

MGN PUBLIC SCHOOL ADARSH NAGAR JALANDHAR
12TH CLASS SYLLABUS MID TERM (SEPTEMBER 2025)

ENGLISH XII

Reading:
Comprehension

Flamingo :
The Last Lesson
Lost Spring....
Deep Water
The Rat Trap
Indigo

Poems:
My Mother at Sixty Six
Keeping Quiet
A Thing of Beauty

Vistas:
The Third Level
The Tiger king
Journey to the End of the World
The Enemy

Writing Section
Notice Writing
Invitations: Formal and informal
Replies: Formal and informal
Letter to the Editor
/Job Application
Article Writing

BLUE PRINT (English)

Class XII

TOTAL MARKS- 80

Section A (Reading)

1. Comprehension I (12)
2. Comprehension II (10)

SECTION B (Writing)

3. Notice Writing (4)
4. Invitations /. Replies(4)
5. Letter to the editor/ Job application (5)
6. Article Writing (5)

LITERATURE

7. 8. 9. Three Extract based questions
Prose and Poetry (Flamingo & Vistas) (6+4+6=16)

10. Short Questions (5x2=10)
(Flamingo)

11. Short Questions (2x2=4) (Vistas)

12. Long Question (Flamingo) (5)

13. Long Question (Vistas) (5)

Unit I: Electrostatics (14marks)

Electric charges, Conservation of charge, Coulomb's law-force between two- point charges, forces between multiple charges; superposition principle and continuous charge distribution. Electric field, electric field due to a point charge, electric field lines, electric dipole, electric field due to a dipole, torque on a dipole in uniform electric field.

Electric flux, statement of Gauss's theorem and its applications to find field due to infinitely long straight wire, uniformly charged infinite plane sheet and uniformly charged thin spherical shell (field inside and outside)

Electric potential, potential difference, electric potential due to a point charge, a dipole and system of charges; equipotential surfaces, electrical potential energy of a system of two-point charges and of electric dipole in an electrostatic field.

Conductors and insulators, free charges and bound charges inside a conductor. Dielectrics and electric polarization, capacitors and capacitance, combination of capacitors in series and in parallel, capacitance of a parallel plate capacitor with and without dielectric medium between the plates, energy stored in a capacitor (no derivation, formulae only).

Unit III: Magnetic Effects of Current and Magnetism (18 marks)

Moving Charges and Magnetism

Concept of magnetic field, Oersted's experiment.

Biot - Savart law and its application to current carrying circular loop.

Ampere's law and its applications to infinitely long straight wire. Straight solenoid (only qualitative treatment), force on a moving charge in uniform magnetic and electric fields.

Force on a current-carrying conductor in a uniform magnetic field, force between two parallel current-carrying conductors-definition of ampere, torque experienced by a current loop in uniform magnetic field; Current loop as a magnetic dipole and its magnetic dipole moment, moving coil galvanometer- its current sensitivity and conversion to ammeter and voltmeter.

Bar magnet, bar magnet as an equivalent solenoid (qualitative treatment only), magnetic field intensity due to a magnetic dipole (bar magnet) along its axis and perpendicular to its axis (qualitative treatment only), torque on a magnetic dipole (bar magnet) in a uniform magnetic field (qualitative treatment only), magnetic field lines.

Magnetic properties of materials- Para-, dia- and ferro – magnetic substances with examples, Magnetization of materials, effect of temperature on magnetic properties.

Unit IV: Electromagnetic Induction and Alternating Currents (18 marks)

Electromagnetic induction; Faraday's laws, induced EMF and current; Lenz's Law, Self and mutual induction.

Alternating currents, peak and RMS value of alternating current/voltage; reactance and impedance; LCR series circuit (phasors only), resonance, power in AC circuits, power factor, wattless current. AC generator, Transformer.

Unit VI: Optics (20 marks)

Ray Optics and Optical Instruments

Ray Optics: Reflection of light, spherical mirrors, mirror formula, refraction of light, total internal reflection and optical fibers, refraction at spherical surfaces, lenses, thin lens formula, lens maker's formula, magnification, power of a lens, combination of thin lenses in contact, refraction of light through a prism.

Optical instruments: Microscopes and astronomical telescopes (reflecting and refracting) and their magnifying powers.

Wave optics: Wave front and Huygen's principle, reflection and refraction of plane wave at a plane surface using wave fronts. Proof of laws of reflection and refraction using Huygen's principle. Interference, Young's double slit experiment and expression for fringe width (No derivation final expression only), coherent sources and sustained interference of light, diffraction due to a single slit, width of central maxima (qualitative treatment only).

CHEMISTRY XII

Max marks 70

Time 3hrs.

1. Solution, (10marks)
2. Electrochemistry. (10marks)
3. Chemical kinetics(10marks)
4. Haloalkanes , Haloarenes(15 marks)
5. Alcohols, phenols and ethers(15 marks)
6. Amines(10marks)

BIOLOGY XII

1. Sexual reproduction in flowering plants 10
2. Human Reproduction 10
3. Reproductive Health 5
4. Principles of Inheritance and Variation 10
5. Molecular Basis of inheritance 10
6. Evolution 5
7. Human Health and Disease 10
8. Microbes in Human Welfare 10

MATHEMATICS XII

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|---------------------------------|------|
| 1. RELATION & FUNCTION | 10 M |
| 2. INVERSE TRIGONOMETRY | 6 M |
| 3. MATRICES | 8 M |
| 4. DETERMINANTS | 10 M |
| 5. CONTINUITY & DIFFERENTIATION | 12 M |
| 6. APPLICATION OF DERIVATIVE | 13 M |
| 7. INTEGRALS | 15 M |
| 8. APPLICATION OF INTEGRALS | 6 M |

(Blue print according to CBSE)

COMMERCE

ACCOUNTANCY XII

M.M. 80

Time: 3 hrs.

- Accounting for Partnership- Fundamentals
- Change in Profit Sharing Ratio
- Methods for calculation of Goodwill
- Admission of a partner
- Retirement of a partner
- Death of partner
- Dissolution of partnership firms
- Accounting for Share Capital

BUSINESS STUDIES XII

Unit 1 - Nature and Significance of Management

Unit 2 - Principles of Management

Unit 3 - Business Environment

Unit 4 - Planning

Unit 5 - Organising

Unit 6 - Staffing

Unit 11 - Marketing Management

Unit 12 - Consumer Protection

ECONOMICS XII

Macro Economics

Unit 1 National Income

Ch.1-Circular Flow of income

Ch.2-Basic concepts of Macro Economics

Ch.3- National Income and related aggregates

Ch.4-Measurement of National income

Unit 2 Money and Banking

Ch.5 Money

Ch.6 Banking: Commercial Banks and Central Banks

Unit 3 :Determination of Income and Employment

Ch.7: Aggregate demand and related concepts

Ch.8: Income determination and Multiplier

Ch.9: Excess demand and deficient demand

Indian Economy

Ch.1: Indian Economy on the eve of independence

Ch.2: Indian Economy 1950-90

Ch. 3: Economic reforms since 1991

Ch. 5: Human capital formation

Paper pattern : As per CBSE Norms

MARKETING XII

M.M. 60

Time: 3 Hrs.

Subject Specific

Unit 1 – Product

Unit 2- Price Decision

Unit 3- Place Decision : Channels of Distribution

Employability Skills

Unit 1- Communication skills

Unit 2- Self management skills

Unit 3- ICT Skills

FINANCIAL MARKETS MANAGEMENT XII

M.M. 60

Time: 3 Hrs.

Subject Specific

Unit 1 – Introduction to Indian Securities Markets and Trading Membership

Unit 2- Trading

Unit 3- Clearing and Settlement, legal framework

Employability Skills

Unit 1- Communication skills

Unit 2- Self management skills

Unit 3- ICT Skills

OPTIONAL

PAINTING XII

UNIT-1

1. Rajasthani and Pahari Schools of Art
2. Mughal and Deccan School of miniature Painting .

PHYSICAL EDUCATION XII

For 12th Class: Unit 1 to Unit 7

DANCE XII

- Basic understanding of the term ABHINAYA and Definition of it's four aspects .
- Rasa :- Definition and explanation of nine rasa.
- Knowledge of the technical terminology of the dance form.
 - a) Vandana
 - b) Tihaayi
 - c) Aamad
 - d) Toda/Tukra
 - e) Paran
 - f) Chakardar Toda/ Tukra& Paran
 - g) Gatnikas
 - h) Gatbhaav
- Knowledge of the following terms:- (Short note)
Sangeet , Tal , laya , lokdharmi , Natyadharmi , Rasa and Bhava.
- A brief history with other classical dance style of India.
Bharatnatyam , Oddisi ,Kathakali
- Notation :- Teentaal & Jhaptal (full)

FOOD AND NUTRITION AND DIETETICS

UNIT I - CLINICAL & THERAPEUTIC NUTRITION

UNIT II - DIET IN HEALTH AND DISEASE-I

UNIT III - DIET IN HEALTH AND DISEASE-II

LEGAL STUDIES SYLLABUS

Unit 1 Judiciary

Unit 2 Alternative Dispute Resolution in India (ADR)

Unit 3 Topics in Law- I (Business Laws)

Chapter 3 (A) - Law of Contract

Chapter 3 (B) - Law of Torts

Chapter 3 (C) - Law of Property

Chapter 3 (D) - Intellectual Property Law

Unit 4 Topics in Law- II (General Laws)

Chapter 4 (A) -Law and Sustainable Development

Chapter 4 (B)- Forms of Legal Entities

INFORMATICS PRACTICES XII

Computer Network 10 marks

MySQL 25 marks

Societal Impacts 10 marks

Python Lists, Series, Plots, DataFrames 25 marks

PSYCHOLOGY XII

PSYCHOLOGY : Class XII

- 1) Variations in psychological attributes
- 2) Self and Personality
- 3) Meeting life challenges
- 4) Psychological disorders
- 5) Therapeutic Approaches

MUSIC XII

Syllabus XII Mid Term/ First term 2025

1. Brief Study of the following. Khatka, Murki, Gamak, Gram, Murchhana, Alap
2. Sangeet Parijat
3. Life sketch of Faiyaz Khan, Bade Ghulam Ali Khan
4. Historical Development of Time Theory of Raga
5. Writing in notation the Dhamar composition (khelat kanha brij mein hori) of Raga Malkauns
7. Tala description of Rupak and Dhamar tala notation.

EARLY CHILDHOOD CARE & EDUCATION XII

Unit 1:

- Chapter 1: Relationship between play, learning and development
- Chapter 2: Needs of the child
- Chapter 3: Physical and motor development milestones
- Chapter 4: Cognitive Development
- Chapter 5: Language Development
- Chapter 6: Socio-Emotional Development

Unit 2:

- Educational thoughts of key theorists (Ch. 1 – Ch. 8)

Unit 3:

- Chapter 1: Early Language and Literacy
- Chapter 2: Cognition and early numeracy
- Chapter 3: The world around us
- Chapter 4: Art and Aesthetics
- Chapter 5: Inclusive Learning Environment

Employability Skills:

- Chapter 1: Communication
- Chapter 2: Self Management

ARTIFICIAL INTELLIGENCE XII

Employability Skills

Unit 1 Communication Skills

Unit 2 Self Management Skills

Unit 3 ICT Skills

Unit 4 Entrepreneurial Skills

Unit 5 Green Skills

Artificial Intelligence

Unit 2 Data Science Methodology

Unit 3 Making Machine See

Unit 5 Intro to Big Data

Unit 6 Understanding Neural Network