
III- درج ذیل نثر نگاروں میں سے کسی ایک کے حالات زندگی اور ادبی خدمات پر نوٹ تحریر کرنا۔	5
شاہد احمد دہلوی، سید رفیق حسین، عصمت چغتائی، شبلی نعمانی، شان الحق چٹھی، میرامن	
IV- خاکہ نگاری اور افسانہ نگاری میں سے کسی ایک پر نوٹ لکھنا۔	5
V- کسی ایک نظم کا مرکزی خیال تحریر کرنا۔	5
VI- غزلیات و رباعیات کے اشعار کا مطلب تحریر کرنا۔	10
VII- کسی ایک شاعر کے حالات زندگی اور شاعری پر نوٹ لکھنا۔	5
اکبر الہ آبادی، محمد اقبال، جوش ملیح آبادی، مخدوم محی الدین، جگت موہن لال رواں، امجد حیدر آبادی	

5	VIII - الفاظ کے معنی تحریر کرنا۔
10	IX - خط یا درخواست لکھنا۔
5	X - ضرب الامثال کو جملوں میں استعمال کرنا۔
<p>طلباء، پرچہ بنانے والوں اور امتحان لینے والوں کیلئے ضروری ہدایات:</p> <p>سوال نمبر I - پہلا سوال لازمی ہے۔ یہ تمام نصاب کا احاطہ کرے گا اس میں کل پانچ سوالات دیئے جائیں گے ہر سوال دو نمبروں کا ہوگا۔</p>	
10	سوال نمبر II - سیاق و سباق کے حوالے سے نصابی اسباق میں سے دیئے گئے تین نثر پاروں میں سے کسی دو کی آسان اردو میں تشریح کرنا ہوگی۔ نمبر کی تقسیم اس طرح ہوگی: سبق کا نام ایک نمبر، نثر نگار کا نام ایک نمبر، آسان اردو میں تشریح تین نمبروں نثر پارے دس نمبروں کے ہونگے۔
10	سوال نمبر III - کسی ایک نثر نگار کے حالات زندگی اور ادبی خدمات پر نوٹ پانچ نمبروں کا ہوگا۔ سبق کا نام ایک نمبر، مصنف کا نام ایک نمبر، تشریح تین نمبر کی ہوگی۔
5	سوال نمبر IV - خاکہ نگاری اور افسانہ نگاری میں سے کسی ایک پر نوٹ تحریر کرنے کیلئے پانچ نمبر ہونگے۔
5	سوال نمبر V - نصاب میں شامل کسی ایک نظم کا مرکزی خیال تحریر کرنے کیلئے پانچ نمبر ہونگے۔
10	سوال نمبر VI - غزلیات رباعیات کے اشعار کی تشریح کیلئے دس نمبر ہونگے۔
5	سوال نمبر VII - شاعر کے حالات زندگی اور شاعری پر نوٹ کیلئے پانچ نمبر مختص کئے گئے ہیں
5	سوال نمبر VIII - پانچ الفاظ کے معنی تحریر کرنے کیلئے پانچ نمبر ہونگے۔
10	سوال نمبر IX - خط یا درخواست لکھنے کیلئے دس نمبر ہونگے۔
(ابتداء کے تین نمبر، درخواست کے متن کے چار اور اختتام کے تین نمبر ہونگے۔)	
5	سوال نمبر X - ضرب الامثال کو جملوں میں استعمال کرنے کیلئے پانچ نمبر ہونگے ہر ایک جملے کیلئے ایک نمبر ہوگا۔

## 5. SANSKRIT

संस्कृत  
कक्षा : ग्यारहवीं  
पाठ्यक्रम

समय : 3 घण्टे

कुल अंक : 70  
सी. सी. ई. : 30

- भाग -क (पाठ्य पुस्तक के 1 से 18 तक पाठ ) 32
- 1 गद्यांशों का हिन्दी या पंजाबी या अंग्रेज़ी में अनुवाद ।
  - 2 पद्य का हिन्दी या पंजाबी या अंग्रेज़ी में प्रसंग सहित अर्थ ।
  - 3 पाठों के अभ्यासों में से हिन्दी में प्रश्न ।
  - 4 पाठों के अभ्यासों में से संस्कृत लघु प्रश्न ।
  - 5 पाठों के अभ्यासों में से संस्कृत शब्दों के हिन्दी में अर्थ ।
  - 6 पाठों के अभ्यासों में से रिक्त स्थान पूर्ति ।
- अथवा
- पाठों के अभ्यासों में से यथानिर्दिष्ट परिवर्तन ।
- भाग ख नाटक (19, 20 पाठ ) 08
- 7 (क) नाटक के अंशों का प्रसंग सहित अर्थ हिन्दी या पंजाबी या अंग्रेज़ी में ।  
(ख) नाटक के अभ्यासों पर आधारित हिन्दी में प्रश्न ।
- भाग-ग ( व्याकरण भाग ) 30
- 8 (क) शब्द रूप : (संज्ञा शब्द ) ( 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 शब्द)सर्व लिंगों और विभक्तियों में -युष्मद् , अस्मद् , तद् , एतद् ,  
यद् , इदम्,किम्, सर्व  
(ख) धातु रूप : ( लट्, लोट्,लङ् , विधिलिङ् , लृट् में)  
भ्वादिगण : ( परस्मैपद ) गर्ज् , सृ , तृ , ।  
आत्मनेपद- लभ्, सेव्, वृत् ।  
तुदादिगण : ( परस्मैपद ) सिच् ।  
दिवादिगण : ( परस्मैपद ) शम् ।  
चुरादिगण : उभयपद चिन्त् , तुल् , पाल्,गण्, कथ् ।  
(ग) वाक्य शुद्धि : (विशेष्य,कर्त्ता,क्रिया में लिंग, विभक्ति, वचन और पुरुष की समता के आधार  
पर वाक्यों की शुद्धि ।  
अथवा  
वाच्य परिवर्तन :- कर्तृवाच्य ,कर्मवाच्य , भाववाच्य की सरल रचनाएं केवल लट् में ।
- 9 (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.  
अनुस्वार विधि,षत्व विधि, लत्व विधि , जश् विधि ,पूर्व सवर्ण विधि

।  
विसर्ग सन्धि :- लोप विधि , उत्त्व विधि , रत्त्व विधि , शत्व विधि , सत्व विधि ।

अथवा

कृदन्त प्रत्ययः निम्नलिखित धातुओं के साथ क्त, क्तवत्, शतृ, शानच् प्रत्यय लगाकर तीनों लिंगों में केवल प्रथमा विभक्ति एकवचन के रूप : भू, पठ्, लिख्, नम्, हस्, वस्, चल्, पत्, खाद्, धाव्, कीड् दृश्, स्था, पा, सेव्, वृत्, वृध्, लभ् ।

अथवा

निम्नलिखित धातुओं के साथ क्त्वा प्रत्यय के रूप तथा उपयुक्त उपसर्ग लगाकर ल्यप् प्रत्यय के रूप : गम्, नम्, नश्, पत्, क्षल्, जि, नी, विश्, भू, स्था, घ्रा, दा, आप्, कृ, हृ, स्मृ ।  
(ग) तुलनात्मक प्रत्ययः विशेषणों के साथ केवल तरप् तथा तमप् प्रत्यय ।

अथवा

तद्धित प्रत्यय - केवल भाववाची 'त्व' और 'ता' प्रत्यय ।

अथवा

स्त्री प्रत्यय : 'ई' तथा 'आ' प्रत्यय के सरल प्रयोग ।

10

हिन्दी सरल वाक्यों का संस्कृत में अनुवाद । (आठ वाक्य दिए जाएं जिनमें से पाँच वाक्यों का अनुवाद करने के लिए कहा जाए) ।

निर्धारित पुस्तक : संस्कृत सौरभम्- 11 पंजाब स्कूल शिक्षा बोर्ड द्वारा प्रकाशित



संस्कृत  
ग्यारहवीं  
प्रश्न- पत्र की रूपरेखा

समय : 3 घण्टे

कुल अंक : 70  
सी. सी. ई. : 30

भाग -क ( पाठ्य पुस्तक के 1 से 18 तक पाठ ) 32

नोट : पहले दो प्रश्नों का उत्तर हिन्दी या पंजाबी या अंग्रेज़ी में दिया जा सकता है ।

- 1 तीन गद्यांश दिए जाएं जिनमें से दो का अनुवाद करने को कहा जाए । 4x2=8
- 2 तीन पद्य दिए जाएं जिनमें से दो का प्रसंग सहित अर्थ लिखने को कहा जाए। 4x2=8
- 3 पाठों के अभ्यासों में से चार प्रश्न हिन्दी में पूछे जाएं , जिनमें से दो का उत्तर हिन्दी में लिखने को कहा जाए । 2x2=4
- 4 संस्कृत में चार लघु प्रश्न दिए जाएं , जिनमें से दो का उत्तर संस्कृत में लिखने को कहा जाए। 2x2=4
- 5 पाठों के अभ्यासों में से छः संस्कृत शब्द दिए जाएं ,जिनमें से चार शब्दों का हिन्दी में अर्थ लिखने को कहा जाए । 4 x1=4
- 6 पाठों के अभ्यासों में से छः रिक्त स्थान पूर्ति के वाक्य दिए जाएं जिनमें से चार रिक्त स्थानों की पूर्ति करने को कहा जाए ।

अथवा

पाठों के अभ्यासों में से यथानिर्दिष्ट परिवर्तन के छः वाक्य दिए जाएं जिनमें से चार वाक्यों में परिवर्तन करने को कहा जाए। 4 x1=4

भाग ख नाटक (19, 20 पाठ )

08

- 7 (क) नाटक भाग में से दो अंश दिए जाएं जिनमें से एक का प्रसंग सहित अर्थ हिन्दी या पंजाबी या अंग्रेज़ी लिखने को कहा जाए ।प्रसंग के 2 अंक तथा अर्थ के 2 अंक है । 4
- (ख) नाटक के अभ्यासों में से चार प्रश्न हिन्दी में पूछे जाएं , जिनमें से दो का उत्तर हिन्दी में लिखने को कहा जाए । 2x2=4

भाग-ग ( व्याकरण भाग )

30

- 8 (क) पाठ्यक्रम में दिए गये शब्द रूपों में से छः 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 छः 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
- (ग ) पाठ्यक्रम में से पाँच वाक्य अशुद्धियाँ दी जायें जिनमें से तीन वाक्यों को शुद्ध करने को कहा जाये ।

अथवा

वाक्य परिवर्तन के पाँच वाक्य दिए जाएं जिनमें तीन वाक्य हल करने को कहा जाए। 3x1=3

- 9 (क) पाठ्यक्रम में दिए गए समासों से संबंधित छः समस्त पद दिए जाएं जिनमें से तीन का विग्रह करने को कहा जाए । 3x1=3

(ख) पाठ्यक्रम में दी गई सन्धियों में से सात सन्धि विच्छेद दिये जाएं जिनमें से चार करने को कहा जाए।

अथवा

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 रूप तथा ल्यप् प्रत्यय के रूप बनाने के लिए दिए जाएं जिनमें से चार करने को कहा जाए

(ग) पाठ्यक्रम में से पाँच शब्दों के साथ तुलनात्मक प्रत्यय या तद्धित प्रत्यय या स्त्री प्रत्यय लगाने को दिये जायें जिनमें से तीन करने को कहा जाए।

3x1=3

10

पाठ्य- पुस्तक के अनुवाद भाग में से हिन्दी के आठ वाक्य दिए जाएं जिनमें से पाँच वाक्यों का संस्कृत में अनुवाद करने को कहा जाए।

5x1=5

**Class-XI**  
**8. History**

Time : 3 hrs.

**Theory: 70 Marks**  
**CCE: 30 Marks**  
**Total : 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. The question paper will be cover whole of the prescribed syllabus.
  2. All questions will be compulsory.
  3. The question paper will comprise of 23 questions in total.
  4. The question paper will have 5 sections A, B, C, D & E.
  5. The question paper will carry
    - a) Objective type questions
    - b) Very short answer type questions
    - c) Short answer type questions
    - d) Essay type questions
    - e) Map
- i) Objective Type Questions:** This type may include questions with one word to one sentence answer/ fill in the blank/ true or false/ multiple choice type questions.
- ii) Very Short Type Question:** This type will include questions with 20 to 25 words answer.
- iii) Short Answer Type Question:** This type will include question with 35 to 40 words answer.
- iv) Essay Type Question:** This type will include question with 250-300 words answer. There will be 100% internal choice in these questions.
- v) Map Questions:** There will be a choice for student to select one topic for the Map which he/she has to explain and also to fill the relevant events in the Map attached along with answer sheet. If Map in not attached it can be asked for to the exam Supervisor/Superintendent of the exam centre.

**Unit wise marks distribution**

<b>S. No.</b>	<b>Syllabus</b>	<b>Chapter</b>	<b>Section A 1 Mark question</b>	<b>Section B 3 Mark question</b>	<b>Section C 5 Marks question</b>	<b>Section D 10 Marks question</b>	<b>Section E (Map) 4 + 7 =11 marks</b>	<b>Total</b>
<b>1</b>	<b>Part A &amp; B objective type question</b>	<b>1 to 21 (5 Q. from A 6 Q. from B)</b>	<b>1 mark question from every two chapter (11×1=11)</b>					
<b>2</b>	<b>Part A &amp; B very short answer type question</b>	<b>(1, 2, 3) = 1 (4, 5, 6) = 1 (7, 8, 9,10) = 1 (11, 12, 13, 14) = 1 (15, 16, 17, 18) = 1 (19,20,21) = 1 (3 q. from each part i.e. A &amp;B)</b>		<b>1 1 1 1 1 1 6×3=18</b>				
<b>3</b>	<b>Part A &amp; B short answer type question</b>	<b>(1-5) = 1 (6-10) = 1 (11-16) = 1 (17-21) = 1 (two questions from each part)</b>			<b>1 1 1 1 4×5=20</b>			
<b>4</b>	<b>Part A &amp; B essay type (to attempt one question)</b>	<b>Part A-1 Part B-1 (with 100% internal choice)</b>				<b>1 1×1●=10</b>		
<b>5</b>	<b>Part C (Choice from these situations)</b>	<b>From chapter - Sites of Indus Valley Civilization - Extent of Ashoka's empire - Extent of Samundragupt a's empire - Important Historical places - India in 1526 - Extent of Akbar's empire - Extent of Ranjit Singh's empire - Important historical places</b>					<b>1 4 marks of explanation 7 marks of Mapping (4+7=11)</b>	
<b>Total Marks</b>			<b>11</b>	<b>18</b>	<b>20</b>	<b>10</b>	<b>11</b>	<b>70</b>



## **PART-A**

- (i) Sites of Indus Valley Civilization;
- (ii) Extent of Ashoka's empire;
- (iii) Extent of Samundragupta's empire;
- (iv) Important Historical places;

## **PART-B**

- (i) India in 1526;
  - (ii) Extent of Akbar's empire;
  - (iii) Extent of Ranjit Singh's empire;
  - (iv) Important historical places;
- 2. The question paper will be strictly according to the syllabus.
  - 3. The language of questions should be straight and simple.
  - 4. For blind students: For blind students the internal choice in Question No. 12 and 24 will be an explanatory question in lieu of map questions. Each carry 10 marks.

## **SYLLABUS**

### **SECTION-A**

- I. Indus Valley Civilisation: a synoptic view of research material, culture, socio-cultural life; decline and disappearance.
- II. The Indo-Aryans: Early settlements; political organisations; Economic life; Social Institutions; religious beliefs and practices; legacy.
- III. Buddhism and Jainism: the socio-political environment, major doctrines; socio-political impact; Legacy.
- IV. The Mauryas: The background to their rise into power; establishment and consolidation of their empire: Ashoka's Dhamm; social and cultural life during their rule.
- V. The age of the Guptas: establishment and consolidation of the Gupta empire, major socio-cultural achievement of the age; Legacy.
- VI. The Vardhanas and their times: Political supremacy in the North; Kingdoms of the South; cultural achievements of the age; Legacy.
- VII. The Rajputs: establishment their kingdom; Political conflict and change; socio-political structure; survival.
- VIII. The Sultanate of Delhi: establishment of Turkish Rule, Dynastic changes and the fortunes of the Sultanate, administration; the ruling classes; art, and architecture, Socio-religious life.

- IX. Kingdoms of the South: The Bahmani empire and its successor states; the Vijayanagar empire; administration, the ruling classes: art architecture; socio-religious life.
- X. Socio-religious movements; Vashnava Bhakti; the Saints.
- XI. Guru Nanak Dev Ji and Foundation of Sikhism: Socio-religious environment; Development of Sikhism (1539-1605); Transformation of Sikhism (1605-1966); Discovery of a new panth, foundation of a new panth, Legacy.

### **SECTION-B**

- XII. Establishment of the Mughal empire: Mughal Afghan contest; consolidation of the Mughal
- XIII. Mughal Policy and Administration: Conception of Kingship: attitude towards the subjects people; central and provincial administration; administration of justice and local administration; the mansabdari system.
- XIV. Rise of new powers in the South: with special reference to the Marathas.
- XV. Rise of new powers in the North: with special reference to the Sikhs.
- XVI. Maharaja Ranjit Singh: Conquests and consolidation; the new ruling classes; administration; attitude towards the subject people; relationship with sovereign powers; the Legacy.
- XVII. Advent of the Europeans and their struggle for supremacy: the Portuguese; the Dutch: The French: Anglo French rivalry; emergence of East India Company as a political power in India.
- XVIII. Expansion and Consolidation of the British empire; expansion through war and diplomacy; Imperial framework: administration and bureaucracy.
- XIX. Social and Economic changes under British rule: means of communication and transportation; raw materials for exports: industrial development; the India elite; the middle classes; the working class.
- XX. Socio-religious movements; construction, Bramho Smaj, Aligarh movement, Nirankari movement, Kuka movement and Singh Sabha movement.
- XXI. Political Consciousness and struggle for Representative Government in India: the revolt of 1857 and its legacy; the Indian National Congress; the Home Rule Movement; Constitutional Reforms; Jallianwala Bagh massacre and its impact demand for independence.
- XXII. Towards Freedom: the Quit India Movement and its aftermath; transfer of power.

## **SECTION-C**

- (i) Sites of Indus Valley Civilization;
- (ii) Extent of Ashoka's empire;
- (iii) Extent of Samundragupta's empire;
- (iv) Important Historical places;
- (v) India in 1526;
- (vi) Extent of Akbar's empire;
- (vii) Extent of Ranjit Singh's empire;
- (viii) Important historical places;

**Class-XI**  
**9. ECONOMICS**  
**(Humanities Group)**

**Time : 3 Hours**

**Theory: 60 Marks**  
**CCE: 30 Marks**  
**Project Work : 10 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. The Question Paper will cover whole of the prescribed syllabus.
2. All Questions will be compulsory.
3. The questions paper will comprise of 13 questions in total.
4. The question paper will have 3 Sections A, B & C.

**SECTION A**

This section will consist of Q. No. 1 which will be objective type consisting of 8 sub parts (i.e. 4 questions from Part A and 4 questions from Part B of syllabus). Each sub part carry 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.

**SECTION B**

This section will consist of 8 short answer type questions (i.e. 2 questions from Part A and 6 questions from Part B of syllabus) carrying 3 marks each. Answer of each question should be given in 50-60 words. Out of 4 questions in Part-A, 1 question will be numerical.

**SECTION C**

This section will consist of 4 long answer type questions (i.e. 2 questions from Part A and 2 questions from Part B of syllabus) with internal choice carrying 7 marks each. Answer of each question should be given in 200-250 words. Out of 2 questions from Part-A one question will be numerical.

**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.**

**Detail of questions set from each unit**

<b>Syllabus</b>	<b>Units</b>	<b>Sec A 1 Mark Questions</b>	<b>Sec B 3 Marks Questions</b>	<b>Sec C 7 Marks Questions</b>	<b>Total Marks</b>
PART - A Statistics for Economics	1	1	-	2 Qs. from different Units (1 theoretical 1 numerical)	24
	2	1	1		
	3	1	1		
		1 Q. from Unit-2 and 3			
PART – B  Indian Economic Development	5	1	1	2 Qs. from any 2 Units (1 Q. each Unit) with 2 Qs. From other 2 Units (1 Q. each Unit) as internal choice	36
	6	1	1		
	7	1	2		
	8	1	1		
		1 Q. from Unit-5,6 & 8			
Total	7	8	8	4	60

**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 TOOLS 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 (Coefficient 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) Industrial 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**  
**10. MATHEMATICS**

**Time: 3:00 hrs**

**Theory: 70 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

1. All Questions are Compulsory.
2. Q 1 will consist of eight parts and each part will carry one Mark.
3. Q 2 to Q 15 each will be of 3 Marks.
4. Q 16 to Q 19 i.e. three questions each will be of 5 marks.
5. There will be no overall choice. There will be an internal choice in any four questions of 3 marks each and two questions of 5 marks each
6. Use of Calculator is not allowed.

Sr. No	Topic	Q. Carrying 1-Marks	Q. Carrying 3-Marks	Q. Carrying 5-Marks	Total Marks
1	Sets	-	1	-	3
2	Relations & Functions	1	1	-	4
3	Trigonometric Functions	1	2	-	7
4	Principle of Mathematical Induction	-	1	-	3
5	Complex numbers & Quadratic Equations	1	-	1	6
6	Linear Inequalities	-	-	1	5
7	Permutations & Combinations	1	1	-	4
8	Binomial Theorem	-	1	-	3
9	Sequence & Series	1	1	-	4
10	Straight lines	1	1	-	4
11	Conic Sections	1	1	-	4
12	Introduction to Three-dimensional Geometry	-	1	-	3
13	Limits & Derivatives	-	1	1	8
14	Mathematical Reasoning	-	1	-	3
15	Statistics	-	-	1	5
16	Probability	1	1	-	4
<b>Total marks</b>		<b>8</b>	<b>14</b>	<b>4</b>	<b>70</b>

**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  $R \times R \times R$ ).

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  $\sin(x \pm y)$  and  $\cos(x \pm y)$  in terms of  $\sin x$ ,  $\sin y$ ,  $\cos x$  &  $\cos y$ . Deducing the identities like following:

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

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

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

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.

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

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.

**Class-XI**  
**11. BUSINESS ORGANISATION & MANAGEMENT**  
**(Humanities Group)**

**Time: 3 Hours**

**Theory: 70 marks**  
**CCE: 30 marks**  
**Total: 100 marks**

Structure of question paper

1. The question paper will cover whole of the syllabus.
2. 11 Questions will be set in the question paper.
3. All units of the syllabus should be given adequate representation in the question paper.
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.
5. Question No 2 to 8 will carry 5 marks each. Answer of each question should be given in 15-20 lines.
6. Question No 9 to 11 will carry 9 marks each with internal choice. Answer of each question should be given in 3-5 pages.

**Detail of questions set from each unit**

<b>Unit No.</b>	<b>Name of the unit</b>	<b>1 mark question</b>	<b>5 marks question</b>	<b>9 marks question</b>
I	Nature and Purpose of Business	1	1	1
II	Structure of Business			1
III	Service Sector and Business	1	1	1
IV	Social Responsibility of Business and Business Ethics			
V	Forms and Formation of Business Enterprises	1	1	1
VI	Sectoral Organisation of Business	1		
VII	Formation of a Company	1	1	1
VIII	Internal Trade	1	1	
IX	Sources of Business Finance	1	1	1
X	External Trade	1	1	

**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 -
  - i. Sole Proprietorship
  - ii. Joint Hindu Family Business
  - iii. Partnership-Partnership Deed (main clauses), Types of Partners, Partnership Formation, Registration
  - iv. Co-operative Societies
  - v. 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 :
  - i. Departmental Undertaking
  - ii. Starting Co-operative.
  - iii. 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.
  - i) Sources of Finance
  - ii) Equity and Preference Shares.
  - iii) Debentures/Bonds Types: (Secured, Unsecured, Convertible and Non-Convertible).
  - iv) Retained Profits.
  - v) Public Deposits
  - vi) 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**  
**12. BOOK KEEPING AND ACCOUNTANCY**  
**(Humanities Group)**

**Time: 3 Hours**

**Theory: 70 marks**  
**CCE: 30 marks**  
**Total: 100 marks**

**Structure of question paper**

1. The question paper will cover whole of the syllabus.
2. 11 Questions will be set in the question paper.
3. All units of the syllabus should be given adequate representation in the question paper.
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.
5. Question No 2 to 8 (of which three will be of numerical nature and other four will be theoretical nature) will carry 5 marks each. Answer of each theoretical question should be given in 15-20 lines.
6. Question No 9 to 11 will carry 9 marks each with internal choice. Of these, any two questions will have internal choice between theoretical and numerical questions while any one of these three will have only numerical question internal choice. Answer of each theoretical question should be given in 3-5 pages.
7. There is no word, line or page limit for numerical questions.
8. The use of non-programmable simple calculator is allowed.

**Detail of questions set from each unit**

Unit No.	Name of the unit	1 mark question	5 marks question	9 marks question
I	Introduction to Accounting	1	1	
II	Theory Base of Accounting	1		
III	Recording of Business transactions	1	1	2
IV	Trial Balance and Rectification of errors	1	1	
V	Depreciation, Provisions and Reserves			1
VI	Bank Reconciliation Statement	1	1	1
VII	Accounting for bill of exchange transaction			1
VIII	Financial Statements	1	1	1
IX	Computer in Accounting	1	1	
X	Accounting and Data Base System	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**  
**13. POLITICAL SCIENCE**

**Time : 3 hrs.**

**Theory: 70 Marks**  
**CCE: 30 Marks**  
**Total : 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. The question paper will cover whole of the prescribed syllabus.
2. All questions will be compulsory.
3. The question paper will comprise of 24 questions in total.
4. The question paper will have 3 sections A, B, & C.

**(A) Objective type questions:-** This part will be containing objective type questions which will be 10 (Ten) in number. Answer of these questions will may include question with one word to one sentence answer/ fill in the blanks/ true or false/ multiple choice type questions. 10×1=10

**(B) Short Answer type questions:-** This part will contain total 12 questions from which candidate is to attempt any 10 questions. Each question will carry 4 marks. Answer to these questions are required in 50-60 words. 10×4=40

**(C) Essay type questions:-** This part will contain total 4 questions from which candidate is to attempt any 2 question. Each question will carry 10 marks. There will be total internal choice for these questions. Answer to these questions will be needed in 250 to 300 words or on 3-4 pages. 2×10=20

**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.
- (e) 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:
  - (i) Democratic And Authoritarian (Dictatorial)
  - (ii) Parliamentary and Presidential
  - (iii) Unitary and Federal

**Unit-VI Organs of Government**

- (a) Executive
  - (i) Types of Executive
  - (ii) Functions.
- (b) Legislature
  - (i) Types of Legislature-Unicameral & Bicameral
  - (ii) Functions.
- (c) Judiciary
  - (i) Importance and Functions
  - (ii) 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**  
**14. SOCIOLOGY**

**Time: 3 Hours**

**Theory: 70 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. There will be 22 questions in all. All questions will be compulsory.
2. Question No. 1 to 10 will carry 1 mark each. Answer to each question should be in about 1- 15 words. 10×1= 10
3. Question No. 11 to 15 will carry 3 marks each. Answer to each question should be in about 30 - 35 words 5×3= 15
4. Question No. 16 to 20 will carry 5 marks each with 100% internal choice. Answer to each question should be in about 75-85 words. 5×5= 25
5. Question No. 21 & 22 will carry 10 marks each. Answer to each question should be in about 250 - 300 words. There will be 100% internal choice in these questions. The paper setter should not set more than one such question from one chapter. 2×10= 20

**Unit-wise Weightage to Content**

Unit No.	Questions carrying 1 Mark	Questions carrying 3 Marks	Questions carrying 5 Marks	Questions carrying 10 Marks	Total
1, 2, 3,	6	3	4	1	44 Marks
4, 5	4	2	1	1	26 Marks
<b>Total questions</b>	10	5	5	2	22 Questions
<b>Total marks</b>	10	15	25	20	70 Marks

**SYLLABUS**

**Unit-I      Sociology**

- (a) Definition, scope and nature.
- (b) Relationship with other social sciences-History, Economics, Political Science.

**Unit-II      Society**

Characteristics Human and Animal society, Man as social animal.

**Unit-III      Basic Concepts**

Association, Community, Institution, Social groups-(Primary and Secondary)

**Unit-IV      Socialization**

As a process, Agencies- (family and school)

**Unit-V      Social Processes**

Meaning and types, Co-operation, Accommodation, Assimilation, competition, Conflict.

**Class-XI**  
**15. PUBLIC ADMINISTRATION**  
**(Humanities Group)**

**Time: 3 Hours**

**Theory: 70 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. The Question Paper will cover whole of the prescribed syllabus.
2. All Questions will be compulsory.
3. 13 Questions will be set in the Question Paper.
4. Question No.1 will consist of 10 sub parts of 1 mark each. Answer of each question should be given in 1-15 words. Objective type questions may include questions with one word to one sentence answer/fill in the blanks/true or false/multiple choice type questions.
5. Question No. 2 to 11 will carry 4 marks each. The answer of each question should be given in 75-80 words.
6. Question No.12 and 13 each with internal choice will carry 10 marks each. The answer of each question should be given in 250-300 words.

**Detail of questions set from each unit**

<b>Syllabus</b>	<b>1 Mark Questions</b>	<b>4 Marks Questions</b>	<b>10 Marks Questions</b>	<b>Total Marks</b>
Unit I & II	3	3	1	25
Unit III & IV	2	2		10
Unit V & VI	3	3	1	25
Unit VII & VIII	2	2		10
Total	10 Marks	40 Marks	20 Marks	70 Marks

**SYLLABUS**  
**ELEMENTS OF PUBLIC ADMINISTRATION**

**Unit-I**

- a) Meaning, Nature, Scope & Significance of Public Administration.
- 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 Minister 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.

## ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ

16. ਧਰਮ

ਸਮਾਂ: 3 ਘੰਟੇ

ਲਿਖਤੀ ਪੇਪਰ: 70 ਅੰਕ

ਸੀ.ਸੀ.ਈ.: 30 ਅੰਕ

ਕੁੱਲ: 100 ਅੰਕ

### ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਵਿੱਚ ਕੁੱਲ 23 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 ਗਿਆਰਾਂ (11) ਵਸਤੂਨਿਸ਼ਠ ਪ੍ਰਸ਼ਨ 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-ਭਾਂਤੀ ਉੱਤਰਾਂ ਵਾਲੇ, ਕਿਸੇ ਵੀ ਤਰ੍ਹਾਂ ਦੇ ਹੋ ਸਕਦੇ ਹਨ।

**ਭਾਗ-II** ਵਿੱਚ ਪੰਜ (5) ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ I) ਪ੍ਰਸ਼ਨ (12 ਤੋਂ 16) ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ 3 ਅੰਕ ਦਾ ਹੋਵੇਗਾ ਜਿਸ ਦਾ ਉੱਤਰ 50-60 ਸ਼ਬਦਾਂ ਵਿੱਚ ਹੋਵੇ।

**ਭਾਗ-III** ਵਿੱਚ ਚਾਰ (4) ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ II) ਪ੍ਰਸ਼ਨ (17 ਤੋਂ 20) ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ 5 ਅੰਕ ਦਾ ਹੋਵੇਗਾ, ਜਿਸ ਦਾ ਉੱਤਰ 70 ਤੋਂ 80 ਸ਼ਬਦਾਂ ਵਿੱਚ ਹੋਵੇ।

**ਭਾਗ-IV** ਵਿੱਚ ਤਿੰਨ (3) ਅੰਦਰੂਨੀ ਛੋਟ ਵਾਲੇ ਨਿਬੰਧਾਤਮਕ ਪ੍ਰਸ਼ਨ (21 ਤੋਂ 23) ਪੁੱਛੇ ਜਾਣਗੇ। ਹਰ ਪ੍ਰਸ਼ਨ 8 ਅੰਕ ਦਾ ਹੋਵੇਗਾ, ਜਿਸ ਦਾ ਉੱਤਰ, ਉੱਤਰ ਪੱਤਰੀ ਦੇ 2 ½ ਪੰਨਿਆਂ ਤੋਂ ਵੱਧ ਨਾ ਹੋਵੇ।

### ਪਾਠ-ਕ੍ਰਮ ਦੇ ਭਾਗਾਂ ਅਨੁਸਾਰ ਪ੍ਰਸ਼ਨਾਂ ਅਤੇ ਅੰਕਾਂ ਦੀ ਵੰਡ

ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਕਿਸਮ	ਅੰਕ ਪ੍ਰਤੀ ਪ੍ਰਸ਼ਨ	ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਗਿਣਤੀ	ਪਾਠ-ਕ੍ਰਮ ਦੇ ਭਾਗਾਂ ਅਨੁਸਾਰ ਪ੍ਰਸ਼ਨਾਂ ਦੀ ਵੰਡ		ਕੁੱਲ ਅੰਕ
			ਭਾਗ 'ਉ'	ਭਾਗ 'ਅ'	
ਵਸਤੂ ਨਿਸ਼ਠ	1 ਅੰਕ	11	5	6	11
ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ I)	3 ਅੰਕ	5	3	2	15
ਛੋਟੇ ਉੱਤਰਾਂ ਵਾਲੇ (ਟਾਈਪ II)	5 ਅੰਕ	4	1	3	20
ਨਿਬੰਧਾਤਮਕ	8 ਅੰਕ	3	2	1	24
<b>ਕੁੱਲ</b>		<b>23</b>	<b>11</b>	<b>12</b>	<b>70</b>

### ਪਾਠ-ਕ੍ਰਮ

#### ਭਾਗ (ਉ)

#### 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**  
**17. MUSIC - VOCAL**

**Time: 3Hrs.**  
**Time: 20 Minutes**

**Theory: 30 Marks**  
**Practical: 40 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER (THEORY)**

1. The question paper will comprise of 14 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts.

Part-I will consist of 8 objective type questions (Q. no. 1 to 8) carrying one mark each. The answer of each question should not exceed more than one sentence.

8×1=8 Marks

Part-II will consist of four (4) short answer type questions (Q. no. 9 to 12) carrying three (3) marks each. The answer of each question should be given in 10 to 15 lines.

4×3=12 Marks

Part-III will consist of two (2) essay type questions (Q. no. 13 to 14) with internal choice from both parts- A and B parts of the syllabus. These questions will carry 5marks each and their answer should not exceed more than two pages of the answersheet.

2×5=10 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	8	4	4	8
Short Answer Type	3	4	2	2	12
Essay Type	5	2	1	1	10
<b>Total Questions</b>		<b>14</b>	<b>7</b>	<b>7</b>	<b>30</b>

**Syllabus (Theory)**

**Part-A**

- 1.) Definition of the following with full explanation:  
Sangeet, naad, shruti, swar, saptak, Thaata, Raag, Arohi, Avrohi, Pakar, Alaap, Taan, Palta, Vadi, Samvadi, Anuvadi, Vivadi, Varan, Alankar, Laya, (Madhya, Drut and Vilambit) Taal, Avartan, Sam, Tali, Khaali, Matra, Sathai, Antra, Sanchri, Abhog.
- 2.) Knowledge of Jatis of Raags.
- 3.) The life of sketches and contribution towards music by
  - (a) Pt. V.N. Bhat Khande
  - (b) Pt. Dalip Chander Bedi
  - (c) S. Sohan Singh

- 4.) Knowledge of the following:-
- Rules of Thaats and Raags and their comparison.
  - Purvang and Utrang Raags.
  - Ashrya and Janya Raags.

### **PART-B**

- To write the notations of Khayals in Raags:  
a) Bhopali                      b) Kalyan                      c) Alahya Bilawal
- Notation of Teen Taal, Dadra, Jhap Taal, Kaharwa along with Ikgun and Dugun Laykaries.
- Description of prescribed Raags.
- Recognition of prescribed Raags from the given Swar-Sangaties.

### **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.

- 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 10 marks.
- 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 10 marks.
- Demonstration of 'Taals' in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 10 marks.
- Recognition of one Taal and one Raag out of the prescribed syllabus. It will be for 2 minutes and will carry 5 marks.
- Demonstration regarding Alankaar/National Anthem/non detailed Raags. It will also be for 4 minutes and will carry 5 marks.

### **SYLLABUS (PRACTICAL)**

- Knowledge of Shudha, Komal and Tiver Swars.
- Capability to demonstrate the following:  
Taals with Bols and Matras by hand in Ikgun and Dugun layakaries:  
i) Teen Taal    ii) Dadra    iii) Jhap Taal    iv) Kaharva Taal
- One Drut Khyal with four Taans in  
i) Kalyan    ii) Allhayia Billawal    iii) Bhopali Raag
- National Anthem.
- To recognise Raags and Taals of the course.
- Capability of demonstration to Matras (Dugun) and four Matras (Chougun) in one beat.
- Knowledge of the following:-

- i) Correct Posture (Mudra)
- ii) Non-detail Raags, in terms of Arohi, Avrohi, Pakar and their definitions:
  - (a) Khamaz
  - (b) Kafi
- (h) Knowledge of the following:
  - String used in Tanpura
  - (i) Following Alankaars to be sung in the Swars in kafi:-
    - (i) Sa Re Ga Ma Pa Dha Ni, Sa Ni Dha Pa Ma Ga Re Sa
    - (ii) Sa, Re Re, Ga Ga, Ma Ma, Pa pa, Dha Dha, Ni Ni, Sa sa, Sa Sa, Ni Ni, Dha Dha, Pa Pa, Ma Ma, Ga Ga, Re Re, Sa Sa.
    - (iii) Sa, Sa Re Sa, Sa Re Ga Re Sa, Sa Re Ga Ma Ga Re Sa, Sa Re Ga Ma Pa Ma Ga Re Sa, Sa Re Ga Ma Pa Dha Pa Ma Ga Re Sa, Sa Re Ga Ma Pa Dha Ni Pa Ma Ga Re Sa, Sa Re Ga Ma Pa Dha Ni Sa Ni Dha Pa Ma Ga Re Sa.
    - (iv) Sa Re Ga, Re Ga Ma, Ga Ma Pa, Ma Pa Dha, Pa Dha Ni, Dha Ni Sa, Sa Ni Dha, Ni Dha Pa, Dha Pa Ma, Pa Ma Ga, Ma Ga Re, Ga Re Sa.

**Class-XI**  
**18. GURMAT SANGEET**

**Time: 3 Hrs.**  
**Time: 20 Minutes**

**Theory: 30 Marks**  
**Practical: 40 Marks**  
**CCE: 30 Marks**  
**Total: 100Marks**

**STRUCTURE OF QUESTION PAPER (THEORY)**

1. The question paper will comprise of 14 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts.  
Part-I will consist of eight (8) objective type questions (Q. no.1 to 8) carrying one mark each. The answer of each question should not exceed more than one sentence.  
8×1=8 Marks  
Part-II will consist of four (4) short answer type questions (Q. no. 9 to 12) carrying three (3) marks each. The answer of each question should be given in 10 to 15 lines.  
4×3=12 Marks  
Part-III will consist of two (2) essay type questions (Q. no. 13 to 14) with internal choice from both parts- A and B parts of the syllabus. These questions will carry 5 marks each and their answer should not exceed more than two pages of the answer sheet.  
2×5=10 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	1	8	4	4	8
Short Answer Type	3	4	2	2	12
Essay Type	5	2	1	1	10
Total Questions		14	7	7	30

**SYLLABUS**  
**PART-A**  
**THEORY**

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, Thaata, Raag, Aroh, Avroh, Alankar, 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 10 marks.
2. Demonstration/performance of Shabad Gagan 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 10 marks.
3. Demonstration of 'Taals' in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 10 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**  
**19. MUSIC - INSTRUMENTAL**

**Time: 3 Hrs.**  
**Time: 20 Minutes**

**Theory: 30 Marks**  
**Practical: 40 Marks**  
**CCE: 30 Marks**  
**Total: 100Marks**

**STRUCTURE OF QUESTION PAPER (THEORY)**

1. The question paper will comprise of 14 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts.

Part-I will consist of eight (8) objective type questions (Q. no. 1 to 8) carrying one mark each. The answer of each question should not exceed more than one sentence.

8×1=8 Marks

Part-II will consist of four (4) short answer type questions (Q. no. 9 to 12) carrying three (3) marks each. The answer of each question should be given in 10 to 15 lines.

4×3=12 Marks

Part-III will consist of two (2) essay type questions (Q. no. 13 to 14) with internal choice from both parts- A and B parts of the syllabus. These questions will carry 5 marks each and their answer should not exceed more than two pages of the answer sheet.

2×5=10 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	8	4	4	8
Short Answer Type	3	4	2	2	12
Essay Type	5	2	1	1	10
<b>Total Questions</b>		<b>14</b>	<b>7</b>	<b>7</b>	<b>30</b>

**SYLLABUS**  
**PART-A**  
**THEORY**

1. Definitions of the following:-  
Sangeet, Naad, Shruti, Swar, Saptak, Thaata, Raag, Arohi, Avrohi, Pakar, Alankar, Laya (Vilambit, Mahdya and Drut) Taal, Avartan, Sam, Taali, Khaali, Matra, Sathai, Antra, Mizrab, Taan, Tora, Vadi, Samvadi, Anuvadi, Varjit, Varna, Gat (Maseet-Khani and Razakhani), Chikari, Meend and Jhala,
2. (a) Knowledge of the Jatis of Raags.  
(b) Rules of Thaats and Raags and their comparison.  
(c) Purvang and Uttrang Raags.
3. Life sketches and contribution towards music of the following:-
  - (i) Pt. V.N. Bhattacharya
  - (ii) Ravi Shankar
  - (iii) Ustad Vilayat Khan

## **PART-B**

1. To write the notations of Raags:  
a) Bhopali      b) Kalyan      c) Alhya Bilawal Raag
2. Description of prescribed Raags.
3. Notation of Teen, Dadra, Jhap, Kehrava. Taal alongwith Ikgun, Dugun and Chougun Laykaries.
4. Recognition of prescribed Raags from the given Swarsangities.

## **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 10 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 10 marks.
3. Demonstration of Taals in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 10 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/non detailed Raags. It will also be for 4 minutes and will carry 5 marks.

### **SYLLABUS (PRACTICAL)**

- (a) Knowledge of Shudha and Vikrit Swaras.
- (b) Capability to demonstrate the following Taals with Bols and Mataras by hand in Ikgun (Brabar) and Dugun Laykaries: Teen Taal and Dadra, Jhap Taal, Kehrava.
- (c) One fast Gat with four toras in  
Bhopali, Kalyan and Alahya Bilawal raags
- (d) Knowledge of the following:-
  - (i) Strings used in your instruments.
  - (ii) Correct posture (Mudra)
- (e) To recognize raags and taals of your course.
- (f) Non detailed raags in terms of definition Arohi, Avrohi and Pakar.
  - (i) Khamaz
  - (ii) Deshkaar



**Class-XI****20. MUSIC - TABLA**

**Time: 3 Hrs.**  
**Time: 20 Minutes**

**Theory: 30 Marks**  
**Practical: 40 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER (THEORY)**

1. The question paper will comprise of 14 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts.

Part-I will consist of eight (8) objective type questions (Q. no. 1 to 8) carrying one mark each. The answer of each question should not exceed more than one sentence.

8×1=8 Marks

Part-II will consist of four (4) short answer type questions (Q. no. 9 to 12) carrying three (3) marks each. The answer of each question should be given in 10 to 15 lines.

4×3=12 Marks

Part-III will consist of two (2) essay type questions (Q. no. 13 to 14) with internal choice from both parts- A and B parts of the syllabus. These questions will carry 5 marks each and their answer should not exceed more than two pages of the answer sheet.

2×5=10 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	1	8	4	4	8
Short Answer Type	3	4	2	2	12
Essay Type	5	2	1	1	10
Total Questions		14	7	7	30

**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 accompaniment 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 Kehrvā and Dadra.
- (iv) Notation of prescribed Taals along with Dugun and Chougūn 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 10 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 10 marks.
3. Demonstration of 'Taals' in Ekgun and Dugun layakaries by hand. It will be for 4 minutes and will carry 10 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 will 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 Kehrvā 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 Chougūn Laykaries of prescribed Taals and on Tabla.

**Class-XI**  
**21. DANCE**

**Time: 3 Hrs.**  
**Time: 20 Minutes**

**Theory: 30 Marks**  
**Practical: 40 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER (THEORY)**

1. The question paper will comprise of 14 questions in total.
2. All questions will be compulsory to attempt.
3. The question paper will consist of three parts.

Part-I will consist of eight (8) objective type questions (Q. no. 1 to 8) carrying one mark each. The answer of each question should not exceed more than one sentence.

8×1=8 Marks

Part-II will consist of four (4) short answer type questions (Q. no. 9 to 12) carrying three (3) marks each. The answer of each question should be given in 10 to 15 lines.

4×3=12 Marks

Part-III will consist of two (2) essay type questions (Q. no. 13 to 14) with internal choice from both parts- A and B parts of the syllabus. These questions will carry 5 marks each and their answer should not exceed more than two pages of the answer sheet.

2×5=10 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 question	1	8	4	4	8
Short Answer Type question	3	4	2	2	12
Essay Type question	5	2	1	1	10
Total Questions		14	7	7	30

**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**

- 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 10 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 10 marks.
- 3. Demonstration/performance of any Taal in Ekgun and Dugun layakaries. It will be for 4 minutes and carry 10 marks.
- 4. 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.
- 5. 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**  
**22. PHILOSOPHY**

**Time: 3 Hours**

**Theory: 70 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. There will be 22 questions in all. All questions will be compulsory.
2. Question No. 1 to 10 will carry 1 mark each. Answer to each question should be in about 1- 15 words. 10×1= 10
3. Question No. 11 to 15 will carry 3 marks each. Answer to each question should be in about 30 - 35 words 5×3= 15
4. Question No. 16 to 20 will carry 5 marks each with 100% internal choice. Answer to each question should be in about 75-85 words. 5×5= 25
5. Question No. 21 & 22 will carry 10 marks each. Answer to each question should be in about 250 - 300 words. Three will be 100% internal choice in these questions. The paper setter should not set more than one such question from one chapter. 2×10= 20

**Unit-wise Weightage to Content**

Unit No.	Questions carrying 1 Mark	Questions carrying 3 Marks	Questions carrying 5 Marks	Questions carrying 10 Marks	Total
1, 2, 3,4	5	3	3	1	39 Marks
5,6,7,8,	5	2	2	1	31 Marks
<b>Total questions</b>	10	5	5	2	22 Questions
<b>Total marks</b>	10	15	25	20	70 Marks

**SYLLABUS**

- Unit-I (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.
- (b) Fundamental Laws of thought
- (c) Terms: Their meaning, Connotation and Denotation.
- Unit-II Logical Definition: Its rules. Fallacies arising out of violation of rules. Limits of logical definition. Practical exercises in fallacies of logical definitions.
- Unit-III (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-IV 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-V Elementary Philosophy: Meaning, Definition and uses of Philosophy.
- Unit-VI Branches of Philosophy: Metaphysics, Epistemology, Logic, Aesthetics and Psychology.
- Unit-VII Relation of Philosophy to science and Religion.
- Unit-VIII Dharma, Artha, Karma, Moksha, Varnashrama, Doctorine of Karma according to Indian Philosophy.

**Class-XI**  
**23. EDUCATION**

**Time: 3 Hours**

**Theory: 70 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. There will be 22 questions in all. All questions will be compulsory.
2. Question No. 1 to 10 will carry 1 mark each. Answer to each question should be in about 10 - 15 words. 10×1= 10
3. Question No. 11 to 15 will carry 3 marks each. Answer to each question should be in about 20 - 25 words. 5×3= 15
4. Question No. 16 to 20 will carry 5 marks each with 100% internal choice. Answer to each question should be in about 75-80 words. 5×5= 25
5. Question No. 21 & 22 will carry 10 marks each. Answer to each question should be in about 200 - 250 words. Three will be 100% internal choice in these questions. The paper setter should not set more than one such question from one chapter. 2×10= 20

**Unit-wise Weightage to Content**

Unit No.	Questions carrying 1 Mark	Questions carrying 3 Marks	Questions carrying 5 Marks	Questions carrying 10 Marks	Total
1, 2, 3,	6	3	3	1	40 Marks
4.5	4	2	2	1	30 Marks
<b>Total questions</b>	10	5	5	2	22 Questions
<b>Total marks</b>	10	15	25	20	70 Marks

**SYLLABUS**

**Principles of Education**

- Unit-I** Meaning and concept of Education. Needs for Education.
- Unit-II** Aims of Education: Industrial aim, Social aim, Vocational aim and Cultural aim.
- Unit-III** Curriculum its meaning and importance, Defects in the Traditional Curriculum. Co-curricular activities and their importance in Education.
- Unit-IV** Agencies of Education-Home, School, Community.
- Unit-V** Organisations of Education: Directorate of Education-D.P.I. and State Board of education.
- Unit-VI** Problems of Education:- Adult Education, Environment Education, Population Education, Women Education, Special Education

**Class-XI**  
**24. GEOGRAPHY**

**Geography (+1)**

Syllabus

**Unit-1**

- (i) **Solar system**- earth, its place in the solar system, its shape and size, its movements and their effects, latitude and longitude, time-local and standard; International date line.
- (ii) **Rocks**- their origin, classification and characteristics.
- (iii) **Agents of change**- weathering and denudation: work of river, glacier, wind, underground water and sea.

**Unit -2 Lithosphere**

- (iv) **Major landforms**- Mountains, plateaus and plains, origin, classification and their significance to man.
- (v) **Earthquake**- Causes and effects; distribution, Volcanoes-Causes and effects of volcanic activity, volcanic forms, distribution of volcanoes.

**Unit-3 Atmosphere**

- (vi) **Atmosphere**- extent, layers and composition, temperature, factors controlling temperature, factors controlling temperature, horizontal and vertical distribution, range of temperature. Pressure of the atmosphere-factors controlling pressure, horizontal and vertical distribution.
- (vii) **Winds-planetary**- seasonal and local, shifting of wind belts and its impact, cyclones and anticyclones.
- (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 circulations, temperature, salinity, waves, currents and tides.

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

(b) Answer should be illustrated with maps and diagrams.

**Practical Map Work**

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

**Scale of Map:** Representative fraction, linear scale (primary and secondary division), its use in preparing maps, reduction and enlargement of the map 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 or recognition of symbols or conventional signs used in all and topographics sheets of Survey of India, signs and symbols used in weather maps.

**Methods of showing relief on maps:** contours, interpolation of contours identification, simple relief features from the contours on a map, drawing of cross section.

**Observing and recording of various weather elements with the help of the following instruments:-**

- (a) Six's Maximum and minimum Thermometer
- (b) Aneroid Barometer
- (c) Wind Vane
- (d) Wet and dry Thermometer
- (e) Rain Gauge
- (f) Drawing of Isotherms, Isobars and isohyets.



**Class-XI**  
**25. DEFENCE STUDIES**

**Time : 3 Hours**

**Theory : 50 Marks**  
**Practical : 20 Marks**  
**CCE : 30 Marks**  
**Total : 100 Marks**

**STRUCTURE OF QUESTIONS PAPER (THEORY)**

1. There will be 12 Questions in all.
2. All questions are compulsory.
3. There will be 5 questions of one Mark each & these questions will be objective type. 5 × 1 = 5
4. There will be 5 questions of 5 Marks each. 5 × 5 = 25
5. There will be 2 questions of 10 Marks each with internal choice. 2 × 10 = 20

**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(b) Defence Potential of India:
  - (i) Strategic location frontiers of India;
  - (ii) Boundaries;

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.
  - (iii) Leadership: Definition, Importance, Types and Qualities of leadership.
  - (iv) Fear and Panic: Causes and effects of fear and panic, methods of recovery from fear and panic.
  - (v) Man Management: What is man management and its purpose.
5. (a) Give Strategic importance of following places:
  - (i) Korakoram-Sinking Highway.
  - (ii) Laddakh.
  - (iii) Kathmandu.
  - (iv) Kodari Highway.
  - (v) Chumbi Valley.

- (b) Defence Potential of India;
  - (i) India's strategic Mineral Commodities;
  - (ii) Industrial potentials, transport and communication in India;

**PAPER-II**  
**VIVA-VOCE**

**Note:** 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**  
**26. PSYCHOLOGY**

**Time: 3 Hrs.**  
**Time: 3 Hrs.**

**Theory: 50 Marks**  
**Practical: 20 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. The Question paper will comprise of 19 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 five (5) objective type questions (Q.No.1 to 5) 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. 5×1=5

**Part-II** will consist of six (6) short answer type I, questions (Q. No. 6 to 11) carrying 2 marks each. Answer of each question should be given in 50-60 words. 6×2=12

**Part-III** will consist of five (5) short answer type II, questions (Q. No. 12 to 16) carrying 3 marks each. Answers of each question should be given in 70-80 words. 5×3=15

**Part-IV** will consist of three (3) long answer type questions with internal choice (Q. No. 17 to 19) 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	5	1	1	-	1	-	1	-	1	<b>5</b>
Short answer type-I	2 Marks	6	1	1	1	1	-	1	-	1	<b>12</b>
Short answer type-II	3 Marks	5	1	1	-	1	-	1	-	1	<b>15</b>
Long answer type	6 Marks	3	-	-	1	-	1	-	1	-	<b>18</b>
<b>Total</b>		<b>19</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>50</b>

## 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 Hormones 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: Learning through trial and error, Insight theory of Learning. Laws of learning.

**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**  
**27. HOME SCIENCE**

**Time: 3 Hrs.**  
**Time: 3 Hrs.**

**Theory: 40 Marks**  
**Practical: 30 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER (Theory)**

1. The question paper will comprise of 16 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 6 objective type questions (Q. no. 1 to 6) 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.

$$6 \times 1 = 6$$

**Part-II** will consists of 8 short answer type questions (Q. no. 7 to 14) carrying 3 marks each. Answer of each question should be given within 60-80 words.  $8 \times 3 = 24$

**Part-III** will consist of 2 long answer type questions (Q. no.15 to 16) with internal choice carrying 5 marks each. Answer of each question should be given within 150-200 words.  $2 \times 5 = 10$

**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	6	3	3	6
Short answer type	3 Marks	8	4	4	24
Long answer type	5 Marks	2	1	1	10
<b>Total</b>		<b>16</b>	<b>8</b>	<b>8</b>	<b>40</b>

**SYLLABUS (THEORY)**

**SECTION-A**

**(HOME MANAGEMENT)**

1. **Introduction to Home Management**  
Meaning of Home Management and its Role
2. **Basis for Management**
  - (i) Values, goals and standards
  - (ii) Small family norms
  - (iii) Resources-Human and Material
3. **Management Process**

Planning, Organising, Implementing

Role of decision making in management process

**4. Qualities & functions of a good Home Manager.**

**5. Human Resources**

- (i) Knowledge
- (ii) Skill and abilities
- (iii) Time as a resource for occupational activity and leisure-utilisation of time in Home management.
- (iv) Utilisation of Human energy
  - (a) Energy involved in household activities
  - (b) Fatigue - Physical and Psychological
  - (c) Work simplification-meaning and method

**6. Material Resources**

Equipment in the home: (Kitchen and general)

- (i) Selection - Design, use and cost
- (ii) Operation-Safety and method of operation
- (iii) Cleaning and Care:
  - (a) Common household cooking and serving utensils
  - (b) Electrical appliances
  - (c) Gas appliances

**7. Work Organisation**

- (i) Maintenance and care of the Home
- (ii) Daily, weekly and periodical dusting and cleaning
- (iii) Polishing of floor, furniture and equipment
- (iv) Cleaning for festivals and special occasions
- (v) Disinfection and pest control

**8. The Family Budget**

- (i) Definition and types of budget
- (ii) Main items of family budget
  - (a) Food, clothing and housing
  - (b) Education, transport, health care and entertainment
  - (c) Allocation of money for the above
  - (d) Expenditure-Maintenance of records
  - (e) Need for saving - Types and methods of saving and investment

**SECTION-B**  
**(CLOTHING AND TEXTILES)**

**Laundry**

- 1. Kinds of Fibre: cotton, linen, silk, wool, nylon-their sources, structure and properties.
- 2. Necessary equipment for laundry.
- 3. Preliminary preparation for washing clothes, sorting, mending and removal of stains.
- 4. Soaps and other supplies used in washing.
- 5. Washing and finishing of garments made of cotton, silk, wool, synthetic fibres.
- 6. Care & storage of clothing for the family.

**Clothing**

- 1. Equipment and appliances used in sewing, sewing machine and its care.
- 2. Study of body measurements.
- 3. Selection and care of clothing for the family.
- 4. Clothing for children (pre-school & school going) with emphasis on comfort, convenience and meeting the needs of growth.

**PRACTICAL  
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 (Home Management)**

2. Any one practical from practical no. 1, 2, 3, 4 and 8 5 Marks  
3. Any one practical from practical no. 5, 6 and 7 5 Marks

**Section-B (Clothing & Textiles)**

4. Any three samples from practical no. 1, 2 and 3 (1 sample from each practical)

or

- Drafting and Stitching from practical No. 6. 5 Marks  
5. Any one practical from practical no. 4 or 5. 5 Marks  
6. Stain removal from Practical no. 3

or

- Laundry of any one garment from practical no. 4 5 Marks

**SYLLABUS (PRACTICAL)**

**SECTION-A**

**(HOME MANAGEMENT)**

1. Prepare a list of goals of your family & yourself indicating priorities.
2. Give suggestions for improving the standard of living of your family.
3. Simple study of operation, use and care of common household gadgets like Kerosene stove, gas-burner, oven (electric), electric iron and heater.
4. Floor cleaning.
5. Prepare a list of activities, you perform during a week. Evaluate the utilisation of time.
6. Prepare a list of minimum equipment needed for a family of four members and calculate cost.
7. Daily and weekly cleaning: rooms and furniture; cleaning and polishing: Brass, silver, iron, aluminium and glass.
8. Study of the amount spent on the main items of expenditure. Work out allocation on different items of expenditure.
9. Study methods of saving in your family and opening and maintaining Bank Accounts.

**SECTION-B**

**(CLOTHING AND TEXTILES)**

**Clothing**

1. Knowledge of basic stitches such as tacking, running stitch, hemming, back stitch, loop, button hole stitch.
2. Flat seam, run and fell seam and French seam.
3. Placket opening-one piece & two piece.
4. Basic embroidery stitches (minimum five) and making embroidery article.
5. Crochet work-Make an album with five different crochet designs.
6. Drafting and stitching of Jangia and Jhabla.

**Laundry**

- i. Simple household tests of textile fabrics.
- ii. Laundry of Cotton, woolen and synthetic garments like Salvar, Kameez.
- iii. Removal of stains-Tea, Ink, Curry and Blood.
- iv. Laundry of Cotton, woolen and Synthetic garments like -Blouse, Petticot, Child's Knicker and Shirt



**ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ**  
**28. ਮਾਡਲਿੰਗ ਅਤੇ ਮੂਰਤੀਕਲਾ (ਬੁੱਤਕਾਰੀ)**  
 (Modelling and Sculpture)

**ਸਮਾਂ : 8 ਘੰਟੇ**

**ਕੁੱਲ ਅੰਕ : 100**

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

**ਅੰਕਾਂ ਦੀ ਵੰਡ**

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	= 70 ਅੰਕ
ਸੀ.ਸੀ.ਈ.	= 30 ਅੰਕ
ਕੁੱਲ ਅੰਕ	= 100 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: 30**

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

**ਭਾਗ-II**

**ਅੰਕ: 30**

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

**ਭਾਗ-III**

**ਅੰਕ: 10**

**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 : 100**

**ਭਾਗ-I**

**ਅੰਕ : 30**

ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟ ਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰੀਖਿਅਕ ਰਾਹੀਂ ਲਿਆ ਜਾਵੇਗਾ। ਇਹ ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਹੋਵੇਗਾ ਅਤੇ ਇਸਦੇ 30 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: 30**

ਇਹ ਪੇਪਰ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਹੋਵੇਗਾ। ਇਸ ਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਅਤੇ ਇਹ ਪੇਪਰ 30 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: 30**

**ਸੈਸ਼ਨਲ ਕੰਮ**

ਦੋਨਾਂ ਸੈਸ਼ਨਾਂ ਦੇ ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੀ ਛੁੱਟੀ ਹੋਵੇਗੀ। ਉਸ ਦੌਰਾਨ ਸੈਸ਼ਨਲ ਕੰਮ ਚੈੱਕ ਕਰਕੇ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ। ਇਹ 10 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

### 29. ਜਿਊਮੈਟਰੀਕਲ ਪਰਾਸਪੈਕਟਿਵ, ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਈਂਗ (Geometrical Perspective and Architechtural Drawing)

ਸਮਾਂ : 4 ਘੰਟੇ

ਕੁੱਲ : 100 ਅੰਕ

#### ਅੰਕਾਂ ਦੀ ਵੰਡ

ਥਿਊਰੀ	= 70 ਅੰਕ
ਸੀ.ਸੀ.ਈ.	= 30 ਅੰਕ
ਕੁੱਲ ਅੰਕ	= 100 ਅੰਕ
ਪਾਸ ਅੰਕ	= 33 ਅੰਕ

#### ਭਾਗ-I

ਅੰਕ : 35

#### ਜਿਊਮੈਟਰੀਕਲ ਅਤੇ ਵਿੱਥ ਸੋਝੀ ਡਰਾਈਂਗ (Geometrical Perspective Drawing)

##### 1. ਜਿਊਮੈਟਰੀਕਲ ਡਰਾਈਂਗ

ਅੰਕ : 12

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 ਜਿਊਮੈਟਰੀ (Solid Geometry) (ਜ਼ਰੂਰੀ)

ਅੰਕ : 8

- i) ਠੋਸ ਆਕਾਰ ਜਿਵੇਂ ਤਿਕੋਣ, ਵਰਗ, ਬਹੁਭੁਜਾਵਾਂ ਅਤੇ ਗੋਲੇ ਦੇ ਤਲ ਅਤੇ ਮੱਥਾ ਬਣਾਉਣਾ।
- ii) XY ਰੇਖਾ ਨਾਲ ਕੋਣ ਬਣਾਉਂਦੇ ਆਕਾਰਾਂ ਦਾ ਤਲ ਅਤੇ ਮੱਥਾ ਬਣਾਉਣਾ।

##### 3. ਵਿੱਥ ਸੋਝੀ ਡਰਾਈਂਗ (Perspective Drawing) (ਜ਼ਰੂਰੀ)

ਅੰਕ 15

- 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 ਸਮਾਨੰਤਰ ਅਤੇ ਕੋਣਿਕ ਵਿੱਥ ਸੋਝੀ ਚਿੱਤਰ ਬਣਾਉਣੇ।

#### ਭਾਗ-II

ਅੰਕ : 35

#### ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਈਂਗ (Architechtural 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 ਪਰਸਪੈਕਟਿਵ, ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਇੰਗ**  
**(Geometrical Perspective and Architectural Drawing)**

**ਸਮਾਂ : 4 ਘੰਟੇ**

**ਥਿਊਰੀ : 70 ਅੰਕ**  
**ਸੀ.ਸੀ.ਈ. : 30 ਅੰਕ**  
**ਕੁੱਲ : 100 ਅੰਕ**

**ਭਾਗ-I**

**ਅੰਕ : 35**

**ਜਿਉਮੈਟਰੀਕਲ ਅਤੇ ਵਿੱਥ ਸੋਝੀ ਡਰਾਇੰਗ**

**ਜਿਉਮੈਟਰੀਕਲ ਡਰਾਇੰਗ**

**ਅੰਕ : 12**

ਇਸ ਭਾਗ ਵਿੱਚ ਪੇਪਰ ਸੈਟਰ ਚਾਰ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰੇਗਾ, ਜਿਹਨਾਂ ਵਿੱਚੋਂ ਪ੍ਰੀਖਿਆਰਥੀ ਨੇ ਦੋ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨੇ ਹਨ ਜੋ 6-6 ਅੰਕਾਂ ਦੇ ਹੋਣਗੇ।

**ਠੋਸ ਅਤੇ ਨਿੱਗਰ ਜਿਉਮੈਟਰੀ**

**ਅੰਕ : 8**

ਇਸ ਭਾਗ ਵਿੱਚ ਪੇਪਰ ਸੈਟਰ ਦੋ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰੇਗਾ ਜਿਹਨਾਂ ਵਿੱਚੋਂ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਜ਼ਰੂਰੀ ਹੋਵੇਗਾ, ਜੋ 8 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ।

**ਵਿੱਥ ਸੋਝੀ ਡਰਾਇੰਗ**

**ਅੰਕ : 15**

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

**ਅੰਕਾਂ ਦੀ ਵੰਡ:-**

ਬਣਾਵਟ	= 7 ਅੰਕ
ਠੀਕ ਗਿਣਤੀਆਂ ਅਤੇ ਠੀਕ ਡਰਾਇੰਗ	= 4 ਅੰਕ
ਸਕੇਲ ਡਰਾਇੰਗ	= 2 ਅੰਕ
ਰੇਖਾਵਾਂ	= 2 ਅੰਕ
ਕੁੱਲ	= 15 ਅੰਕ

**ਭਾਗ-II**

**ਅੰਕ : 35**

**ਆਰਕੀਟੈਕਚਰਲ ਡਰਾਇੰਗ**

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

**ਅੰਕਾਂ ਦੀ ਵੰਡ:-**

ਮੱਥਾ (Elevation)	= 10 ਅੰਕ
ਪਾਸਾ (Side)	= 10 ਅੰਕ
ਤਲ (Plan)	= 10 ਅੰਕ
ਲਿਖਾਈ ਅਤੇ ਮਾਪ (W + S)	= 5 ਅੰਕ
ਕੁੱਲ	= 35 ਅੰਕ

ਕਾਗਜ਼ ਦਾ ਮਾਪ:-  $\frac{1}{4}$  (35 ਸੈਂ.ਮੀ.  $\times$  25 ਸੈਂ.ਮੀ.)

**ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ**  
**30. ਕਮਰਸ਼ੀਅਲ ਆਰਟ**  
 (Commercial Art)

ਸਮਾਂ : 8 ਘੰਟੇ

ਕੁੱਲ ਅੰਕ : 100

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

ਅੰਕਾਂ ਦੀ ਵੰਡ:-

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	= 70 ਅੰਕ
ਸੀ.ਸੀ.ਈ.	= 30 ਅੰਕ
ਕੁੱਲ ਅੰਕ	= 100 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: 30**

**ਲੇ-ਆਉਟ ਡੀਜਾਇਨਿੰਗ (Layout Designing)**

i) ਹਿੰਦੀ, ਪੰਜਾਬੀ ਜਾਂ ਅੰਗਰੇਜ਼ੀ ਵਿੱਚ ਵੱਡੇ ਵੱਡੇ ਅੱਖਰਾਂ ਵਿੱਚ ਲਿਖਾਈ ਕਰਨਾ।

ਜਿਵੇਂ :- ਜੀ ਆਇਆ ਨੂੰ, ávwgq`m, WELCOME

(ii) ਸਾਧਾਰਨ ਕਿਤਾਬਾਂ ਦੇ ਕਵਰ ਚਿੱਤਰਾਂ ਦੇ ਸਾਧਾਰਨ ਲੇ-ਆਉਟ ਤਿਆਰ ਕਰਨੇ।

**ਮੀਡੀਅਮ :- ਪੋਸਟਰ ਕਲਰ।**

**ਭਾਗ - II**

**ਅੰਕ : 30**

**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  $\frac{1}{4}$  ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ.  $\times$  25 ਸੈਂ.ਮੀ.)

**ਭਾਗ - III**

**ਅੰਕ : 10**

**ਸੈਸ਼ਨਲ ਕੰਮ**

ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੀਆਂ ਘੱਟੋ-ਘੱਟ 20 ਕਲਾ ਕ੍ਰਿਤੀਆਂ ਜੋ ਕਿ ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਤਿਆਰ ਕੀਤੀਆਂ ਹੋਣ ਦਾ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ। ਹਰ ਕਲਾ ਕ੍ਰਿਤੀ ਦਾ  $\frac{1}{2}$  ਅੰਕ ਹੋਵੇਗਾ।

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

**ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ**  
**Structure of Question Paper**

**ਕਮਰਸ਼ੀਅਲ ਆਰਟ**  
**(Commercial Art)**

**ਸਮਾਂ : 8 ਘੰਟੇ**

**ਕੁੱਲ : 100 ਅੰਕ**

**ਅੰਕਾਂ ਦੀ ਵੰਡ**

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 70 ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 30 ਅੰਕ
ਕੁੱਲ	: 100 ਅੰਕ
ਪਾਸ ਅੰਕ	: 33 ਅੰਕ

**ਭਾਗ-I**

**ਅੰਕ : 30**

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 30 ਅੰਕ ਹੋਣਗੇ। ਇਸ ਵਿੱਚ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰਨੇ ਹੋਣਗੇ। ਵਿਦਿਆਰਥੀ ਵੱਲੋਂ ਕੋਈ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਹੋਵੇਗਾ।

**ਭਾਗ-II**

**ਅੰਕ : 30**

2. ਦੂਜੇ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਪੋਸਟਰ ਡਿਜ਼ਾਈਨਿੰਗ ਦਾ ਪੇਪਰ ਹੋਵੇਗਾ। ਇਹ ਪੇਪਰ ਵੀ ਉਪਰੋਕਤ ਅਨੁਸਾਰ 30 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸ ਦਾ ਸਮਾਂ ਚਾਰ ਘੰਟੇ ਹੋਵੇਗਾ। ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਕੋਈ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰਨਾ ਹੋਵੇਗਾ।
3. ਪੇਪਰ ਦਾ ਸਾਈਜ਼:- ਪੂਰੇ ਕਾਗਜ਼ ਦਾ  $\frac{1}{4}$  ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ.  $\times$  25 ਸੈਂ. ਮੀ.)
5. ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੇ ਸਮੇਂ ਵਿੱਚ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਪ੍ਰੀਖਿਆਰਥੀਆਂ ਦੇ ਸੈਸ਼ਨਲ ਕੰਮ ਦਾ ਮੁਲਾਂਕਣ ਕਰੇਗਾ। ਇਸਦੇ 10 ਅੰਕ ਹੋਣਗੇ। ਪ੍ਰੀਖਿਅਕ ਕੀਤੇ ਕੰਮਾਂ ਅਨੁਸਾਰ ਅੰਕ ਦੇਵੇਗਾ।
6. ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਸਾਰੇ ਪੇਪਰਾਂ ਦਾ ਮੁਲਾਂਕਣ ਕਰਕੇ ਨੰਬਰ ਸੂਚੀਆਂ ਸਬੰਧਤ ਅਧਿਕਾਰੀ ਨੂੰ ਮੋਹਰ ਬੰਦ ਕਰਕੇ ਭੇਜੇਗਾ।
7. ਡਰਾਈਂਗ ਸ਼ੀਟਾਂ ਅਤੇ ਪੇਟਿੰਗ ਦਾ ਹੋਰ ਸਾਰਾ ਸਾਮਾਨ ਪ੍ਰੀਖਿਆਰਥੀ ਖੁਦ ਨਾਲ ਲੈ ਕੇ ਆਵੇਗਾ।

**ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ**  
**31. ਡਰਾਈਂਗ ਅਤੇ ਚਿੱਤਰਕਲਾ**  
**(Drawing and Painting)**

**ਸਮਾਂ : 8 ਘੰਟੇ**

**ਕੁੱਲ ਅੰਕ : 100**

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

**ਅੰਕਾਂ ਦੀ ਵੰਡ:-**

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 70 ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 30 ਅੰਕ
ਕੁੱਲ	: 100 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 : 30**

**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 ਦਰੱਖਤ ਆਦਿ ਦੇ ਚਿੱਤਰਾਂ ਨੂੰ ਪ੍ਰਯੋਗ ਕਰਕੇ ਕੁਦਰਤੀ ਦ੍ਰਿਸ਼ ਤਿਆਰ ਕਰਨੇ।

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

**ਜਾਂ**

**ਡੀਜ਼ਾਈਨ (Design)**

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

ਨੋਟ : ਸਿਰਫ਼ ਪਾਣੀ ਵਾਲੇ ਰੰਗ।

**ਭਾਗ - II**

**ਅੰਕ: 30**

**ਮਾਡਲ ਡਰਾਈਂਗ (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 ਡਰਾਈਂਗ ਵਿੱਚ ਛਾਇਆ ਤੇ ਪਰਛਾਇਆ (Light and Shade) ਦਿਖਾਈ ਜਾਵੇ।

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

**ਭਾਗ - III**

**ਅੰਕ : 10**

**ਸੈਸ਼ਨਲ ਕੰਮ**

ਘੱਟੋ-ਘੱਟ 20 ਮਾਡਲ ਜੋ ਕਿ ਪ੍ਰੀਖਿਆਰਥੀ ਵੱਲੋਂ ਸਾਰੇ ਸਾਲ ਵਿੱਚ ਤਿਆਰ ਕੀਤੇ ਹੋਣ ਦਾ ਮੁਲਾਂਕਣ ਕੀਤਾ ਜਾਵੇਗਾ। ਹਰ ਮਾਡਲ ਦਾ ½ ਅੰਕ ਹੋਵੇਗਾ।

ਨੋਟ :- ਡਰਾਈਂਗ ਸ਼ੀਟਾਂ ਅਤੇ ਰੰਗ ਪ੍ਰੀਖਿਆਰਥੀ ਖੁਦ ਨਾਲ ਲੈ ਕੇ ਆਵੇਗਾ।

**ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ**  
**Structure of Question Paper**  
**ਡਰਾਈਂਗ ਅਤੇ ਚਿੱਤਰਕਲਾ**  
**(Drawing and Painting)**

ਸਮਾਂ : 8 ਘੰਟੇ

ਕੁੱਲ : 100 ਅੰਕ

**ਅੰਕਾਂ ਦੀ ਵੰਡ**

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 70 ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 30 ਅੰਕ
ਕੁੱਲ	: 100 ਅੰਕ
ਪਾਸ ਅੰਕ	: 33 ਅੰਕ

**ਭਾਗ-I**

**ਅੰਕ : 30**

1. ਇਹ ਪੇਪਰ ਪ੍ਰਯੋਗੀ ਡੇਟ-ਸ਼ੀਟ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ। ਇਸ ਭਾਗ ਵਿੱਚ ਪਾਠ-ਕ੍ਰਮ ਅਨੁਸਾਰ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਸਕੈਚਿੰਗ, ਫਰੀਹੈਂਡ ਡਰਾਈਂਗ ਅਤੇ ਡਿਜ਼ਾਈਨ ਸਬੰਧੀ ਤਿੰਨ ਪ੍ਰਸ਼ਨ ਸੈੱਟ ਕਰੇਗਾ, ਜਿਸ ਵਿੱਚੋਂ ਪ੍ਰੀਖਿਆਰਥੀ ਆਪਣੀ ਚੋਣ ਅਨੁਸਾਰ ਇੱਕ ਪ੍ਰਸ਼ਨ ਹੱਲ ਕਰੇਗਾ ਜੋ 30 ਅੰਕਾਂ ਦਾ ਹੋਵੇਗਾ। ਇਸਦਾ ਸਮਾਂ 4 ਘੰਟੇ ਦਾ ਹੋਵੇਗਾ। ਇਹ ਪੇਪਰ ਸਵੇਰ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਸੈੱਟ ਕੀਤਾ ਜਾਵੇਗਾ।

ਪੇਪਰ ਦਾ ਸਾਈਜ਼:- ਪੂਰੇ ਕਾਗਜ਼ ਦਾ  $\frac{1}{4}$  ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ.  $\times$  25 ਸੈਂ. ਮੀ.)

**ਭਾਗ-II**

**ਅੰਕ : 30**

2. ਇਹ ਪੇਪਰ ਸ਼ਾਮ ਦੇ ਸੈਸ਼ਨ ਵਿੱਚ ਹੋਵੇਗਾ। ਇਸਦਾ ਸਮਾਂ 4 ਘੰਟੇ ਅਤੇ ਇਹ 30 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 ਬਣਾਏ ਜਾਣਗੇ। ਇਹ ਯਕੀਨੀ ਬਣਾਇਆ ਜਾਵੇ ਕਿ ਹਰ ਵਿਦਿਆਰਥੀ ਨੂੰ ਮਾਡਲ ਅਸਾਨੀ ਨਾਲ ਦਿਖਾਈ ਦੇ ਸਕੇ।

ਪੇਪਰ ਦਾ ਸਾਈਜ਼:- ਪੂਰੇ ਕਾਗਜ਼ ਦਾ  $\frac{1}{4}$  ਹਿੱਸਾ (35 ਸੈਂ. ਮੀ.  $\times$  25 ਸੈਂ. ਮੀ.)

**ਭਾਗ-III**

3. ਵਿਚਕਾਰ ਇੱਕ ਘੰਟੇ ਦੇ ਸਮੇਂ ਦੌਰਾਨ ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਅਕ ਪ੍ਰੀਖਿਆਰਥੀਆਂ ਦੇ ਸੈਸ਼ਨਲ ਕੰਮ ਦਾ ਮੁਲਾਂਕਣ ਕਰੇਗਾ। ਇਸਦੇ 10 ਅੰਕ ਹੋਣਗੇ। ਪ੍ਰੀਖਿਅਕ ਕੀਤੇ ਕੰਮਾਂ ਅਨੁਸਾਰ ਅੰਕ ਦੇਵੇਗਾ।

**ਅੰਕਾਂ ਦੀ ਵੰਡ:**

ਸਕੈਚਿੰਗ ਅਤੇ ਬਣਾਵਟ	: 8 ਅੰਕ
ਪ੍ਰਭਾਵ	: 8 ਅੰਕ
ਠੀਕ ਡਰਾਈਂਗ	: 8 ਅੰਕ
ਰੰਗ ਯੋਜਨਾ	: 6 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 30 ਅੰਕ

**ਧਰਤੀ ਦ੍ਰਿਸ਼ ਚਿੱਤਰਨ (Land Scape)**

ਬਣਾਵਟ	: 10 ਅੰਕ
ਸਮੁੱਚਾ ਪ੍ਰਭਾਵ	: 6 ਅੰਕ
ਠੀਕ ਡਰਾਈਂਗ	: 6 ਅੰਕ
ਰੰਗ ਯੋਜਨਾ	: 8 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 30 ਅੰਕ

**ਡਿਜ਼ਾਈਨ (Design)**

ਡਿਜ਼ਾਈਨ ਦੀ ਇਕਾਈ	: 8 ਅੰਕ
ਪੇਪਰ ਤੇ ਡਿਜ਼ਾਈਨ ਦੀ ਸੈਟਿੰਗ	: 11 ਅੰਕ
ਰੰਗ ਯੋਜਨਾ ਅਤੇ ਪ੍ਰਭਾਵ	: 11 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 30 ਅੰਕ

**ਭਾਗ-II****ਮਾਡਲ ਡਰਾਈਂਗ**

ਬਣਾਵਟ	: 6 ਅੰਕ
ਅਨੁਪਾਤ ਅਤੇ ਸਮਾਨੁਪਾਤ	: 6 ਅੰਕ
ਵਿੱਥ ਸੋਝੀ	: 4 ਅੰਕ
ਠੀਕ ਡਰਾਈਂਗ	: 8 ਅੰਕ
ਛਾਇਆ ਤੇ ਪ੍ਰਛਾਇਆ	: 6 ਅੰਕ
ਕੁੱਲ ਅੰਕ	: 30 ਅੰਕ



**ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ**  
**32. ਕਲਾ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਪ੍ਰਸ਼ੰਸਾ**  
**(History and Appreciation of Art)**

ਸਮਾਂ : 3 ਘੰਟੇ

ਕੁੱਲ : 100 ਅੰਕ

**ਅੰਕਾਂ ਦੀ ਵੰਡ:**

ਪ੍ਰਯੋਗੀ ਪ੍ਰੀਖਿਆ	: 70 ਅੰਕ
ਸੀ.ਸੀ.ਈ.	: 30 ਅੰਕ
ਕੁੱਲ	: 100 ਅੰਕ
ਪਾਸ ਅੰਕ	: 33 ਅੰਕ

**ਨੋਟ :** ਇਹ ਪੇਪਰ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਬਾਕੀ ਬਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੈਂਟ ਵੱਲੋਂ ਲਿਆ ਜਾਵੇਗਾ।

**ਭਾਗ-I**

**ਕਲਾ ਦਾ ਇਤਿਹਾਸ (History of Art)**

1. ਪੂਰਵ ਇਤਿਹਾਸ-ਗੁਫਾਵਾਂ ਦੀ ਚਿੱਤਰਕਾਰੀ।
2. ਸਿੰਧ ਘਾਟੀ ਦੀ ਸੱਭਿਅਤਾ ਦੇ ਚਿੱਤਰ।
3. ਮੌਰੀਆ ਯੁੱਗ ਦੇ ਚਿੱਤਰ।
4. ਸੰਘਾ ਕਲਾ ਦੇ ਚਿੱਤਰ।
2. ਗੰਧਾਰ ਕਲਾ ਦੇ ਚਿੱਤਰ।
3. ਗੁਪਤਕਾਲ ਦੀ ਕਲਾ

**ਭਾਗ-II**

**ਕਲਾ ਦੀ ਪ੍ਰਸ਼ੰਸਾ (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 ਬਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੈਂਟ ਦੀ ਹਾਜ਼ਰੀ ਵਿੱਚ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਹੋਵੇਗਾ।

**ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ-ਰੇਖਾ**  
**Structure of Question Paper**  
**ਕਲਾ ਦਾ ਇਤਿਹਾਸ ਅਤੇ ਪ੍ਰਸ਼ੰਸਾ**  
**(History and Appreciation of Art)**

ਸਮਾਂ : 3 ਘੰਟੇ

ਅੰਕਾਂ ਦੀ ਵੰਡ	ਕੁੱਲ ਅੰਕ	ਪਾਸ ਅੰਕ
ਥਿਊਰੀ	70	23
ਸੀ.ਸੀ.ਈ.	30	10
ਕੁੱਲ ਅੰਕ	100	33

1. ਇਹ ਪੇਪਰ ਪ੍ਰੀਖਿਆ ਭਵਨ ਵਿੱਚ ਬਾਕੀ ਥਿਊਰੀ ਪੇਪਰਾਂ ਵਾਂਗ ਕੇਂਦਰ ਸੁਪਰਡੈਂਟ 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 14 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।

**ਸ਼੍ਰੇਣੀ-ਗਿਆਰ੍ਹਵੀਂ**  
**33. ਸਰੀਰਕ ਸਿੱਖਿਆ ਅਤੇ ਖੇਡਾਂ**

ਸਮਾਂ : 3 ਘੰਟੇ

ਥਿਊਰੀ ਭਾਗ - 30 ਅੰਕ  
ਪ੍ਰਯੋਗੀ ਭਾਗ - 40 ਅੰਕ  
ਸੀ.ਸੀ.ਈ - 30 ਅੰਕ  
ਕੁੱਲ - 100 ਅੰਕ

**ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਦੀ ਰੂਪ ਰੇਖਾ**

1. ਪ੍ਰਸ਼ਨ ਪੱਤਰ ਵਿੱਚ ਕੁੱਲ 15 ਪ੍ਰਸ਼ਨ ਪੁੱਛੇ ਜਾਣਗੇ ਅਤੇ ਇਹ ਸਾਰੇ ਪ੍ਰਸ਼ਨ ਕਰਨੇ ਜ਼ਰੂਰੀ ਹਨ।
2. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 1 ਤੋਂ 8 ਤੱਕ ਇੱਕ-ਇੱਕ ਅੰਕ ਵਾਲੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ ਅਤੇ ਇਹ ਓਬਜੈਕਟਿਵ ਟਾਈਪ ਵੀ ਹੋ ਸਕਦੇ ਹਨ ਅਤੇ ਇਹਨਾਂ ਦਾ ਉੱਤਰ 10 ਸ਼ਬਦਾਂ ਤੱਕ ਦਾ ਹੋ ਸਕਦਾ ਹੈ।
3. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 9 ਤੋਂ 11 ਤੱਕ ਦੋ-ਦੋ ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ। ਹਰੇਕ ਪ੍ਰਸ਼ਨ ਦਾ ਉੱਤਰ ਲਗਭਗ 30 ਸ਼ਬਦਾਂ ਤੱਕ ਹੋ ਸਕਦਾ ਹੈ।
4. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 12 ਤੋਂ 13 ਤੱਕ ਤਿੰਨ-ਤਿੰਨ ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ। ਜਿਨ੍ਹਾਂ ਦਾ ਉੱਤਰ ਲਗਭਗ 30 ਤੋਂ 50 ਸ਼ਬਦਾਂ ਤੱਕ ਹੋ ਸਕਦਾ ਹੈ।
5. ਪ੍ਰਸ਼ਨ ਨੰਬਰ 14 ਅਤੇ 15 ਪੰਜ- ਪੰਜ ਅੰਕਾਂ ਵਾਲੇ ਪ੍ਰਸ਼ਨ ਹੋਣਗੇ, ਇਹਨਾਂ ਵਿੱਚੋਂ 100% ਅੰਦਰੂਨੀ ਛੋਟ ਹੋਵੇਗੀ।

**ਪਾਠਕ੍ਰਮ**  
**ਲਿਖਤੀ ਭਾਗ**

<b>ਪਾਠ ਪਹਿਲਾ</b>	<b>ਸਰੀਰਕ ਸਿੱਖਿਆ</b>
	(ੳ) ਭਾਰਤ ਵਿੱਚ ਸਰੀਰਕ ਸਿੱਖਿਆ ਦਾ ਇਤਿਹਾਸ
	(ਅ) ਸਰੀਰਕ ਸਿੱਖਿਆ ਦੀ ਧਾਰਨਾ, ਟੀਚੇ ਅਤੇ ਉਦੇਸ਼
<b>ਪਾਠ ਦੂਜਾ</b>	(1) <b>ਸਰੀਰਕ ਸਿੱਖਿਆ ਦੇ ਸਰੀਰਕ ਕਿਰਿਆ ਸਬੰਧੀ ਪ੍ਰਭਾਵ</b>
	(1) ਕਸਰਤਾਂ ਦੇ ਪ੍ਰਭਾਵ
	(ੳ) ਪੇਸ਼ੀ-ਪ੍ਰਬੰਧ ਜਾਂ ਪੱਠਾ ਪ੍ਰਣਾਲੀ ਤੇ ਕਸਰਤ ਦੇ ਪ੍ਰਭਾਵ
	(ਅ) ਕਸਰਤ ਦੇ ਲਹੂ ਗੋੜ ਪ੍ਰਣਾਲੀ ਦੇ ਪ੍ਰਭਾਵ
	(ੲ) ਸਵਾਸ ਕਿਰਿਆ ਪ੍ਰਣਾਲੀ ਤੇ ਕਸਰਤ ਦੇ ਪ੍ਰਭਾਵ
	(2) ਥਕਾਵਟ, ਦੂਸਰਾ ਸਵਾਸ, ਉਕਤਾਹਟ, ਆਕਸੀਜਨ ਕਾਰਜ ਵਰਗੀਆਂ ਘਟਨਾਵਾਂ।
<b>ਪਾਠ ਤੀਜਾ</b>	<b>ਸਰੀਰਕ ਸਿੱਖਿਆ ਦੇ ਮਨੋਵਿਗਿਆਨਕ ਪੱਖ</b>
	(ੳ) ਮਨੋਵਿਗਿਆਨਕ ਦੀ ਪਰਿਭਾਸ਼ਾ ਅਤੇ ਖੇਡ ਮਨੋਵਿਗਿਆਨ
	(ਅ) ਖੇਡ ਦੇ ਸਿਧਾਂਤ
	(ੲ) ਖੇਡ-ਪ੍ਰਦਰਸ਼ਨ (ਕੁਸ਼ਲਤਾ) ਨੂੰ ਪ੍ਰਭਾਵਿਤ ਕਰਨ ਵਾਲੇ ਮਨੋਵਿਗਿਆਨਕ ਤੱਤ।
	(ਸ) ਪ੍ਰੇਰਣਾ
<b>ਪਾਠ ਚੌਥਾ</b>	<b>ਸਿਹਤ ਸਿੱਖਿਆ</b>
	(ੳ) ਸਿਹਤ ਸਿੱਖਿਆ ਦੀ ਧਾਰਨਾ, ਟੀਚੇ, ਉਦੇਸ਼ ਅਤੇ ਖੇਤਰ।
	(ਅ) ਸਰੀਰਕ ਸਿੱਖਿਆ ਦੇ ਸਿਧਾਂਤ, ਬਾਲਿਗ ਅਤੇ ਯੁਵਾ ਪੀੜ੍ਹੀ ਦੀ ਲਈ ਸਿਹਤ ਸਿੱਖਿਆ ਦਾ ਮਹੱਤਵ। ਸਿਹਤ ਨੂੰ ਪ੍ਰਭਾਵਿਤ ਕਰਨ ਵਾਲੇ ਤੱਤ, ਵਿਅਕਤੀ, ਪਰਿਵਾਰ ਅਤੇ ਸਮਾਜ ਦੀ ਸਿਹਤ ਤੇ ਸ਼ਰਾਬ, ਤੰਬਾਕੂ ਅਤੇ ਨਸ਼ੀਲੀ ਦਵਾਈਆਂ ਦੀ ਵਰਤੋਂ ਦੇ ਪ੍ਰਭਾਵ।
	(ੲ) ਅੱਜ ਦੀਆਂ ਸਿਹਤ ਸਮੱਸਿਆਵਾਂ - ਪ੍ਰਦੂਸ਼ਣ, ਪਾਣੀ, ਹਵਾ, ਆਵਾਜ਼, ਕੁਪੋਸ਼ਣ ਅਤੇ ਇਨ੍ਹਾਂ ਨੂੰ ਹੱਲ ਕਰਨ ਲਈ ਸਿਹਤ ਸਿੱਖਿਆ ਦਾ ਯੋਗਦਾਨ।

- (ਸ) ਛੂਤ ਦੀਆਂ ਬਿਮਾਰੀਆਂ ਦਾ ਅਰਥ, ਉਹਨਾਂ ਦੇ ਸੰਚਾਰਨ ਦਾ ਢੰਗ ਅਤੇ ਹੇਠ ਲਿਖੀਆਂ ਬਿਮਾਰੀਆਂ ਦੀ ਰੋਕਥਾਮ-ਏਡਜ਼, ਰੇਬੀਜ਼, ਟੈਟਨਸ, ਮਲੇਰੀਆ, ਟੀ.ਬੀ., ਹੈਪੇਟਾਈਟਸ-ਬੀ।

#### ਪਾਠ ਪੰਜਵਾਂ ਉਲੰਪਿਕ ਖੇਡਾਂ

- (ੳ) ਆਧੁਨਿਕ ਉਲੰਪਿਕ ਖੇਡਾਂ ਦਾ ਇਤਿਹਾਸ। ਉਲੰਪਿਕ ਮਾਟੋ, ਉਲੰਪਿਕ ਸੌਹ ਅਤੇ ਝੰਡਾ  
(ਅ) ਪੰਜਾਬ ਖੇਡ ਵਿਭਾਗ  
(ੲ) ਪੰਜਾਬ ਉਲੰਪਿਕ ਐਸੋਸੀਏਸ਼ਨ

#### ਪਾਠ ਛੇਵਾਂ ਸਰੀਰਕ ਵਾਧਾ ਅਤੇ ਵਿਕਾਸ

- (ੳ) ਵਾਧੇ ਅਤੇ ਵਿਕਾਸ ਵਿੱਚ ਅੰਤਰ  
(ਅ) ਵਾਧੇ ਅਤੇ ਵਿਕਾਸ ਤੇ ਵੰਸ਼ ਪਰੰਪਰਾ ਅਤੇ ਵਾਤਾਵਰਣ ਦੇ ਪ੍ਰਭਾਵ  
(ੲ) ਵਿਅਕਤੀਗਤ ਸਿਹਤ ਅਤੇ ਸਿਹਤ ਨਿਯਮ  
(ਸ) ਖਿਡਾਰੀਆਂ ਲਈ ਸੰਤੁਲਿਤ ਭੋਜਨ

#### ਪਾਠਕ੍ਰਮ (ਪ੍ਰਯੋਗੀ)

#### ਸਮਾਂ 4 ਘੰਟੇ

ਪ੍ਰਯੋਗੀ : 40 ਅੰਕ

- (ੳ) ਟਰੈਕ ਅਤੇ ਫੀਲਡ ਦੀ ਈਵੈਂਟਸ (ਲੜਕੇ ਅਤੇ ਲੜਕੀਆਂ ਲਈ) ਹਰੇਕ ਈਵੈਂਟ ਦੇ 7 ਅੰਕ ਹੋਣਗੇ।  
ਹੇਠ ਲਿਖਿਆਂ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਈਵੈਂਟਸ ਇੱਕ ਟਰੈਕ ਵਿੱਚੋਂ ਅਤੇ ਇੱਕ ਫੀਲਡ ਵਿੱਚੋਂ ਚੁਣੀਆਂ ਜਾ ਸਕਦੀਆਂ ਹਨ।
- ਦੌੜਾਂ - 100 ਮੀਟਰ, 200 ਮੀਟਰ, 400 ਮੀਟਰ ਅਤੇ 800 ਮੀਟਰ, 3000 ਮੀਟਰ।
  - ਲੜਕੀਆਂ ਲਈ 110 ਮੀਟਰ ਹਰਡਲ (ਹਰਡਲ ਦੀ ਉਚਾਈ 96.4 ਸੈ.ਮੀ. ਅਤੇ 10 ਉਚਾਈਆਂ), ਲੜਕੀਆਂ ਲਈ 100 ਮੀਟਰ (ਹਰਡਲ ਦੀ ਉਚਾਈ 76.2 ਸੈ.ਮੀ.) ਅਤੇ 8 ਉਚਾਈਆਂ, 4x100 ਮੀਟਰ (ਲੜਕੀਆਂ ਵਾਸਤੇ) ਅਤੇ 4x200 ਮੀਟਰ (ਲੜਕੀਆਂ ਵਾਸਤੇ) ਰਿਲੇਅ।
  - ਹੈਮਰ ਥਰੋ, ਡਿਸਕਸ ਥਰੋ, ਜੈਵਲਿਨ ਥਰੋ, ਸ਼ਾਟ ਪੁੱਟ, ਲੌਂਗ ਜੰਪ, ਹਾਈ ਜੰਪ, ਟਰਿੱਪਲ ਜੰਪ, ਬਰਾਡ ਜੰਪ, ਪੋਲਵਾਲਟ, ,
- (ਅ) ਹੇਠ ਲਿਖੀਆਂ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਖੇਡਾਂ ਦੀ ਚੋਣ ਕੀਤੀ ਜਾ ਸਕਦੀ ਹੈ। ਹਰੇਕ ਖੇਡ ਦੇ 5 ਅੰਕ ਹੋਣਗੇ।  
ਖੇਡਾਂ (ਲੜਕੇ ਅਤੇ ਲੜਕੀਆਂ ਲਈ)।  
ਹਾਕੀ, ਹੈਂਡ ਬਾਲ, ਕਬੱਡੀ, ਬਾਕਸਿੰਗ, ਟੇਬਲ ਟੈਨਿਸ, ਤੈਰਾਕੀ ਅਤੇ ਡਾਈਵਿੰਗ, ਜਿਮਨਾਸਟਿਕ, ਫੁੱਟਬਾਲ, ਬੈਡਮਿੰਟਨ, ਬਾਸਕਟਬਾਲ, ਕ੍ਰਿਕਟ, ਖੋ-ਖੋ, ਕੁਸ਼ਤੀ, ਜੂਡੋ, ਵਾਲੀਬਾਲ, ਗੱਤਕਾ, ਲਾਨ ਟੈਨਿਸ, ਯੋਗਾ ਨਾਲ ਸਬੰਧਤ ਸਰੀਰਕ ਕ੍ਰਿਆਵਾਂ, ਰਿਦਮਕ ਫੋਕ ਡਾਂਸ
- (ਸ) ਖੇਡਾਂ ਵਿੱਚ ਪ੍ਰਾਪਤੀ (ਵੱਧ ਤੋਂ ਵੱਧ 10 ਅੰਕ) ਹੇਠ ਲਿਖੇ ਅਨੁਸਾਰ ਅੰਕ ਦਿੱਤੇ ਜਾਣਗੇ।
- |                    |        |
|--------------------|--------|
| ਸਕੂਲ ਪ੍ਰਤੀਨਿਧਤਾ    | 3 ਅੰਕ  |
| ਜ਼ੋਨ ਪ੍ਰਤੀਨਿਧਤਾ    | 4 ਅੰਕ  |
| ਜ਼ਿਲ੍ਹਾ ਪ੍ਰਤੀਨਿਧਤਾ | 6 ਅੰਕ  |
| ਰਾਜ ਪ੍ਰਤੀਨਿਧਤਾ     | 8 ਅੰਕ  |
| ਕੌਮੀ ਪ੍ਰਤੀਨਿਧਤਾ    | 10 ਅੰਕ |
- ਹ) ਪ੍ਰੈਕਟੀਕਲ ਕਾਪੀ, ਚਾਰਟ ਜਾਂ ਮਾਡਲ - 2 ਅੰਕ  
ਕ) ਵਾਇਵਾ - 4 ਅੰਕ

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

**Class-XI**  
**34. INSURANCE**  
**(Humanities Group)**

**Time - 3 Hours**

**Theory- 70 Marks**  
**CCE- 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER**

1. The Question Paper will cover whole of the prescribed syllabus.
2. All Questions will be compulsory.
3. 15 Questions will be set in the Question Paper.
4. This section will consist of Q. No. 1 which will be objective type consisting of 12 sub parts. Each sub part carries 1 mark. Objective type questions may include questions with one word to one sentence answer/fill in the blank/multiple choice type questions. Question No. 2 to 11 will carry 3 marks each. The answer of each question should be given in 50-60 words.
5. Question No.12 to 15 each with internal choice will carry 7 marks each. The answer of each question should be given in 200-250 words.

**Detail of questions set from each unit**

<b>Syllabus Units</b>	<b>1 Mark Questions</b>	<b>3 Marks Questions</b>	<b>7 Marks Questions</b>
1	2	2	1
2	2	2	1
3a	2	2	1 Q from Unit 3a & 3b
3b	2	1	
4	2	2	1 Q from Unit 4 & 5
5	2	1	
<b>Total</b>	<b>12</b>	<b>10</b>	<b>4</b>

**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.

**35. RURAL DEVELOPMENT AND ENVIRONMENT**

**Time: 3 Hours**

**Theory : 70 Marks**

**CCE: 30 Marks**

**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER (THEORY)**

1. There will be 21 questions in the question paper.
2. All questions are compulsory.
3. There will be the three-sections i.e. A, B and C in the question paper.

**Section A**

This section will comprise of 11 Questions.

1. 6 will be of 1 mark each. Answer to each question will be in few words or one line.  $1 \times 6 = 6$
2. 5 are very short answer type Questions carrying 2 marks each. Each question should be answer in 5-7 lines.  $2 \times 5 = 10$

**Section B**

This section will comprise of part-1 of the syllabus containing 1-5 units. In this section, 6 questions of 5marks each will be set, whose answer should be given in 15-20 lines.  $5 \times 6 = 30$

**Section C**

This section will comprise of part -II of the syllabus containing unit-6-7. In this section 4 questions of 6 marks each will be set, whose answer should be given in 20-25 lines.  $6 \times 4 = 24$

**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**  
**36. MEDIA STUDIES**  
**Theory**

**Time: 3 Hrs.**

**Theory Paper: 50 Marks**  
**CCE : 30 Marks**  
**Practical: 20 Marks**  
**Total: 100 Marks**

*Syllabus*  
**Introduction to communication**

**Group-A**

I – Communication : meaning, definition ,approach, types : Intrapersonal, interpersonal, group, public and mass communication .

**Group-B**

II - Media of Communications : Body language , spoken word, printed word , symbols and pictures.  
III - Mass media : traditional, print, radio, television and new media .

**News Media**

**Group – C**

IV – Writing for newspaper: News Stories, editorial, articles, features , letters to editor.  
V- Writing for magazines

**Group-D**

VI- Content of newspaper : News and its types, views and its types, advertisement and its types.  
VII- Introduction to public relation.

**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 news paper office and current affairs(national and regional) related to running academic session period .

**Class-XI**  
**37. PHYSICS**

**Time : 3 Hours**

**Theory : 50 Marks**  
**Practical : 20 Marks**  
**C.C.E. : 30 Marks**  
**Total : 100 Marks**

**STRUCTURE OF QUESTION PAPER (Theory)**

- 1 There will be one theory paper comprising of 26 questions. The student has to attempt total 20 question out of 26 as per the directions given below:
- 2 Question no. 1 to 5 will be of one mark each.
- 3 Question no.6 to 14 will be of two marks each. Candidate can attempt any 6 questions out of 9 questions.
- 4 Question no. 15 to 23 will be of three marks each. Candidate can attempt any 6 questions out of 9 questions.
- 5 Question no. 24 to 26 will be of five 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	MARKS	PERCENTAGE OF MARKS
KNOWLEDGE	18	36%
UNDERSTANDING	22	44%
APPLICATION	10	20%
<b>Total</b>	<b>50</b>	<b>100%</b>

- 7 There will be no question 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%.

**UNIT WISE DISTRIBUTION OF MARKS**

Unit	Title	Marks
UNIT-I	Physical world and measurement	02
UNIT-II	Kinematics	07
UNIT-III	Laws of motion	07
UNIT-IV	Work, Energy & Power	04
UNIT-V	Motion of System of Particles & Rigid body	04
UNIT-VI	Gravitation	04
UNIT-VII	Properties of Bulk matter	07
UNIT-VIII	Thermodynamics	04
UNIT-IX	Behaviour of perfect gas and kinetic theory of gases	04
UNIT-X	Oscillation & waves	07
<b>Total Marks</b>		<b>50</b>

### SCHEMATIC DISTRIBUTION OF MARKS

UNIT	Title	1 Mark Question	2 Marks Question	3 Marks Question	5 Marks Question	Total Marks
1	Physical world & measurement	-	1	-	-	02
2	Kinematics	-	1	-	1	07
3	Laws of motion	-	1	-	1	07
4	Work, Energy & Power	1	-	1	-	04
5	Motion of System Particles & Rigid body	1	-	1	-	04
6	Gravitation	1	-	1	-	04
7	Properties of matter	-	1	-	1	07
8	Thermodynamics	1	-	1	-	04
9	Behaviour of Perfect gas & Kinetic theory of gases	1	-	1	-	04
10	Oscillation & waves	-	2	1	-	07
Total Questions		5	6	6	3	20 + 6 choice questions=26
Total Marks		5	12	18	15	50

### INSTRUCTIONS FOR PAPER SETTER

- Note: 1. There will be one theory paper consisting of total 26 questions. Three questions of two mark each & three questions of three marks each are choice questions will be set in the paper.
- Question no.6 to 14 will be of 2 marks each, out of total 9 questions carrying 2 marks each, candidate can attempt any 6 questions.
  - Question no.15 to 23 will be of 3 marks each. Out of 9 questions carrying 3 marks each, candidate can attempt any 6 questions.
  - From one unit, only choice question either of two marks or three marks can be set. Choice question of two marks or three marks will be set only from those units carrying two or three marks questions.
  - Question No. 24-26 will be of five marks and there will be 100% internal choice in them.

## 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 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**

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, 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 conservation and centre of mass motion. Centre of mass of a rigid body; centre of mass of uniform rod.

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.

## **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.

## **Unit-VII      Properties of Bulk Matter**

Elastic behaviour, Stress-strain relationship, Hooke's law, Young's modulus, bulk modulus, shear, modulus of rigidity, 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 velocity. 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.

Heat, temperature, thermal expansion; thermal expansion of solids, liquids and gases, anomalous expansion, specific heat Capacity:  $C_p$ ,  $C_v$ -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 internal energy. First law of thermodynamics. Isothermal and adiabatic processes.

Second law of thermodynamics: reversible and irreversible processes.

Heat engines and refrigerators.

## **Unit-IX      Behaviour of Perfect Gas and Kinetic Theory**

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

Kinetic theory of 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: concept of mean free path, Avogadro's number.

## **Unit-X      Oscillations and Waves**

Periodic motion - period, frequency, displacement as a function of time.

Periodic functions.

Simple harmonic motion (S.H.M) and its equation; phase; oscillations of a spring-restoring force and force constant; energy in S.H.M.-kinetic and potential energies: simple pendulum-derivation of expression for its time period: free, forced and damped oscillations (qualitative ideas only), resonance.

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

## 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	<hr/> 20

## PRACTICAL SYLLABUS

### Experiments

1. Use of Vernier Callipers
  - (i) To measure diameter of a small spherical/cylindrical body.
  - (ii) To measure internal diameter and depth of a given beaker/ calorimeter and hence find its volume.
2. Use of screw gauge
  - (i) to measure diameter of 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.
5. Using a simple pendulum, plot L-T and L-T<sub>2</sub> 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 ( $\theta$ ) by plotting graph between force and  $\sin\theta$ .
8. To determine the mass of two different objects using a beam balance.
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 temperature using a resonance tube by two-resonance 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 note 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 study 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.

**38. CHEMISTRY****Time: 3 Hours**

**Theory : 50 Marks**  
**Practical : 20 Marks**  
**C.C.E. : 30 Marks**  
**Total : 100 Marks**

**STRUCTURE OF QUESTION PAPER (Theory)**

- 1 There will be one theory paper comprising of 26 questions. The student has to attempt total 20 question out of 26 as per the directions given below:
- 2 Question no. 1 to 5 will be of one mark each.
- 3 Question no. 6 to 14 will be of two marks each. Candidate can attempt any 6 questions out of 9 questions.
- 4 Question no.15 to 23 will be of three marks each. Candidate can attempt any 6 questions out of 9 questions.
- 5 Question no.24 to 26 will be of five 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	MARKS	PERCENTAGE OF MARKS
KNOWLEDGE	18	36%
UNDERSTANDING	22	44%
APPLICATION	10	20%
Total	50	100%

- 7 There will be no question 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%



### UNITWISE DISTRIBUTION OF MARKS

SR.NO	UNIT	TOTAL MARK
1	Some Basic Concept of Chemistry	03
2	Structure of Atom	03
3	Classification of Elements and Periodicity in Properties	02
4	Chemical Bonding and Molecular Structure	03
5	Hydrogen	03
6	S-Block Elements (Alkali and Alkaline Earth Metals)	03
7	Organic Chemistry- Some Basic Principles and Techniques	05
8	Status of Matter: Gases and Liquids	04
9	Thermodynamics	03
10	Equilibrium	05
11	Redox Reaction	05
12	Some p-Block Elements, General introduction to p-Block Elements	05
13	Hydrocarbons	05
14	Environmental Chemistry	01
	<b>TOTAL QUESTIONS &amp; TOTAL MARKS</b>	<b>T.Q=20 T.M=50</b>

**Total Question in paper =26 including 6 choice questions**

### SCHEMATIC DISTRIBUTION OF MARKS

Sr.No	UNIT	1 MARK	2 MARK	3 MARK	5 MARK	TOTAL MARK
1	Some Basic Concept of Chemistry	1	1			03
2	Structure of Atom			1		03
3	Classification of Elements and Periodicity in Properties		1			02
4	Chemical Bonding and Molecular Structure			1		03
5	Hydrogen			1		03
6	S-Block Elements (Alkali and Alkaline Earth Metals)	1	1			03
7	Organic Chemistry- Some Basic Principles and Techniques		1	1		05
8	Status of Matter: Gases and Liquids	1		1		04
9	Thermodynamics			1		03
10	Equilibrium				1	05
11	Redox Reaction	1	2			05
12	Some p-Block Elements, General introduction to p-Block Elements				1	05
13	Hydrocarbons				1	05
14	Environmental Chemistry	1				01
	TOTAL QUESTIONS & TOTAL MARKS	T.Q=5 T.M=5	T.Q=6 TM=12	T.Q=6 T.M=18	T.Q=3 T.M=15	T.Q=20 T.M=50

**Total Question in paper =26 including 6 choice questions**

**NOTE:- INSTRUCTIONS FOR PAPER SETERS**

- There will be one theory paper consisting of total 26 questions. Three questions of two marks each, three questions of three marks will be choice questions.
- Question no 6 to 14 will be of 2 marks each, Out of total 9 questions carrying 2 marks each, candidate can attempt any 6 questions.
- Question no 15 to 23 will be of 3 marks each. Out of 9 questions carrying 3 marks each, candidate can attempt any 6 questions.
- From one unit, only choice question either of two marks or three marks can be set. Choice question of two marks or three marks will be set only from those units carrying two or three marks questions.
- Question No. 24-26 will be of five marks and there will be 100% internal choice in them.

## **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. Ionization 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  $\Delta U$  and  $\Delta H$ , 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<sub>3</sub> 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 alkalis 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	<hr/> 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

1. Cutting glass tube and glass rod
2. Bending a glass tube
3. Drawing out a glass jet
4. 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-**  $\text{Pb}^{2+}$ ,  $\text{Cu}^{+2}$ ,  $\text{As}^{3+}$ ,  $\text{Al}^{3+}$ ,  $\text{Fe}^{3+}$ ,  $\text{Mn}^{2+}$ ,  $\text{Ni}^{2+}$ ,  $\text{Zn}^{2+}$ ,  $\text{Co}^{2+}$ ,  $\text{Ca}^{2+}$ ,  $\text{Sr}^{2+}$ ,  $\text{Ba}^{2+}$ ,  $\text{Mg}^{2+}$ ,  $\text{NH}_4^+$

**Anions-**  $\text{CO}_3^{2-}$ ,  $\text{S}^{2-}$ ,  $\text{SO}_3^{2-}$ ,  $\text{SO}_4^{2-}$ ,  $\text{NO}_2^-$ ,  $\text{NO}_3^-$ ,  $\text{Cl}^-$ ,  $\text{Br}^-$ ,  $\text{I}^-$ ,  $\text{PO}_4^{3-}$ ,  $\text{C}_2\text{O}_4^{2-}$ ,  $\text{CH}_3\text{COO}^-$

**(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 any one 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  $[\text{Co}(\text{H}_2\text{O})_6]^{2+}$  and chloride ions by changing the 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 fluoride, 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**  
**39. BIOLOGY**

Time: 3 Hours

Theory : 50 Marks  
Practical : 20 Marks  
C.C.E. : 30 Marks  
Total : 100 Marks

**STRUCTURE OF QUESTION PAPER (Theory)**

- 1 There will be one theory paper comprising of 26 questions. The student has to attempt total 20 question out of 26 as per the directions given below:
- 2 Question no. 1 to 5 will be of one mark each.
- 3 Question no. 6 to 14 will be of two marks each. Candidate can attempt any 6 questions out of 9 questions.
- 4 Question no.15 to 23 will be of three marks each. Candidate can attempt any 6 questions out of 9 questions.
- 5 Question no.24 to 26 will be of five 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	MARKS	PERCENTAGE OF MARKS
KNOWLEDGE	18	36%
UNDERSTANDING	22	44%
APPLICATION	10	20%
Total	50	100%

- 7 There will be no question 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%

**UNITWISE DISTRIBUTION OF MARKS**

Unit	Title	Marks
I	Diversity in living World	09
II	Structure Organization in animals & plants	09
III	Cell structure and functions	11
IV	Plant physiology	10
V	Human anatomy and physiology	11
Total Marks		50

**SCHEMATIC DISTRIBUTION OF MARKS**

Unit	1 mark question	2 marks questions	3 marks questions	5 marks question	Total
Unit-I	1	1	2	-	09
Unit-II	1	1	2	-	09
Unit-III	1	1	1	1	11
Unit-IV	-	1	1	1	10
Unit-V	2	2	-	1	11
Total questions	5	6	6	3	20
Total Marks	5	12	18	15	50

## INSTRUCTION FOR PAPER SETTER

- Note:1. There will be one theory paper consisting of total 26 questions. Three questions of two marks each & three questions of three marks each are choice questions will be set in the paper.
2. Question no.6 to 14 will be of 2 marks each, out of total 9 questions carrying 2 marks each, candidate can attempt any 6 questions.
  3. Question no.15 to 23 will be of 3 marks each. Out of 9 questions carrying 3 marks each, candidate can attempt any 6 questions.
  4. From one unit, only choice question either of two marks or three marks can be set. Choice question of two marks or three marks will be set only from those units carrying two or three marks questions.
  5. Question No. 24-26 will be of five marks and there will be 100% internal choice in them.

## 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, stem, 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, carbohydrates, 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, root pressure and guttation; Transpiration- Opening and Closing of stomata; Uptake and translocation of mineral nutrients- 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, exophthalmic 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 slides.

**Class-XI**  
**40. GEOLOGY**

**Time : 3 hrs.**

**Theory : 50 Marks**  
**Practical : 20 Marks**  
**CCE: 30 Marks**  
**Total : 100 Marks**

**STRUCTURE OF QUESTION PAPER**  
**(THEORY)**

1. There will be one theory paper comprising of 23 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. 11-15 are very short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
5. Question Nos. 16-20 are short answer type questions carrying 3 marks each. Answer to each question will be in 80-100 words.
6. Question Nos. 21-23 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)**

**Tme : 3 Hours**

**Marks: 20**

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 and 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 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 aquifers and wells, 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, graptolites, echinoderms. Some idea about plant fossils.

### **PRACTICAL**

- (i) Identification of some important minerals like quartz, feldspars, mica, magnetite, copper ores etc. in land specimen.
- (ii) Identification of important fossils like Terebratula. Spirifer, Productus, Trionia, pecten, Murex, Trochus, Belemnites. Ceratites, Calymene, phacops, monograptus, Microster.
- (iii) Determination of specific gravity and study of rocks in land specimen. Granite, sandstone, quartzite, limestone, marble, basalt, etc. Identification 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**  
**41. BIOTECHNOLOGY**

**Time: 3 hrs.**

**Theory: 50 Marks**  
**Practical: 20 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks**

**STRUCTURE OF QUESTION PAPER THEORY**

1. There will be one theory paper comprising of 23 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. 11-15 are very short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
5. Question Nos. 16-20 are short answer type questions carrying 3 marks each. Answer to each question will be in 80-100 words.
6. Question Nos. 21-23 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: 20**

Distribution of marks:

- |    |                   |         |
|----|-------------------|---------|
| 1. | One Experiment    | 6 marks |
| 2. | Practical record  | 3 marks |
| 3. | Viva on practical | 3 marks |
| 4. | Project work      |         |
|    | (a) Write up      | 4 marks |
|    | (b) Viva          | 4 marks |

A group of students for practical should not be more than 20 students.

**SYLLABUS**

**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**

**Note:- Every students 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. Determination 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**  
**42. COMPUTER APPLICATION**  
**Instructions (Theory Paper)**

**Time: 3 hours**

**Theory : 50 Marks**  
**CCE : 30 Marks**  
**Practical : 20 Marks**  
**Total : 100 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 8 objective type question from Question No. 1 to 8, each question will be of one marks each.
3. In Part -B, there will be 4 Questions from Question no. 9 to 12, each question will be of three marks.
4. In Part -C, there will be 4 Questions from Question no. 13 to 16, each question will be of five marks.
5. In Part –D, there will be one question (Question no.17) of 10 marks.
6. All questions of Part-A and Part-B are compulsory. However internal choice may be given in Part-C and Part-D.

<b>Sr. No</b>	<b>Chapter</b>		<b>1 marks question</b>	<b>3 Marks question</b>	<b>5 Marks question</b>	<b>10 marks question</b>
1a	Introduction to c++	9	1	1	1	-
2a	Data types, variable & constant	11	1	-	-	1
3a	Operators & expressions	4	1	1	-	-
4a	Control statements	6	1	-	1	-
5a	Array	6	1	-	1	-
6a	Functions	4	1	1	-	-
7a	Standard library functions	4	1	1	-	-
8a	The Internet	6	1	-	1	-
	<b>Total Marks</b>	<b>50</b>	<b>8</b>	<b>4</b>	<b>4</b>	<b>1</b>

**UNIT-I      INTRODUCTION TO PROGRAMMING IN C++**

Introduction to Object Orientation  
Object Oriented Programming  
Differences between structured and object oriented language.  
Introduction to C++ Language.  
Program Structure, Program Design and Implementation Issues.  
C++ character set (Letters, Digits, Special symbols, other, characters)  
C++ Tokens (Identifiers, Keywords, Constants, Operators).  
Structure of a C++ program (including files, declaration of an object, main function).  
Header Files-<iostream.h>, <stdio.h>  
Using of I/O operators.

Basic commands of editor  
Interpretation Compilation, Linking and Execution of programs.  
Object declared as Classes, Encapsulation, Data hiding, Inheritance, Polymorphism.

## **UNIT-II     DATA TYPES , VARIABLES AND CONSTANTS**

Concept of Data Types  
Data Type Modifiers  
Built in Data Types : void ,char, int, float and double.  
Constants, integer Constants, Character Constants, Floating Point Constants, String Constants.  
Variables : Rules for formation of Identifiers, Declaration of Variables.  
Access modifiers constant and its Types; signed , unsigned, short, long

## **UNIT - III     OPERATORS AND EXPRESSIONS**

Definitions of Operators and Expressions  
Arithmetic operators (-,+,\*,/) Modules operators(%)  
Unary operator(-,+)  
Increment and Decrement Operators (--), (==)  
Relational Operators (>,>=,<,<=,!=)  
Logical Operators (&&,||)  
Ternary Operators  
Conditional Expressions  
Precedence of Operators  
Type Conversion in Expression : Automatic type Conversion.  
Assignment operators and expressions : C++ shorthands (+=,\*=,&=,/=,%=)  
Variables Assignment, Type & Compatibility.

## **UNIT - IV     CONTROL STATEMENTS**

Compound statements or blocks using {}  
Conditional statements : Selection statements:  
if -else statements , nester if  
Switch & Switch - default statements.  
Simple Control statement  
Break statements  
Exit() Function  
Iteration Statements.  
Loops & Nested loops  
While statements , do while statement  
Console I/O functions  
Header Files : stdio.h, getc(), putc(), gets(), and puts() functions.

## **UNIT -V     STRUCTURED DATA TYPES : ARRAY**

Declaration of Array  
One Dimensional Array  
Nature of Subscripts  
Two Dimensional Array  
Array of strings  
Array initialization  
Multidimensional Array

## **UNIT -VI      FUNCTIONS**

Definition of Function  
Function Prototype  
Objective of using Function Prototype  
Accessing a function  
Passing arguments to a function  
Specifying argument data types  
Default arguments  
Constant Arguments  
Function call by value  
Call by reference  
Parameters pass by reference  
Return void  
Returning values and their types  
Calling function with arrays  
Scope rules of functions, and variables  
Local And global variables.

## **UNIT-VII      STANDARD LIBRARY FUNCTIONS AND HEADER FILES**

Header files  
String.h, Math.h  
Standard all functions  
Char and string related functions  
isalnum(), isalpha(), isdigit(), islower(), isupper(), tolower(), toupper(), strepy(),  
strecat(),  
strlen().  
Mathematical function  
fabs(), log(), pow(), sqrt(), sin(), cos(), abs().

## **UNIT-VIII      THE INTERNET**

What is the Internet?  
The Information Highway  
The Global community  
Communicating on the Internet  
Accessing information on the Internet  
Exchange Documents and Files  
Business on the Internet  
Domain names, E-mail connections  
Setting up a web site  
Web server hardware

### **PRACTICAL**

**Time: 3 hrs**

**Marks: 20**

### **EVALUATION SCHEME FOR PRACTICAL**

#### **1. Programming in C++**

There will be 3 questions/Program will be set from which candidate has to attempt any two 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) 5×2=10 Marks

**2. Viva-Voce**

5 Marks

**3. Practical record file**

5 Marks

Record of at least 20 programs in C++ (with listing and Outputs) based on programming concepts and 5 on data base concepts

**SYLLABUS**

All the relevant practical exercise will be based upon the relevant chapters mentioned in the Theory Syllabus.

**43. ELEMENTS OF ELECTRONIC ENGINEERING****Time: 2 hrs.****Theory: 30 Marks**  
**Practical: 40 Marks**  
**CCE: 30 Marks**  
**Total: 100 Marks****Theory**  
**Structure of Question Paper**

In all, sixteen questions will be set from the prescribed syllabus. The question paper will comprise of three parts (Part-I, Part-II and Part-III). The questions will be evenly distributed from the prescribed syllabus.

Part-I will consist of Five 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 seven short answer type questions carrying 3 marks each. Candidate will attempt any five 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 four questions carrying 5 marks each. Candidate will attempt any two 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. Introduction 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) Multimeter
  - (iv) Oscilloscopes.

**PRACTICAL  
STRUCTURE OF QUESTION PAPER**

**Max: 40 Marks**

**Time: 3Hrs**

The description of Marks will be as follows:

- |                             |          |
|-----------------------------|----------|
| 1. Viva -Voce               | 5 Marks  |
| 2. Note book/Sessional Work | 5 Marks  |
| 3. Actual Performance       | 30 Marks |

**(a) Major Practical:**

The examiner shall set any three practicals from the practical Nos 1,2,3 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. 20 Marks

**(b) Minor Practical:**

The examiner shall set any three practicals from the practical Nos. 1, 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. 10 Marks

**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**  
**44. BUSINESS STUDIES-I**  
**(COMMERCE GROUP)**  
**PAPER - I**

**Time : 3 Hours**

**Theory: 50 Marks**  
**CCE: 25 Marks**  
**Total: 75 Marks**

Structure of question paper

1. The question paper will cover whole of the syllabus.
2. 11 Questions will be set in the question paper.
3. All units of the syllabus should be given adequate representation in the question paper.
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.
5. Question No 2 to 8 will carry 3 marks each. Answer of each question should be given in 15-20 lines.
6. Question No 9 to 11 will carry 7 marks each with internal choice. Answer of each question should be given in 3-5 pages.

**Detail of questions set from each unit**

<b>Unit No.</b>	<b>Name of the unit</b>	<b>1 mark question</b>	<b>3 marks question</b>	<b>7 marks question</b>
1	Nature and Purpose of Business	1	1	1
2	Structure of Business			1
3	Service Sector and Business	1	1	1
4	Social Responsibility of Business and Business Ethics			
5	Forms and Formation of Business Enterprises	1	1	1
6	Sectoral Organisation of Business	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	

**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).
- d) 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****45. ACCOUNTANCY-I  
PAPER – II****Time : 3 Hours**

<b>Theory :</b>	<b>35 marks</b>
<b>Project work/ Practical:</b>	<b>15 marks</b>
<b>CCE:</b>	<b>25 marks</b>
<b>Total:</b>	<b>75 marks</b>

**Structure of question paper**

1. The question paper will cover whole of the syllabus.
2. 11 Questions will be set in the question paper.
3. All units of the syllabus should be given adequate representation in the question paper.
4. Question No. 1 consist of 6 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.
5. Question No 2 to 8 ( of which three will be of numerical nature and other four will be theoretical nature) will carry 2 marks each. Answer of each theoretical question should be given in 15-20 lines.
6. Question No 9 to 11 will carry 5 marks each with internal choice. Of these, any two questions will have internal choice between theoretical and numerical questions while any one of these three will have only numerical question internal choice. Answer of each theoretical question should be given in 3-5 pages.
7. There is no word, line or page limit for numerical questions.
8. The use of non-programmable simple calculator is allowed.

**Detail of questions set from each unit**

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

## Project work

**Time Allowed:** 1 ½ 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**

- ii) 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 Accounting System.

**Class-XI**

**46. BUSINESS ECONOMICS & QUANTITATIVE METHODS-I**  
**(COMMERCE GROUP)**  
**PAPER - III**

**Time: 3 Hours****Theory: 50 Marks****CCE: 25 Marks****Total: 75 Marks****STRUCTURE OF QUESTION PAPER**

1. The question paper will cover whole of the syllabus.
2. 11 Questions will be set in the question paper.
3. All units of the syllabus should be given adequate representation in the question paper.
4. Question No. 1 consists of 8 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 to one sentence answer/fill in the blanks/true or false/multiple choice type questions.
5. Question No. 2 to 8 will carry 3 marks each. Answer of each question should be given in 15-20 lines.
6. Question No. 9 to 11 will carry 7 marks each with internal choice. Answer of each question should be given in 3-5 pages.

**Detail of questions set from each unit**

Detail of questions set from each unit				
Syllabus	Units	Sec A 1 Mark Questions	Sec B 3 Mark Questions	Sec C 7 Mark Questions
PART - I	1	1	1	i) 1 numerical question with numerical question as internal choice from units 1-4  ii) 1 theoritical question with theoretical question as internal choice from units 5-8.
Business Statistics	2	1	1	
	3	1	1 Q from units 3 & 4	
	4	1		
PART – II	5	1	1	iii) 1 theoritical question with numerical question as internal choice, one from each part ( I and II)
Introductory Micro Economics	6	1	1	
	7	1	1	
	8	1	1	
Total questions	8	8	7	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 of 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**  
**47. MODERN OFFICE PRACTICE**  
**(COMMERCE GROUP)**  
**PAPER – IV**

**Time : 3 Hours**

**Theory: 35 Marks**  
**CCE: 25 Marks**  
**Practical: 15 Marks**  
**Total: 75 Marks**

**Structure of Question Paper**  
**(Theory)**

1. The question paper will cover whole of the syllabus.
2. Eleven questions will be set in Question Paper.
3. All the questions will be compulsory.
4. All units of the syllabus should be given adequate representation in the question paper.
5. The question Paper will have three sections i.e. A, B and C.

**Section A**

Question number 1 will be objective type consisting of 6 sub parts (i.e. Q. No. 1a to 1f). Each part carry one mark each. Three questions will be set from Part-1 and three questions will be set from Part-2 of the syllabus. Objective type questions may include questions with one word or one sentence answer/fill in the blanks/multiple choice type questions.  
(6x1=6marks)

**Section B**

In this section seven questions (i.e. Q. No. 2 to Q. No. 8) carrying two marks each will be set. Three questions will be set from Part-1 and four questions will be set from Part 2 of the syllabus. Answer of each of these questions should be given in 15-20 lines.  
(7x 2 =14 marks)

**Section C**

In this section Q. No. 9-11 (i.e. 1 from part-I and 2 from part-II) each with internal choice will be set. Each question will carry 5 marks. Answer of these questions will be given in 3-4 pages of the answer book.  
(3x5 = 15 marks)

**Unit wise Division of Marks**

<b>Unit No</b>	<b>One mark Question</b>	<b>Two marks question</b>	<b>5 marks question</b>
Part-I	3	3	1
Part-II	3	4	2

\*: Two questions should not be set from the same unit.

#: Internal choice question should not be set from the same unit

**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; Classification 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**  
**48. AGRICULTURE**

**Time : 3 hrs.**

<b>Theory</b>	<b>: 50 Marks</b>
<b>Practical</b>	<b>: 20 Marks</b>
<b>CCE</b>	<b>: 30 Marks</b>
<b>Total</b>	<b>: 100 Marks</b>

**STRUCTURE OF QUESTION PAPER**  
**(THEORY)**

1. There will be one theory paper comprising of 23 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. 11-15 are very short answer type questions carrying 2 marks each. Answer to each question will be in 20-30 words.
5. Question Nos. 16-20 are short answer type questions carrying 3 marks each. Answer to each question will be in 80-100 words.
6. Question Nos. 21-23 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: 20**

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 2  
marks
5. Viva-voce 2  
marks
6. 4 Practical of 4 marks each 16 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 soil separates (sand, silt and clay), textural 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 knowledge 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 irrigational 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 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 Hours**

**Marks: 20**

#### **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.**