STD - IX

ENGLISH LITERATURE

1st Term
Drama - Julius Caesar
1. Act 1, Scene1

Prose - Short Stories
1. Bonku Babu's Friend

Poetry
1. The Night Mail

2nd Term
Drama - Julius Caesar
1. Act 1, Scene2
2. Act 2, Scene 1

Prose - Short Stories
1. Oliver Asks For More
2. The Boy who Broke the Bank

Poetry
1. Skimbleshanks : The Railway Cat
2. A Work of Artifice

3rd Term
Drama - Julius Caesar
1. Act 2, Scene 2, 3 & 4

Prose - Short Stories
1. The Model Millionaire
2. The Homecoming

Poetry
1. I Remember , I Remember
2. A Doctor's Journal Entry for August 6, 1945

ENGLISH LANGUAGE

1st Term
Grammar
1. Agreement of the Verb with the Subject
2. Degrees of Comparison
3. Tenses

Essay Writing

1. Describe a park or an open space in your area. What are its unique sights, sounds, and smells? What is your favourite thing to do there?
2. Imagine a situation where your mother has been unwell and you had to help her. Explain what you did and what did you learn from the experience.

Letter Writing
1. Your cousin did not visit the Book Fair this year. Write a letter telling him/her about your visit, what you liked specifically and why the visit was memorable to you.
2. Write a letter to the Municipal Officer expressing your concern over the many open manholes in your neighbourhood, stating how it poses danger to the residents and giving suggestions to arrive at a solution.
3. You had visited a beautiful hill station in India during your summer holidays, Write a letter to your friend describing the place, what you did there and what you liked about the place. (HHW)

Notice Writing and Email Writing
1 . Format of Notice Writing and Email Writing to be given.

2a. 22nd March is celebrated as 'World Water Day'. The school Dramatics Club is planning to stage a play to mark the occasion and create awareness. Write a notice to be put up on the school notice board giving details of the events.

2b. Write an email to the Principal of a neighbouring school requesting him or her to send a team of children to participate in the interactive session which will follow the play on 'World Water Day' celebration.

3a. Your school is organising an inter-school Puppet Show Competition for the students of Classes IX and X. Write a notice to be put up on the school notice board giving details of the event.

3b. Write an e-mail to the Principal of your neighbouring school requesting her to send a delegation of students to participate in the competition.

Comprehension
1. Practice Paper 1
2. Practice Paper 2

2nd Term
Grammar
1. Prepositions
2. Active and Passive Voice
3. Direct and Indirect Speech
4. Substitution of one part of speech for another

Essay Writing
1. Which season do you prefer-summer, winter, or monsoon? What unique sights. scents, and tastes do you associate with the season? Why do you like it more than the others?
2. Everyone must avail public transport. Write an essay expressing your views in support or against the topic.

Letter Writing
1. Write a letter to your friend telling her about how you celebrate your favourite festival. Tell her why this festival is so special for you and describe what you do during the festival.
2. Write a letter to the Principal bringing his attention to the lack of healthy lunch options in your school canteen, giving suggestions on changing the school canteen menu and stating the importance of having a more balanced and nutritious menu.

Notice Writing and Email Writing
1a. Your school is organising a Story-Writing Competition . Write a notice to be put up on the school notice board giving details of the event.

1b. Write an e-mail to a famous writer inviting him/her to judge the Story-Writing Contest.

2a. Your school is organising a Talent Hunt for the students of middle and secondary school. Write a notice to be put up on the school notice board giving details of the event.

2b. Write an e-mail to a famous artist requesting him/her to grace the occasion and judge the Talent Hunt.

Comprehension
1. Practice Paper 3
2. Practice Paper 4

3rd Term
Grammar
1. Interchange of Sentences
2. Transformation of Sentences
3. Synthesis of Sentences
4. Practice Papers 1 - 5

Essay Writing
1. Electronic vehicles are becoming a popular alternative to vehicles that run on fuel.
2. Write an original short story which illustrates the truth of the statement : 'One lie leads to another'.
3. Picture Composition - pg 109

Letter Writing
1. Your friend recently met with an accident and has been put on bed rest for two months by his doctor. Write a letter to wish him a speedy recovery, tell him how he can make use of his time and that you will visit him soon.
2. The market in your locality has more than fifty shops but no parking facilities. Write a letter to the local Councillor describing your problem and suggesting a possible solution.
3. You are being considered for a Head Boy/Head Girl position in the school. Write a letter to the Principal explaining why you think you would make a good Head Boy/Head. Describe ways in which you would carry out your responsibilities.

Notice Writing and Email Writing

1a. Your school is organising an inter-house Football Tournament. Write a notice for the school notice board giving details of the event.

1b. Write an e-mail to the Head of the Sports Department of your neighbouring school inviting him/her to be the Guest of Honour of the event.

2a. Your school is hosting an inter school quiz competition. Write a notice to be put up on the school notice board giving details of the event.

2b. Write an email to the Principal of a neighbouring school requesting him or her to send it a team to participate in the event.

3a. Your school is organising an Art Exhibition. Write a notice to be put up on the school notice board giving details of the event and requesting participants to submit their artwork.

3b. Write an e-mail to a famous artist of your city inviting him/her to be the Chief Guest to the art exhibition.

Comprehension
1. Practice Paper 5
2. Practice Paper 6
3. Practice Paper 7

गद्य भाग

बात अठन्नी की

काकी

पद्य भाग

साखी
गिरिधर की कुंडलियों

एकांकी

संस्कार और भावना

बहू की विदा

व्याकरण

भाषा और व्याकरण

भाववाचक संज्ञा बनाना

लिंग बदलो

वचन बदलो

पर्यायवाची शब्द

विलोम शब्द

अशुद्ध वाक्यों को शुद्ध करे

निबंध लेखन

चित्र लेखन

पत्र लेखन

अपठित गद्यांश

2nd Term

गद्य भाग

महायज्ञ का पुरस्कार
नेताजी का चश्मा
पद्य भाग

स्वर्ग बना सकते है
वह जन्मभूमि मेरी

एकांकी

मातृभूमि की मान

व्याकरण

उपसर्ग और प्रत्यय
वाच्य परिवर्तन
काल
पर्यायवाची शब्द

विलोम शब्द

निर्देशानुसार वाक्य परिवर्तन

अनेकार्थक शब्द

निबंध लेखन

चित्र लेखन

पत्र लेखन

अपठित गद्यांश

3rd Term

गद्य भाग

अपना अपना भाग्य

पद्य भाग

मेघ आएं

एकांकी

सुखी डाली

व्याकरण

तत्सम और तद्भव

पर्यायवाची शस्त

विलोम शब्द

मुहावरे और लोकोक्तियों

निबंध लेखन

चित्र लेखन

पत्रलेखन

अपठित गद्यांश

Std: IX Commerce
Sub: Commercial studies

First Term

1. Commercial and Non-Commercial activities.
2. Business Activities
3. Profit and non-profit Organisation
4. Classification of Commercial Organisation
5. Trade

6. Sole proprietorship
7. Partnership
8. Joint Stock Company
9. Co-operative society
10. Public sector enterprises

Second Term

1. Production
2. Marketing and Sales
3. Finance and Accounting
4. Human Resources
5. Communication in Commercial Organisation
6. Meaning, objective and terminology of Accounting
   + 1st Term Syllabus

Third Term

1. Basic Accounting Principles and Concepts
2. Accounting books and Statements
3. Banking
4. Social responsibility of commercial organisation towards the environment
   + 1st term and 2nd term syllabus

Physics

First Term

Measurement & Experiment:
Fundamental and derived units (And Units).
Instruments: Vernier calipers, Slide calipers, and Screw gauge.
Measurement of mass and time (including Graphs).
Simple Pendulum.
Motion in One Dimension:
Graphical representation and Newton's Laws of Motion.
Light:
Laws of reflection.
Two inclined plane mirrors.
Spherical mirrors (Concave and Convex).
Sign convention and numerical problems.

Second Term

Sound Energy:
Important terms related to sound.
Longitudinal and Transverse waves.
Comparison between sound and light waves.

Numerical problems and graph-related sums.
Pressure in Fluids:
Mathematical expression of pressure.
Laws of liquid pressure.
Pascal's Law.
Atmospheric pressure.
Archimedes' Principle.
Determination of Relative Density , Laws of floatation , Numerical sums.
Heat & Energy
Anomalous expansion of water: The unique property where water expands instead of contracting when cooled between
and

Greenhouse effect & Global warming: The trapping of heat in the atmosphere and the resulting rise in Earth's temperature.
Energy Flow: The transfer of energy through different systems or trophic levels.
Sources of Energy: Study of renewable and non-renewable sources. Conservation of Energy.

Final Term

Numerical Sums: Practice problems related to heat from the textbook.
Electricity & Magnetism
Static Electricity: Study of electric charges at rest.
Electromagnetism: The interaction between electric currents and magnetic fields.
Magnetism: All key terms and concepts related to magnetic properties.

Physics Practical Syllabus:

1. Determine the least count of the Vernier callipers

and measure the length and diameter of a small

cylinder (average of three sets) - may be a metal

rod of length 2 to 3 cm and diameter 1 to 2 cm.

2. Determine the pitch and least count of the given

screw gauge and measure the mean radius of the

given wire, taking three sets of readings in

perpendicular directions.

3. Measure the length, breadth and thickness of a glass block using a metre rule (each reading correct to a mm), taking the mean of three readings in each case. Calculate the volume of the block in cm3 and m3

. Determine the mass (not weight) of the block using any convenient balance in g and kg. Calculate the density of glass in cgs and SI units using mass and volume in the respective units. Obtain the relation between the two density units.

4. Measure the volume of a metal bob (the one used in simple pendulum experiments) from the readings of water level in a measuring cylinder using displacement method. Also calculate the same volume from the radius measured using Vernier callipers. Comment on the accuracies.

5. Obtain five sets of readings of the time taken for 20 oscillations of a simple pendulum of lengths about 70, 80, 90, 100 and 110 cm; calculate the time periods (T) and their squares (T2

) for each length (l). Plot a graph of l vs. T2

. Draw the best - fit straight - line graph. Also, obtain its slope. Calculate the value of g in the laboratory. It is 4π2 x slope.

6. Take a beaker of water. Place it on the wire gauze

on a tripod stand. Suspend two thermometers - one with Celsius and the other with Fahrenheit scale. Record the thermometer readings at 5 to 7 different temperatures. You may start with ice-cold water, then allow it to warm up and then heat it slowly taking temperature (at regular intervals) as high as possible. Plot a graph of TF vs. TC. Obtain the slope. Compare with the theoretical value. Read the intercept on TF axis for TC = 0.

7. Using a plane mirror strip mounted vertically on a board, obtain the reflected rays for three rays incident at different angles. Measure the angles of incidence and angles of reflection. See if these angles are equal.

8. Place three object pins at different distances on a line perpendicular to a plane mirror fixed vertically on a board. Obtain two reflected rays (for each pin) fixing two pins in line with the image. Obtain the positions of the images in each case by extending backwards (using dashed lines), the lines representing reflected rays. Measure the object distances and image distances in the three cases. Tabulate. Are they equal? Generalize the result.

9. Obtain the focal length of a concave mirror (a) by distant object method, focusing its real image on a screen or wall and (b) by one needle method removing parallax or focusing the image of the

illuminated wire gauze attached to a ray box. One could also improvise with a candle and a screen. Enter your observations in numbered rows.

10. Connect a suitable dc source (two dry cells or an acid cell), a key and a bulb (may be a small one used in torches) in series. Close the circuit by inserting the plug in the key. Observe the bulb as it lights up. Now open the circuit, connect another identical bulb in between the first bulb and the cell so that the two bulbs are in series. Close the key.

Observe the lighted bulbs. How does the light from any one bulb compare with that in the first case when you had only one bulb? Disconnect the second bulb. Reconnect the circuit as in the first experiment. Now connect the second bulb across the first bulb. The two bulbs are connected in parallel. Observe the brightness of any one bulb. Compare with previous results. Draw your own conclusions regarding the current and resistance in the three cases.

11. Plot the magnetic field lines of earth (without any magnet nearby) using a small compass needle. On another sheet of paper, place a bar magnet with its axis parallel to the magnetic lines of the earth, i.e. along the magnetic meridian or magnetic north south. Plot the magnetic field in the region around the magnet. Identify the regions where the combined magnetic field of the magnet and the

earth is (a) strongest, (b) very weak but not zero,

and (c) zero. Why is neutral point, so called?

12. Using a spring balance obtain the weight (in N) of

a metal ball in air and then completely immersed

in water in a measuring cylinder. Note the volume

of the ball from the volume of the water displaced.

Calculate the upthrust from the first two weights.

Also calculate the mass and then weight of the

water displaced by the bob M=V.ρ, W=mg). Use

the above result to verify Archimede

Chemistry

First Term

Fundamental Chemistry: The language of chemistry, chemical changes, chemical reactions & their types, and Atomic structure.

Water: Valence electrons of water, introduction/reaction of water, all terms related to water, test for water, hardness of water.

Solutions: Solutions & its types, solubility problems, and water pollution.

Second Term

Matter & Bonding: Water, hygroscopic and deliquescent substances, chemical bonds, and types of bonds.

Gases & Atomic Theory: Hydrogen gas, revision of key words of atomic structure.

The Periodic Table: Modern and Mendeleev's periodic table.

Laws & Numerical: Gas laws (Boyle's Law) and numerical on solubility.

Third Term

Advanced Gas Laws: Hydrogen gas, study of Charles' Law & Gas Law.

Environmental Chemistry: Atmosphere & atmospheric pollution, Global Warming.

Review & Practical Application:

Periodic Table revision.

Practical-based questions: Action of heat on carbonate/bicarbonate salts and tests for evolution of gases.

Comprehensive Revision: Numerical problems on Boyle's Law, Charles' Law, Gas Law, and Solutions.

Chemistry Practical Syllabus:

1. Action of heat on the following compounds:

(a) Copper carbonate, zinc carbonate

(b) Washing soda, copper sulphate crystals

(c) Zinc nitrate, copper nitrate, lead nitrate

(d) Ammonium chloride, iodine, ammonium

Dichromate

Make observations, identify the products and

make deductions where possible.

2. ActMon of dilute Sulphuric acid on the following substances. (Warm if necessary)

(a) A metal

(b) A carbonate

(c) A sulphide

(d) A sulphite

Make observations, identify the gas evolved and

Make deductions.

3. Apply the flame test to identify the metal in the

unknown substance.

(a) A sodium salt

(b) A potassium salt

(c) A calcium compound

4. Simple experiments based on hard water and soft

Water – identification of hardness – simple

Softening – by heating the temporary hard water,

using washing soda and advantage of using

detergents over soap in hard water.

5. Find out the sources of pollution of water bodies

in the locality. Suggest preventive steps to

control it.

Biology

First term

1. Basic biology
2. The cell
3. Tissues
4. The flower
5. Pollination (self and cross pollination)

Second term

1. Respiration in plants
2. Five kingdom classification
3. Economic importance of bacteria and fungi
4. Seed-structure type and Germination
5. Nutrition-classes of food

Third term

1. Digestive system
2. Skeleton- moment and locomotion
3. Structure and function of skin
4. Respiratory system
5. Disease
6. Hygiene
7. Aids to health
8. Waste generation and management

Biology Practical

1) The examination of onion peels under a microscope.
2) Study of different parts of the flower.
3) Cross pollination to be examined.
4) Identification of sugar, starch, fat protein.
5) Examination and Identification of following specimens .
Non chordata - porifera,colentrata,platyhelminthes, nemathehelmi thes,annileda, echinodermata, mollusca, Arthropoda
Chordata -- pisces, amphibians, reptilia, aves, mammalia
6) The examination of the human cheek cell under the microscope

Computer

First Term

Chapter 1: Introduction to Object and Classes *(March)*

Chapter 2: Elementary Concept of Object and Classes *(March)*

Chapter 3: Identifiers and Literals *(April)*

Chapter 4: Operators in Java *(May & June)*

Second Term

Chapter 5: Basic Structure of a Class in Java *(July)*

Chapter 6: Data Processing in Java *(August)*

Chapter 7: Mathematical Library Methods *(September)*

Chapter 8: Conditional Statements in Java *(October)*

Third Term

Chapter 9: Looping / Iterative Statements in Java *(October)*

Chapter 10: Nested 'For' Loops *(November)*

Chapter 11: Ethical Computing

Practical

1. Area of a Rectangle

Write a program to input length and breadth and calculate the area and perimeter of a rectangle.

2. Simple Interest

Write a program to calculate Simple Interest using the formula:

SI=P×R×T100SI=\frac{P\times R\times T}{100}SI=100P×R×T

3. Temperature Conversion

Write a program to convert temperature from Celsius to Fahrenheit.

Formula:

F=95C+32F=\frac{9}{5}C+32F=59C+32

4. Swap Two Numbers

Write a program to interchange two numbers using:

- a third variable
- without using a third variable

5. Largest of Three Numbers

Write a program to input three numbers and display the largest number.

6. Even or Odd

Write a program to check whether a number is even or odd.

7. Positive, Negative or Zero

Write a program to check whether a number is positive, negative, or zero.

8. Divisibility Test

Write a program to check whether a number is divisible by 5 and 11.

9. Grade Calculator

Write a program to input marks of five subjects and calculate:

- total marks
- percentage
- grade according to percentage

10. Leap Year

Write a program to check whether a given year is a leap year or not.

11. Menu Driven Calculator

Write a menu-driven program to perform:

- Addition
- Subtraction
- Multiplication
- Division

using switch statement.

12. Multiplication Table

Write a program to print the multiplication table of a given number.

13. Sum of Natural Numbers

Write a program to find the sum of first N natural numbers.

Formula:

S=n(n+1)2S=\frac{n(n+1)}{2}S=2n(n+1)

14. Factorial of a Number

Write a program to find the factorial of a given number.

Example:

n!=n×(n−1)×(n−2)×⋯×1n!=n\times(n-1)\times(n-2)\times\cdots\times1n!=n×(n−1)×(n−2)×⋯×1

15. Reverse a Number

Write a program to reverse the digits of a number.

Example:
Input: 1234
Output: 4321

16. Palindrome Number

Write a program to check whether a number is palindrome or not.

Example:
121 → Palindrome

17. Armstrong Number

Write a program to check whether a number is an Armstrong number.

Example:

153=13+53+33153=1^3+5^3+3^3153=13+53+33

18. Prime Number

Write a program to check whether a number is prime or not.

19. Fibonacci Series

Write a program to print Fibonacci series up to N terms.

Example:

0,1,1,2,3,5,8,13,…0,1,1,2,3,5,8,13,\ldots0,1,1,2,3,5,8,13,…

20. Pattern Programs

Write programs to print the following patterns:

(a)

```
*
**
***
****
```

(b)

```
1
12
123
1234
```

(c)

```
****
***
**
*
```