



GIRLS HIGH SCHOOL AND COLLEGE PRAYAGRAJ

SESSION: 2020-21

CLASS: IX A, B, C, D, E

FINAL EXAMINATION REVISED SYLLABUS

(I) ENGLISH LANGUAGE :

1. Essay Writing
2. Letter Writing (Formal and Informal)
3. Notice Writing
4. Email
5. Comprehension
6. Preposition
7. Verb Forms
8. Transformation of Sentences

(II) ENGLISH LITERATURE :

1. THE MERCHANT OF VENICE

(Shakespeare's unabridged play by  
A.W. Verity)

Drama: Act 1 – Scenes 1, 2 & 3, Act 2 – Scenes  
1 to 9, Act 3 – Scene 1 ONLY.

TREASURE TROVE - A collection of ICSE  
Poems & Short Stories (Evergreen Publications)

2. POETRY:

- (i) The Cold Within–James Patrick Kinney
- (ii) The Bangle Sellers – Sarojini Naidu
- (iii) After Blenheim – Robert Southey
- (iv) Television – Roald Dahl
- (v) Daffodils – William Wordsworth

3. PROSE (Short Stories):

- (i) Old Man at the Bridge – Ernest Miller  
Hemingway
- (ii) A Horse and Two Goats – R.K. Narayan
- (iii) Hearts and Hands – O. Henry

- (iv) A Face in the Dark – Ruskin Bond
- (v) An Angel in Disguise – T.S. Arthur

### (III) MATHEMATICS :

#### Unit1: Pure Arithmetic

- 1. Rational and Irrational numbers

#### Unit2: Commercial Mathematics

- 2. Compound Interest ( Without using formula)
- 3. Compound Interest (Using formula)

#### Unit 3: Algebra

- 4. Expansions
- 5. Factorisation
- 6. Simultaneous (linear) Equations

- 7. Indices

#### Unit4: Geometry

- 8. Triangles (congruency in triangles)
- 9. Mid-point and its Converse( including Intercept Theorem)
- 10. Pythagoras Theorem
- 11. Rectilinear Figures
- 12. Circle

#### Unit5: Statistics and graph work

- 13. Statistics
- 14. Mean and Median

#### Unit6: Mensuration

- 15. Area and perimeter of plane figures
- 16. Solids

#### Unit7: Trigonometry

- 17. Trigonometrical Ratios
- 18. Trigonometrical Ratios of standard angles
- 19. Solution of Right Triangles
- 20. Complementary Angles

#### Unit8: Co-ordinate

- 21. Co-ordinate Geometry
- 22. Graphical solution
- 23. Distance Formula

### (IV) HISTORY/CIVICS

#### : CIVICS

### 1. Our Constitution

Definition of Constitution - date of adoption, date of enforcement and its significance. Features: Single Citizenship, Universal Adult Franchise, Fundamental Rights (names only) and Fundamental Duties, Directive Principles of State Policy (meaning), Welfare State (meaning only).

### 2. Elections

Meaning; Composition of Election Commission (in brief); Direct and Indirect election; General election; Mid-term election and By-election.

### 3. Local Self Government

(i) Rural: Three-tier system of Panchayati Raj – Gram Panchayat, Panchayat Samiti, Zila Parishad – functions (any four each).

(ii) Urban: Municipal Committees and Municipal Corporations – functions (any four each).

## HISTORY

### 1. The Harappan Civilisation

Sources: Great Bath, Citadel, seals, bearded man, dancing girl, dockyard, script. Urban planning. Decline of the Harappan civilization.

### 2. The Vedic Period

Sources: Vedas and Epics (brief mention); Brief comparative study of Early and Later Vedic society.

### 3. Jainism and Buddhism

Causes for the rise of Jainism and Buddhism in the 6th century B.C. Doctrines.

### 4. The Mauryan Empire

Sources: Arthashastra, Indika, Ashokan Edicts, Sanchi Stupa. Administration (Chandragupta Maurya and Ashoka); Ashoka's Dhamma.

### 5. The Sangam Age

Meaning of Sangam; Sources: Tirukkural (in brief).

### 6. The Age of the Guptas

Sources: Account of Fa-hien; Allahabad Pillar Inscription. Contribution to the fields of Education (Nalanda University), Science (Aryabhata) and Culture (works of Kalidasa, Deogarh temple).

### 7. Medieval India

#### (a) The Cholas

Sources: Inscriptions; Brihadishwara Temple. Administration (Rajaraja I,

Rajendra I).

(b) The Delhi Sultanate

Qutab Minar. Political history and Administration (Alauddin Khilji and Muhammad Bin Tughlaq).

(c) The Mughal Empire

Sources: Ain-i-Akbari, Taj Mahal, Jama Masjid and Red Fort. Political history and administration (Akbar)

8. The Modern Age in Europe

(a) Renaissance

Definition; causes (new trade routes, invention of the printing press) and impact on art, literature and science (Leonardo Da Vinci, William Shakespeare and Copernicus).

(b) Reformation

Meaning of Reformation; dissatisfaction with the practices of the Catholic Church, Counter Reformation. (meaning only).

(c) Industrial Revolution

Definition of the term. Socialism and Capitalism - meaning only.

(V) GEOGRAPHY :

1. Our World

(i) Geographic grid - Latitudes & Longitudes

(a) Concept of latitudes: main latitudes, their location with degrees, parallels of latitude and their uses.

(b) Concept of longitudes - Prime Meridian, time (local, standard and time zones, Greenwich Mean Time (GMT) and International Date Line (IDL). Eastern and Western hemisphere.

(ii) Rotation and Revolution

Rotation – direction, speed and its effects (occurrence of day and night, the sun rising in the east and setting in the west, Coriolis effect) Revolution of the earth and its inclined axis – effects: the variation in the length of the day and night and seasonal changes with Equinoxes and Solstices.

2. Structure of the Earth

(i) Earth's Structure

Core, mantle, crust – meaning, extent and their composition.

(ii) Rocks - difference between minerals and rocks, types of rocks:

igneous, sedimentary, metamorphic, their characteristics and formation.

(iii) Volcanoes

Meaning, Types – active, dormant and extinct. Effects – constructive and destructive.

Important volcanic zones of the world.

(iv) Earthquakes

Meaning, causes and measurement. Effects: destructive and constructive.

Earthquake zones of the World

(v) Weathering

Meaning, types and effects of weathering.

Types: Physical Weathering – block and granular disintegration, exfoliation; Chemical weathering - oxidation, carbonation, hydration and solution; Biological Weathering – caused by humans, plants and animals.

3. Hydrosphere

Meaning of hydrosphere. Tides - formation and pattern.

Ocean Currents – their effects (specifically of Gulf Stream, North Atlantic Drift, Labrador Current, Kuro Shio and Oya Shio.)

4. Atmosphere

(i) Composition and structure of the atmosphere.

Troposphere, Stratosphere, Ionosphere and Exosphere; Ozone in the Stratosphere, its depletion. Global warming and its impact.

(ii) Insolation

- Meaning of insolation and terrestrial radiation.
- Factors affecting temperature: latitude, altitude, distance from the sea, slope of land, winds and ocean currents.

(iii) Atmospheric Pressure and Winds.

- Meaning and factors that affect atmospheric pressure.
- Major pressure belts of the world.
- Factors affecting direction and velocity of wind – pressure gradient, Coriolis Effect.
- Permanent winds – Trades, Westerlies and Polar Easterlies.
- Periodic winds - Land and Sea breezes, Monsoons.
- Local winds - Loo, Chinook, Foehn and Mistral.
- Variable winds - Cyclones and Anticyclones.

#### (iv) Humidity

- Humidity – meaning.
- Precipitation - forms (rain, snow, and hail).
- Types of rainfall – relief/orographic, convectional, cyclonic/ frontal with examples from the different parts of the world.

#### 5. Pollution

(a) Types - air, water (fresh and marine), soil, radiation and noise.

(b) Sources:

- Noise: Traffic, factories, construction sites, loudspeakers, airports.
- Air: vehicular, industrial, burning of garbage. Water: domestic and industrial waste.
- Soil: chemical fertilizers, bio medical waste and pesticides.
- Radiation: X- rays; radioactive fallout from nuclear plants.

(c) Effects - on the environment and human health.

(d) Preventive Measures

Carpools, promotion of public transport, no smoking zone, restricted use of fossil fuels, saving energy and encouragement of organic farming.

#### 6. Natural Regions of the World

Location, area, climate, natural vegetation and human adaptation. Equatorial region, Tropical Deserts, Tropical Monsoon.

#### 7. Map Work

On an outline map of the World, candidates will be required to locate, mark and name the following:

1. The major Natural Regions of the world - Equatorial, Tropical Monsoon, Tropical Deserts.
2. The Oceans, Seas, Gulfs and Straits - all Major Oceans, Caribbean Sea, North Sea, Black Sea, Caspian Sea, South China Sea, Mediterranean Sea, Gulf of Carpentaria, Hudson Bay, Persian Gulf, Gulf of Mexico, Gulf of Guinea, Bering Strait, Strait of Gibraltar, Strait of Malacca.
3. Rivers – Mississippi, Colorado, Amazon, Paraguay, Nile, Zaire, Niger, Zambezi, Orange, Rhine, Volga, Danube, Murray, Darling, Hwang Ho, Yangtse Kiang, Ob, Indus, Ganga, Mekong, Irrawaddy, Tigris, Euphrates.
4. Mountains – Rockies, Andes, Appalachian, Alps, Himalayas, Pyrenees, Scandinavian Highlands, Caucasus, Atlas, Drakensburg, Khinghan, Zagros, Urals, Great Dividing Range.
5. Plateaus – Canadian Shield, Tibetan Plateau, Brazilian Highlands, Patagonian Plateau, Iranian Plateau, Mongolian Plateau.

## (VI) PHYSICS :

### 1. Measurements and Experimentation

- (i) Systems of unit and Units in S.I. System.
- (ii) Simple pendulum.

### 2. Motion in One Dimension

Scalar and vector quantities, distance, speed, velocity, acceleration; equations of uniformly accelerated motion without derivations.

### 3. Laws of Motion

- (i) Contact and non-contact forces; cgs & SI units.
- (ii) Newton's First Law of Motion (qualitative discussion) introduction of the idea of inertia, mass and force.
- (iii) Newton's Second Law of Motion (including  $F=ma$ ); weight and mass.
- (iv) Newton's Third Law of Motion (qualitative discussion only); simple examples.
- (v) Gravitation.

### 4. Fluids

- (i) Change of pressure with depth (including the formula  $p=h\rho g$ ); Transmission of pressure in liquids; atmospheric pressure.
- (ii) Buoyancy, Archimedes' Principle; floatation; relationship with density; relative density; determination of relative density of a solid using water only.

### 5. Heat and Energy

- (i) Concepts of heat and temperature.
- (ii) Anomalous expansion of water
- (iii) Global warming and Green House effect.

### 6. Light

- (i) Reflection of light; images formed by a pair of parallel and perpendicular plane mirrors.
- (ii) Spherical mirrors; characteristics of image formed by these mirrors. Uses of concave and convex mirrors. (Only simple direct ray diagrams are required).

### 7. Sound

- (i) Nature of Sound waves. Requirement of a medium for sound waves to travel; propagation and speed in different media; comparison with speed of light.
- (ii) Infrasonic, sonic, ultrasonic frequencies and their applications.

## 8. Electricity and Magnetism

(i) Simple electric circuit using an electric cell and a bulb to introduce the idea of current (including its relationship to charge); potential difference; insulators and conductors; closed and open circuits; direction of current (electron flow and conventional).

(ii) Induced magnetism, Magnetic field of earth. Neutral points in magnetic fields.

## (VII) CHEMISTRY :

### Chapter 1: The Language of Chemistry

(i) Symbol of an element; valency; formulae of radicals and compounds. Balancing of simple chemical equations.

(ii) Relative Atomic Masses and Relative Molecular Masses: Definitions & Calculations of RMM and percentage composition of a compound.

### Chapter 2: Chemical changes and reactions

(i) Types of chemical changes.

(ii) Energy changes in a chemical change.

### Chapter 3: Water

(i) Water as a universal solvent.

(ii) Hydrated and Anhydrous substances.

(iii) Drying and Dehydrating Agents.

### Chapter 4: Atomic Structure & Chemical Bonding

(i) Structure of an atom, mass number and atomic number, Isotopes and Octet Rule.

(ii) Electrovalent and Covalent bonding, structures of various compounds – orbit structure.

### Chapter 5: The Periodic Table

Dobereiner's Triads, Newland's law of Octaves, Mendeleev's contributions; Modern Periodic law, Modern Periodic Table. (Groups and Periods)

### Chapter 6: Study of the first element – Hydrogen

Position in the periodic table and general group characteristics.

(i) Preparation of Hydrogen from water, dilute acids and alkalis.

(ii) Laboratory preparation and collection of hydrogen (method other than electrolysis).

(iii) Industrial manufacture of hydrogen by Bosch process.



(iv) Oxidation and Reduction reactions.

#### Chapter 7: Study of Gas Laws

(i) The behavior of gases under changes of temperature and pressure; explanation in terms of molecular motion; Boyle's Law and Charles' Law; absolute zero; gas equation; simple relevant calculations.

(ii) Relationship between Kelvin scale and Celsius Scale of temperature; Standard temperature and pressure.

#### Chapter 9: Practical work

(i) Action of heat on a given compound.

(ii) Action of dilute sulphuric acid on the following substances:

(a) a metal

(b) a carbonate

(c) a sulphide

(d) a sulphite

(iii) Flame Test to identify the following metals in the unknown substance:

(a) a sodium salt

(b) a potassium salt

(c) a calcium salt

#### (VIII) BIOLOGY :

Ch-1. Cell -A Unit of Life

Ch-2. Tissues

Ch-3. Flower

Ch-4. Pollination and Fertilisation

Ch-5. Structure and Germination of seeds

Ch-6. Respiration in Plants

Ch-8. Economic Importance of Bacteria and Fungi

Ch-9. Nutrition

Ch-10. Dentition

Ch-11. Digestive System

Ch-12. Skeleton Movement and Locomotion

Ch-13. Skin Structure and functions

Ch-14. Respiratory System

#### (IX) COMPUTER APPLICATIONS :

CH 1: INTRODUCTION TO OBJECT ORIENTED PROGRAMMING  
CONCEPTS

CH 2: INTRODUCTION TO JAVA

CH 3: ELEMENTARY CONCEPTS OF OBJECTS AND CLASSES

CH 4: VALUES AND DATA TYPES

CH 5: OPERATORS IN JAVA

CH 7: INPUT IN JAVA

CH 8: MATHEMATICAL LIBRARY METHODS

CH 9: CONDITIONAL CONSTRUCTS IN JAVA

CH 10: ITERATIVE CONSTRUCTS IN JAVA

(X) COMMERCIAL APPLICATIONS :

Ls 1- Introduction to Commercial Organisation

Ls 2- Ownership Structures - Sole Proprietorship & Joint Hindu Family Business

Ls 3- Ownership Structures - Partnership

Ls 4 - Ownership Structures- Joint Stock Company

Ls 5 - Ownership Structures - Cooperative Society

Ls 6 - Public Enterprises

Ls 7 - Functioning of a Commercial Organisation

Ls 8 - Communication in a Commercial Organisation

Ls 9 - Ways of Communicating

Ls 11- Nature & Terminology of Accounting

Ls 12 - Accounting Records

Ls 13 - Natural Resources

(XI) ART :

PAPER III

1.Village Scene

2.Rainy Day

3.Zoo Scene

4.Marriage Scene

5.Any Festival

6.Picnic Scene

7.Poem illustration

8.Market Scene

9. Clean India, Green India (Poster)

10. Winter Scene
11. Birthday Party Scene
12. Any Sport

#### PAPER IV

1. Birthday Card
2. Thank you Card
3. Anniversary Card
4. Teachers Day Card
5. Book Cover (Story Book)
6. Valentine Day Card
7. Father/Mother Day Card
8. Stop Dowry (Poster)
9. Save the Environment (Poster)
10. Brother/Sister Day Card
11. Invitation Card
12. Christmas Day Card
13. Get Well Soon Card
14. Wrapping Paper
15. Save Wild Life (Poster)

#### (XII) HINDI :

##### हिन्दी Section A

1. प्रस्ताव-लेखन (निबंध)
2. कहानी-लेखन
3. पत्र-लेखन
4. अपठित गद्यांश
5. व्यावहारिक व्याकरण (शब्द भंडार)

##### Section B

#### साहित्य सागर

- |                        |   |              |
|------------------------|---|--------------|
| 1. बात अठन्नी की       | — | सुदर्शन      |
| 2. महायज्ञ का पुरस्कार | — | यशपाल        |
| 3. नेताजी का चश्मा     | — | स्वयं प्रकाश |
| 4. बड़े घर की बेटी     | — | प्रेमचंद     |

#### पद्य भाग

- |                        |   |                        |
|------------------------|---|------------------------|
| 1. साखी                | — | कबीर दास               |
| 2. स्वर्ग बना सकते हैं | — | रामधारी सिंह दिनकर     |
| 3. वह जन्मभूमि मेरी    | — | सोहनलाल द्विवेदी       |
| 4. मेघ आए              | — | सर्वेश्वर दयाल सक्सेना |
| 5. सूर के पद           | — | सूरदास                 |

विशेष नोट— वार्षिक परीक्षा में कक्षा नौवीं की हिंदी पुस्तक के गद्य, पद्य एवं व्याकरण में पढ़ाए गए समस्त पाठ एवं उनके अंश सम्मिलित हैं।