



MOUNT CARMEL SCHOOL, CHANDIGARH
Syllabus (Monthly Basis) Session 2024-25
Subject : Science XII (Term-1)

ENGLISH:

- April** Flamingo - F-1-The last Lesson
F-2 – Lost Spring
P-1-My Mother at Sixty Six
Writing- Notice
- May** Flamingo - F-3 – Deep Water
Vistas - Ch.-1- The Third Level
Writing - Letter to The Editor
- July** Flamingo- F-4 The Rattrap
F-5 - Indigo
P-2-Keeping Quiet
Vistas- Ch-2 Tiger King

Writing- Article
- August** Flamingo- F-6- Poets and Pancakes
F-7 - The Interview
P-3 - A Thing of Beauty
Vistas - Ch.-3- Journey to the End of the Earth
Ch.-4- The Enemy
Writing - Invitations- Formal and Informal with their replies
- September** Flamingo - P-4 - A Roadside Stand
Vistas - Ch.-4 - The Enemy (completion)
Writing - Job Application with Resume, Report Writing
Revision for the Terminal Examination
Revision and Examination

UNIT TEST 20 MARKS

Reading	7 Marks
Writing	4 Marks
Literature	9 Marks

INTERNAL ASSESSMENT

- Assessment of Listening Skills - 05 Marks
.Assessment of Speaking Skills – 05 Marks
Project Work 10 Marks

SECTION A READING SKILLS (22 Marks)

Reading Comprehension through Unseen Passage

- I. One unseen passage to assess comprehension, interpretation and inference. Vocabulary and inference of meaning will also be assessed. The passage may be factual, descriptive or literary. (12x1=12 Marks)
- II. One unseen **case-based** passage with verbal/visual inputs like statistical data, charts etc. (10x1=10 Marks)
- Note:** The combined word limit for both the passages will be 700-750 words. Multiple Choice Questions / Objective Type Questions will be asked.

SECTION – B (18 Marks)

Creative Writing Skills.

The section has Short and Long writing tasks.

- III. Notice up to 50 words. One out of the two given questions to be answered. (4 Marks).
- IV. Formal/Informal Invitation and Reply up to 50 words. One out of the two given questions to be answered. (4 Marks).
- V. Letters based on verbal/visual input, to be answered in approximately 120-150 words. Letter types include application for a job with bio data or resume. Letters to the editor (giving suggestions or opinion on issues of public interest). One out of the two given questions to be answered. (5 Marks).
- VI. Article/ Report Writing, descriptive and analytical in nature, based on verbal inputs, to be answered in 120-150 words. One out of the two given questions to be. (5 Marks)

SECTION C (40 Marks)

This section will have variety of assessment items including Multiple Choice Questions, Objective Type Questions, Short Answer Type Questions and Long Answer Type Questions to assess comprehension, analysis, interpretation and extrapolation beyond the text.

Reference to the Context

- VII. One Poetry extract out of two from the book **Flamingo** to assess comprehension, interpretation, analysis and appreciation. (6x1=6 Marks)
- VIII. One Prose extract out of two from the book **Vistas** to assess comprehension, interpretation, analysis and appreciation. (4x1=4 Marks)
- IX. One prose extract out of two from the book **Flamingo** to assess comprehension, interpretation and analysis. (6x1=6 Marks)
- X. Short answer type question (**from Prose and Poetry from the book Flamingo**), to be answered in 40-50 words. Questions should elicit inferential responses through critical thinking. Five questions out of the six given are to be answered. (5x2=10 Marks)
- XI. Short answer type question, from **Prose (Vistas)**, to be answered in 40- 50 words. Questions should elicit inferential responses through critical thinking. Any 2 out of 3 questions to be done. (2x2=4 Marks)
- XII. One Long answer type question, from **Prose/Poetry (Flamingo)**, to be answered in 120-150 words. Questions can be based on incident / theme / passage / extract / event as reference points to assess extrapolation beyond and across the text. The question will elicit analytical and evaluative response from student. Any 1 out of 2 questions to be done. (1x5=5 Marks)
- XIII. One Long answer type question, based on the chapters from the book **Vistas**, to be

answered in 120-150 words to assess global comprehension and extrapolation beyond the text. Questions to provide evaluative and analytical responses using incidents, events, themes as reference points. Any 1 out of 2 questions to be done. **(1x5=5 Marks)**

Note: * Subject to changes as per CBSE instructions.

MATHS: (041)

- April :** Chapter 3- Matrices
Chapter 4- Determinants
Chapter 2 – Inverse Trigonometric Functions
- May:** Chapter 5 – Continuity & Differentiability
Chapter 1- Relations & Functions
- July :** Chapter 6 - Applications of Derivatives
Chapter 8 – Integrals
- August :** Chapter 12- Applications of Integrals
Chapter 7- Linear Programming
- September:** Revision for First Terminal Examination

Mathematical Activities – (a) Lab Manual : 10 Activities
(b) Assessment of the activities
(c) Viva- voice

UNIT TEST : 20 Marks

INTERNAL ASSESSMENT	20 MARKS
Periodic Tests (Best 2 out of 3 tests conducted)	10 Marks
Mathematics Activities	10 Marks

CHEMISTRY :

- April** **Unit:1** – Solutions
- May:** **Unit:2-** Electrochemistry
- July :** **Unit:3-** Chemical Kinetics
Unit:4- d -and f -Block Elements
- August:** **Unit:5-** Coordination Compounds
- September:** **Revision & Terminal Examination**

Practical Work:

- *Volumetric Analysis: Titration of KMnO_4 with Mohr's Salt
Titration of KMnO_4 with Oxalic acid
- *Content Based Experiment: Preparation of Crystals of Potash Alum and Mohr 'salt

Format of Question Paper for Unit Test (For Class XII): 20 Marks

There are 07 questions in the question paper.

- (i) SECTION -A consists of 3 very short answer questions carrying 2 marks each.
- (ii) SECTION -B consists of 3 short answer questions carrying 3 marks each.
- (iii) SECTION -C consists of 1 long answer questions carrying 5 marks.

Format of Question Paper for Theory Examination (For Class –XII): 70 Marks

There are 33 questions in the question paper with internal choice.

- (i) SECTION - A consists of 16 objective questions carrying 1 mark each.
- (ii) SECTION - B consists of 5 very short answer questions carrying 2 marks each.
- (iii) SECTION - C consists of 7 short answer questions carrying 3 marks each.
- (iv) SECTION - D consists of 2 case-based questions carrying 4 marks each.
- (v) SECTION - E consists of 3 long answer questions carrying 5 marks each.

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BIOLOGY :

April

1. Chapter-2: Sexual Reproduction in Flowering Plants
2. Chapter-3: Human Reproduction

May

3. Chapter-4: Reproductive Health
4. Chapter-5: Principles of Inheritance and Variation

July

5. Chapter-6: Molecular Basis of Inheritance
6. Chapter-7: Evolution

August

7. Chapter-11: Biotechnology - Principles and Processes
8. Chapter-12: Biotechnology and its Applications

September- Revision & Terminal Examination

PRACTICALS (Max. Marks: 30)

Evaluation Scheme

- | | Marks |
|----------------------------------|--------------|
| 1. One Major Experiment (Part A) | 5 Marks |
| 2. One Minor Experiment (Part A) | 4 Marks |
| 3. Slide Preparation (Part A) | 5 Marks |
| 4. Spotting (Part B) | 7 Marks |
| 5. Practical Record + Viva Voce | 4 Marks |
| 6. Project Record + Viva Voce | 5 Marks |

A. List of Experiments

1. Prepare a temporary mount to observe pollen germination.
2. Prepare a temporary mount of onion root tip to study mitosis.
3. Isolate DNA from available plant material such as spinach, green pea seeds, papaya, etc.

B. Study and observe the following (Spotting):

1. Flowers adapted to pollination by different agencies (wind, insects and birds).
2. Pollen germination on stigma through a permanent slide or scanning electron micrograph.
3. Identification of stages of gamete development, i.e., T.S. of testis and T.S. of ovary through permanent slides (from grasshopper/mice).
4. Meiosis in onion bud cell or grasshopper testis through permanent slides.
5. T.S. of blastula through permanent slides (Mammalian).
6. Mendelian inheritance using seeds of different colour/sizes of any plant.
7. Prepared pedigree charts of any one of the genetic traits such as rolling of tongue, blood groups, ear lobes, widow's peak and colour blindness.
8. Controlled pollination - emasculation, tagging and bagging.

QUESTION PAPER BLUE PRINT (MAX. MARKS: 70)

Typology	Marks
Objective Type (MCQ, AR)	16
Short Answer Type (2 Marks)	10
Short Answer Type (3 Marks)	21
Case Based Type (4 Marks)	8
Long Answer Type (5 marks)	15

*Any changes in the syllabus/pattern will be intimated to the students in due time.

PHYSICS :

April:	Chapter 1 Electric Charges and field Chapter 2 Electrostatic Potential and Capacitance Chapter 3 Current Electricity
May:	Chapter 4 Magnetic effect of Current
July:	Chapter 5 Magnetism and Matter Chapter 6 Electromagnetic Induction Chapter 7 Alternating Current
August:	Chapter 8 Electromagnetic Wave
September:	Revision for Terminal Examination

Practicals: Term 1 Practicals related to the theory will be covered side by side.

Format of Question Paper for Unit Test- 20 Marks

There are 07 questions in the question paper.

- (i) SECTION - A consists of 3 very short answer questions carrying 2 marks each.
- (ii) SECTION - B consists of 3 short answer questions carrying 3 marks each.
- (iii) SECTION - C consists of 1 long answer questions carrying 5 marks.

Format of Question Paper for Theory Examination - 70 Marks

There are 33 questions in the question paper with internal choice.

- (i) SECTION - A consists of 16 objective questions carrying 1 mark each.
- (ii) SECTION - B consists of 5 very short answer questions carrying 2 marks each.
- (iii) SECTION - C consists of 7 short answer questions carrying 3 marks each.
- (iv) SECTION - D consists of 3 long answer questions carrying 5 marks each.

(v) SECTION - E consists of 2 case-based questions carrying 4 marks each.

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INFORMATICS PRACTICES (065)

Marks Distribution :-

Theory : 70 Marks

Practical : 30 Marks

Total Marks :- 100 Marks

April: Unit 4 – Lesson 6 Societal Impacts
Unit 1-- Lesson-1 Data handling using Pandas

May: Lesson-1 Data Handling using Pandas

July: Lesson -2 Data Visualization using Matplotlib

August: Practicals and Revision of Term-I Syllabus

September: Revision & Terminal Examination

Practical Marks Distribution

S.No.	Unit Name	Marks
1.	Programs using Pandas	8
2.	Programs using Pandas and Matplotlib	7
3.	Practical file (Minimum of 15 programs based on Pandas, 4 based on Matplotlib)	5
4.	Project Work (Using Concepts learned in class XI and XII) It can be done individual	5
5.	Viva-Voce	5
	Total	30

Terminal Examination

Theory Paper - 70 Marks

Practical Paper - 30 Marks

Marks Distribution – Theory Paper (70 Marks)

Q1 to Q18	---	1x18 = 18 Marks
Q19 and Q25	---	2x 7 = 14 Marks
Q26 to Q30 (Short Answer Questions)	---	3x5 = 15 Marks
Q31 to Q33 (Long Answer Questions)	---	5x3 = 15 Marks
Q34 to Q35 (Case Based Question)	---	4x2 = 8 Marks
Total	---	70 Marks

PHYSICAL EDUCATION:

April- Unit 1: Management of Sporting Events

May- Unit 2: Children & Women in Sports

Unit 3: YOGA as Preventive measures for Lifestyle Disease

July- Unit 4: Physical Education and Sports for Children with special needs

Unit 5: Sports & Nutrition

August - Unit 6: Test and Measurement in sports.

September - Revision & Terminal Examination