



Gems Akademia International School

Session: 2022 – 2023 TERM WISE SYLLABUS

GRADE: VIII (ICSE)

TERM I

SUBJECT: ENGLISH LANGUAGE

A. TOPICS

1. Descriptive Composition
2. Narrative Composition
3. Picture Composition
4. Letter Writing – Friendly
5. Unseen Comprehension
6. Subject Verb Agreement
7. Tense
8. Prepositions
9. Finite and Non Finite Verbs
10. Transformation of Sentences - Removal of Adverb 'too', As soon as.... No sooner.....than, Hardly.....when, Scarcely.....when, Despite....., In spite of....., Active and Passive Voice)

SUBJECT: ENGLISH LITERATURE

1.	After Twenty Years
2.	<i>The Solitary Reaper</i>
3.	MrsPackeltide's Tiger
4.	<i>To the Evening Star</i>
5.	The Village By The Sea Chapter 1-6

SUBJECT: COMPUTER STUDIES

A. Topics

Chapter 1: Operating System and Graphical User Interface

1. Explain the need, functions, features and types of operating systems.
2. Define single-user, multi-user and multitasking operating systems.
3. Differentiate between CUI and GUI in terms of multitasking.
4. Types of Operating System.
5. List the features, functions and advantages of GUI.

Chapter 2: Spreadsheet –Functions and Charts

1. Explain cells, range of cells.
2. Select range, name cell range.
3. Explain cell referencing and differentiate between relative, absolute and mixed referencing with examples.
4. Manage worksheets (Rename, Delete, Add)
5. Entering formula in cells.

Explain excel functions.

6. Rules to enter function like Sum, Average, Max, Min, Count.
7. Understand the use of operators in Excel.
8. Differentiate between different types of operators with examples.
9. Working with multiple workbooks.
10. Formatting Text
11. Formatting Numbers and Dates.
12. Define chart in excel.
13. Different types of charts in MS Excel
14. Describe the components of charts and understand their significance.
15. Creating chart in MS Excel.
16. Format charts in excel.

Chapter 3: Networks – Unit I: Communication Systems and Network Technology

1. Define network and networking.
2. Identifying the components of a network.
3. Discuss different types of networks.
4. Distinguish between Internet and Intranet
5. Discuss the different types of wired and wireless networking technology.

Chapter – 4 Algorithms and Flow Charts

1. Define algorithm.
2. State the characteristics of a good algorithm.
3. State the uses of algorithms.`
4. Discuss the methods of developing an algorithm.
5. Define Flowchart.
6. Identify the different symbols of a flowchart and explain their significance.
7. Application of algorithms and flowchart to develop a program.

B. Activities

- ✓ Project Work – Assigns various tasks that challenge the students to apply the concepts learnt.

SUBJECT: GEOGRAPHY

1. INTERPRETING TOPOGRAPHICAL MAPS.
2. POPULATION.
3. MIGRATION.
4. URBANIZATION.

- ❖ PROJECT AND ACTIVITY TO BE DONE.

SUBJECT: CHEMISTRY

1. Matter

- Kinetic theory of matter.
- Properties (rigidity, density) of three states of matter.
- Change of state & interconversion of matter.

2. Elements, compounds & mixtures

- Classification of elements.
- Types of mixtures.

3. Atomic Structure

- Terms related to atoms.
- Formation of compounds from atoms.

4. Language of Chemistry

- Symbols.
- Valency (variable valency), Radicals and Chemical formula.
- Writing a chemical formula.
- Chemical equations.
- Balancing a chemical equation.

5. Chemical Reactions

- Types of chemical reactions with definition & examples
- Conditions necessary for a chemical reaction.
- Combination reaction
- Decomposition reaction
- Displacement reaction
- Double decomposition reaction & its sub-types

SUBJECT: PHYSICS

1. Matter

(i) Kinetic theory of Matter.

(ii) Three states of Matter in terms of Movement of Particles.

(iii) Energy content in three states of Matter.

(iv) Change of State in Matter using the Kinetic Theory.

(v) Change of State diagrams.

2. Physical Quantities and Measurement

(i) Measurement of density of irregular solids using (a) Eureka can, (b) Measuring Cylinder.

(ii) Measurement of density of Fluids:

(a) Basic Concepts

(b) Concept of Floatation and Sinking of a substance.

(iii) Comparison of densities in the three states of Matter.

3. Force and Pressure

(i) Turning effect of Force: concept, definition and calculation.

(ii) Pressure: definition, unit, calculation of pressure in simple cases, pressure exerted by liquids (qualitative only), pressure exerted by gases - Atmospheric pressure (qualitative only).

4. Energy

(i) Concept of Work, unit of work, calculation of work done in simple cases.

(ii) Kinetic energy - basic concept.

(iii) Potential energy - basic concept, Gravitational potential energy.

(iv) Calculation of Kinetic and Potential Energies (simple numerical problems).

(v) Energy transformation in common daily life.

(vi) Difference between energy and power.

5. Light Energy

(i) Refraction - definition, examples of refraction.

(ii) Convex and concave mirrors - reflecting surface, use of curved mirrors, terms related to curved mirrors, rules for making ray diagrams of spherical mirrors, real and virtual images, ray diagrams curved mirrors where real images are formed.

(iii) Dispersion of white light into constituent colours.

SUBJECT: BIOLOGY

1. Transportation in Plants

- Structure and function of xylem and phloem in detail
- Transport of water
- Processes involved in absorption of water and minerals
- Conduction of water and mineral theories

2. Transpiration in Plants

- Transpiration definition and process
- Modes of transpiration
- Factors affecting transpiration
- Significance of transpiration

3. Asexual Reproduction

- Vegetative propagation
- Artificial propagation by tissue culture

4. Sexual Reproduction in Plants

- Parts of a typical flower
- Self and cross pollination
- Agents of pollination
- Fertilization process
- Artificial pollination

5. Reproduction in Human Beings

- Sexual Reproduction in humans.
- Main organs of male and female reproductive system.

6. Ecosystem and Interaction

- Understanding Ecosystems: Definition, Interaction between biotic and abiotic factors.
- Food chain, Food Web and Ecological Pyramids
- Interdependence between organisms
- Forest ecosystem

SUBJECT: MATHEMATICS

TOPICS

Number Systems

Rational Numbers

- Properties of rational numbers
- Representation of rational numbers on the number line.
- Between any two rational numbers there lies another rational number.
- Operations of rational numbers.

- Word problems

Exponents and powers

- Laws of exponents with integral powers.
- Square and Square roots using factor method and division method for numbers containing (a) not more than four digits (b) not more than two decimal places.
- Cubes and cube roots (by factor method)

Playing with numbers

- Numbers in general form
- Solving and creating various problems and puzzles.
- Deducing the divisibility test rules for two or three digit numbers.

Sets

- Union and intersection of sets
- Disjoint set
- Complement of a set

Ratio and Proportion

Percentage and its application

- Percentage
- Profit and loss
- Overhead expenses
- Discount

Algebra

Algebraic expressions and Identities

- Recapitulation of Addition, subtraction
- Multiplication, division of algebraic expression (coefficient as integers)
- Identities

Geometry

Understanding shapes

- Properties of quadrilaterals – Angle sum property (by verification)
- Properties parallelogram (by verification)

Construction of Quadrilaterals

Mensuration

Area and perimeter of plane figures

- Area of 2-D shapes

Data handling

- Arranging ungrouped data into groups.
- Bar – Graphs (constructing and interpreting)
- Pie charts

Activity:

Activities to be done in the Mathematics Laboratory.

SUBJECT: HISTORY & CIVICS

CIVICS

1. Union Legislature
2. Union Executive
3. Judiciary

HISTORY-

1. Beginning of the modern world
2. Industrial Revolution and Rise of Imperialism
3. The Age of Revolutions
4. The American Civil War
5. Decline of Mughal Empire

6. Rise of Independent Regions and Powers

SUBJECT: SECOND LANGUAGE – BENGALI

TERM – I		TERM - II	
1.	বাল্যস্মৃতি (গদ্য)	1.	কুতুব মিনারের কথা (গদ্য)
2.	অপুর বাহিরে যাত্রা (গদ্য)	2.	অগ্নিদেবের শয্যা (গদ্য)
3.	বাঘ মামা আর শিয়াল ভাগ্নে (গদ্য)	3.	রাগের ওষুধ (গদ্য)
4.	মহালয়ার উপহার (গদ্য)	4.	কুড়িমামার হাতের কাজ (গদ্য)
5.	ছাড়পত্র (কবিতা)	5.	নন্দলাল (কবিতা)
6.	মূল্যপ্রাপ্তি (কবিতা)	6.	রামচন্দ্রের বিলাপ (কবিতা)
7.	বাগধারা (১-৩০)	7.	বোধ পরীক্ষণ
8.	সমোচ্চারিত ভিন্নার্থক শব্দ (৩০টি শব্দ)	8.	বাগধারা (৩১-৬০)
9.	বোধ পরীক্ষণ	9.	বাচ্য
10.	বাক্য পরিবর্তন	10.	একই শব্দের ভিন্ন অর্থে প্রয়োগ (১০টি শব্দ)
11.	অশুদ্ধি সংশোধন (৫০টি শব্দ)	11.	অশুদ্ধি সংশোধন (৫০টি শব্দ)
12.	পত্রলিখন (ব্যক্তিগত পত্র)	12.	পত্রলিখন (আবেদন পত্র)
13.	প্রবন্ধ লিখন	13.	প্রবন্ধ লিখন

SUBJECT: SECOND LANGUAGE – HINDI TERM – I

❖ हिंदीसंचिता : पाठो के नाम :-

मातृभूमि
हम दीवानों की क्या हस्ती
स्वत्व-रक्षा
सदाचार की तावीज़
कलेंडर कलाकार
स्वाभिमान
कोटर और कुटीर

❖ हिन्दी व्याकरण : पाठो के नाम :-

शब्द-भण्डार
निर्देशानुसार परिवर्तन
पत्र-लेखन
निबंध-लेखन
मुहावरे
अपठित गद्यांश

SUBJECT: THIRD LANGUAGE – BENGALI

1. বোকা কুমিরের কথা
2. তালগাছ
3. বাবুই পাখিরে ডাকি
4. মুনি আর ইঁদুর
5. পদের শ্রেণিবিভাগ
6. বচন
7. সমার্থক শব্দ
8. বোধপরীক্ষণ
9. লিঙ্গ
10. অনুচ্ছেদ রচনা

SUBJECT: THIRD LANGUAGE – HINDI

Sl No	TOPIC
1.	पेड़
2.	संज्ञा /सर्वनाम
3.	भारत में स्वच्छता अभियान
4.	विलोम /पर्यायवाची
5.	क्रिया
6.	ईदगाह
7.	अनेक शब्दों के लिए एक शब्
8.	क्रिया
9.	अनेक शब्दों के लिए एक शब्द/अनुच्छेद लेखन
10.	लालच का परिणाम
11.	वाक्य शुद्ध करना /अपठित गद्यांश
12.	पुनरावृत्ति

SUBJECT: THIRD LANGUAGE – SPANISH

1. The negation of sentences
2. The formation of questions
3. The translation of sentences
4. The culture of Latin America
5. Imperative
6. Simple future
7. Biography of Spanish poets and painters
8. Overview of major Spanish world cities
9. Essay writing
10. Projects and activities
11. Lesson from 1 to 3

SUBJECT: THIRD LANGUAGE – FRENCH

Topics

- Comprehension
- Composition (Paragraph, Letter or Email)
- Grammar (From the Chapters given below)
- Questions & Answers (From the chapters given below)

Leçons

Chapter 0 - La France qu'est que c'est

Chapter 1- La rentrée

Chapter 2 - Il est français

Chapter 3 - La journée de Mme Lavigne

Chapter 4 - Kalu est malade

Chapter 5 - Faire les course

Chapter- 6- Mme Lavigne cherche un manteau

Chapter 7 - Allons à Paris

Chapter 8 - Les photos de Manuel