ENGLISH

Q1. You are taking a walk in your neighborhood park when you find a small, locked diary lying near a bench. Out of curiosity, you open it and read the first page — what you discover changes your view of someone you thought you knew very well. Write a story in 100–120 words based on this situation.
(Make sure your story has a suitable title, characters, plot, conflict, and resolution.)

Q2. Read the following extract and answer the following question-

Lines - "Climbing Mountains gave her the feeling of coming close to God. It provided her the strength to face life's challenges boldly."

1. Who is 'her' in the above lines?
2. What gave her the feeling of coming close to God?
3. What does this line tell you about her character?
4. What is the central idea conveyed through these lines?

Q3. "The Prince's heart was filled with pity for the poor and the suffering."
Based on this line and your understanding of the story, describe **the character of the Happy Prince and his attitude towards the poor.**

Q4. Imagine you are Behrman. Describe one major challenge you faced while painting the last leaf and how you tried to handle it.

Q5. DO AS DIRECTED-

1. Complete the following dialogue by filling in the blanks with suitable modals:
(can, must, may, should, will, could, might, shall)

Teacher: You _____ submit your assignment by tomorrow.
Student: Sorry, ma'am, I was unwell. _____ I submit it the day after?
Teacher: All right, but you _____ complete it by Friday at any cost.
Student: Thank you, ma'am. I _____ work on it tonight.

2. Fill in the blanks with correct Verb:

Teacher: Rohan, your handwriting _____ (is/are) improving day by day.
Rohan: Thank you, ma'am. Writing neatly _____ (help/helps) me focus better.
Teacher: Good! Hard work always _____ (bring/brings) success.

हिंदी

निम्नलिखित प्रश्नों के उत्तर लिखिए

1. कवि 'एक पत्र छाँह' भी माँगने से मना करता है, ऐसा क्यों?

2. टीलियामुरा कस्बे में लेखक का परिचय किन दो प्रमुख हस्तियों से हुआ? समाज-कल्याण के कार्यों में उनका क्या योगदान था?

3. अग्नि पथ' कविता को आप अपने जीवन के लिए कितनी उपयोगी मानते हैं?

4. वाद्ययंत्रों की ध्वनियों के अध्ययन के द्वारा रामन् क्या करना चाहते थे?

5. पाठ के संदर्भ में उनाकोटी में स्थित गंगावतरण की कथा को अपने शब्दों में लिखिए।

6. कवि मनुष्य से क्या अपेक्षा करता है? 'अग्नि पथ' कविता के आधार पर लिखिए।

7. रामन् के लिए नौकरी संबंधी कौन-सा निर्णय कठिन था।

8. सर चंद्रशेखर वेंकट रामन् को समय-समय पर किन-किन पुरस्कारों से सम्मानित किया गया?

9. रामन् के प्रारंभिक शोधकार्यों को आधुनिक हठयोग क्यों कहा गया है?

10. देश को वैज्ञानिक दृष्टि और चिंतन प्रदान करने में सर चंद्रशेखर वेंकट रामन् के महत्त्वपूर्ण योगदान पर प्रकाश डालिए।

11. त्रिपुरा के घरेलू उद्योगों पर प्रकाश डालते हुए अपनी जानकारी के कुछ अन्य घरेलू उद्योगों के विषय में बताइए?

12. जीवन पथ पर चलते मनुष्य के कदम यदि रुक जाते है तो उसे क्या हानि हानि उठानी पड़ती है?

13. आपके विद्यालय से जम्मू-कश्मीर भ्रमण हेतु छात्रों का एक दल जा रहा है। इस यात्रा में शामिल होने के कारणों का उल्लेख करते हुए अपने पिता जी से अनुमति माँगते हुए पत्र लिखिए।

14. आपके चाचा जी ने आपके लिए कुछ पुस्तकें भेजी हैं। उन पुस्तकों की उपयोगिता एवं आवश्यकता बताते हुए उन्हें धन्यवाद देते हुए पत्र लिखिए।

15. गाँव से कुछ दूरी पर रेलगाड़ी दुर्घटनाग्रस्त हो गई है, दो मित्र वहाँ पीड़ितों की सहायता के लिए जाना चाहते हैं। उनके मध्य हुए संवाद का लेखन कीजिए।

Mathematics

Q1. Define the following terms:
  a) Point
  b) Line
  c) Plane

Q2. Using Heron's formula, show that the area of an equilateral triangle with side **a** is $\sqrt{3}/4a^2$.

Q3. Define a parallelogram. Write any four properties of a parallelogram.

Q4. True or False:
  a) A line segment has one endpoint.
  b) Two lines in the same plane that never meet are called parallel lines.
  c) A plane has boundaries.
  d) A point has dimensions.

Q5. What condition must be satisfied for a quadrilateral to be a parallelogram?

Q6. Fill in the blanks:
  a) The opposite angles of a parallelogram are _____.
  b) The sum of all angles of a quadrilateral is _____.
  c) In a rhombus, all sides are _____ and opposite angles are _____.
  d) A square is a special type of _____.

Q7. In parallelogram ABCD, if $\angle A = 70°$, find $\angle B$, $\angle C$, and $\angle D$.

Q8. In quadrilateral PQRS, diagonals PR and QS bisect each other at point O. Show that PQRS is a parallelogram.

Q9. Find the area of a triangle whose sides are 7 cm, 8 cm, and 9 cm.

Q10. A triangular field has sides 36 m, 77 m, and 85 m. Find its area and also find the cost of leveling the field at ₹3 per m².

Q11. The sides of a triangle are in the ratio 3 : 4 : 5 and its perimeter is 72 cm. Find its area.

Q12. Find the area of an isosceles triangle with equal sides 13 cm each and base 10 cm.

Q13. Find the sides of a rhombus if its diagonals are 18 cm and 24 cm respectively.
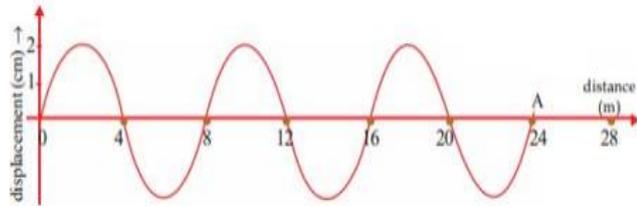
Q14.Solve the equation a – 50 = 120 and state which axiom have you used here.

Q15. What is the area of a triangle with side lengths 20 cm, 20 cm and 8cm?

SCIENCE

1. Observe the graphic representation of a wave motion given below.
 a) What is the amplitude of the wave?
b) What is the wave length?
c) Calculate the frequency of the wave if it took
 0.2 to reach A
d) Calculate the speed of the wave.

2. A baby recognizes her mother voice. Name the characterisrics of the sound involved.

3. Green manures are very beneficial for farmers. Name the plants that are used to produce green manure.

4. Differentiate between mixed cropping and intercropping.

5. Why are manures said to be organic and considered as eco-friendly?
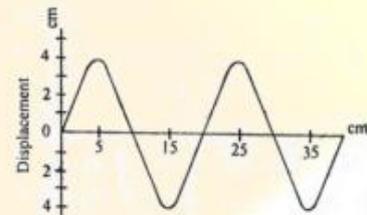
6. Give example for any two fodder crops.

7. A wave is moving in air with a velocity of 340m/s. Calculate the wavelength if its frequency is 512 Hz?.

8. Which of the following sound waves we can hear: 10 Hz, 500 Hz, 1500 Hz, 12000 Hz, 25000 Hz?

9. The diagram shows a snap shot of a wave form of frequency 50 Hz in a string. The numbers in diagram represent distance in centimeters.

For this wave motion find, (i) Wavelength (ii) Amplitude (iii) Wave velocity

10. Mention the types of honey bee you will prefer to rear if you are running an apiary.

SOCIAL SCIENCE

I. Multiple Choice Questions

1. Which of the following is not a component of food security?
   a) Availability of food
   b) Accessibility of food
   c) Affordability of food
   d) Adulteration of food
2. The National Food Security Act was passed in:
   a) 2000
   b) 2005
   c) 2013
   d) 2015
3. The most densely populated state in India according to the Census 2011 is:
   a) Bihar
   b) Uttar Pradesh
   c) West Bengal
   d) Kerala
4. Which of the following is a 'push factor' for migration?
   a) Employment opportunities
   b) Better education
   c) Poverty and unemployment in villages
   d) Medical facilities in cities
5. The Raikas of Rajasthan are known for:
   a) Cattle herding
   b) Camel herding
   c) Sheep rearing
   d) Goat rearing
6. In a democracy, elections are important because:
   a) They promote monarchy
   b) They help people choose their representatives
   c) They limit citizens' participation
   d) They are held only once in 20 years

SECTION B: Assertion and Reason

a) Both A and R are true, and R is the correct explanation of A.
b) Both A and R are true, but R is not the correct explanation of A.
c) A is true, but R is false.
d) A is false, but R is true

7. **Assertion (A):** Food security depends on the Public Distribution System (PDS).
   Reason (R): PDS ensures supply of food grains to the poor at subsidized prices.
8. **Assertion (A):** India has a youthful population.
   Reason (R): More than 50% of India's population is below 25 years of age.
9. **Assertion (A):** Pastoralists always live a settled life.
   Reason (R): They depend on livestock grazing and migrate seasonally.
10. **Assertion (A):** Elections in India are conducted by the Election Commission.
    Reason (R): The Election Commission ensures free and fair elections in the country.

SECTION C: Source-Based Questions

Source 1: (From "Food Security in India")

"The poorest sections of society might remain food insecure even in times of good harvest because they have very low purchasing power."

Questions:
a) What do you mean by "food insecurity"?
b) Why do the poor remain food insecure even when food is available in the market?
c) Mention any two government programmes that help ensure food security in India.

Source 2: (From "Pastoralists in the Modern World")

"The colonial government in India passed various laws to control the movement of pastoral communities. Grazing taxes were imposed and many forests were declared as reserved."

Questions:
a) How did the colonial rule affect the lives of pastoralists?
b) What were 'Reserved Forests'?
c) Mention one impact of grazing taxes on the pastoralists.

Source 3: (From "Electoral Politics")

"In India, elections are held regularly and are based on the principle of universal adult franchise."

Questions:
a) What is meant by universal adult franchise?
b) Who conducts elections in India?
c) Why are regular elections important in a democracy?

SECTION D: Answer the following questions

11. What are the main causes of food insecurity in India?
12. Describe any three factors influencing population change in India.
13. Mention three ways in which pastoralists are important to India's economy.
14. Explain the role of the Election Commission of India.
15. Explain the measures taken by the government to ensure food security in India.
16. Discuss the population policy of India. What are its main objectives?
17. Describe the seasonal movement and lifestyle of any one pastoral community in India.

INFORMATION TECHNOLOGY

Unit 4 – Electronic Spreadsheet (MCQs)

1. LibreOffice Calc is an example of which type of software?
A) Word Processing Software
B) Spreadsheet Software
C) Database Software
D) Presentation Software

2. The default file extension of a spreadsheet created in LibreOffice Calc is:
A) .docx
B) .xls
C) .ods
D) .odt

3. The intersection of a row and a column in a spreadsheet is called a:
A) Field
B) Table
C) Cell
D) Range

4. Which of the following features helps continue a number or date series automatically?
A) AutoFormat
B) Fill Handle
C) Sort
D) Filter

5. What symbol must every formula in Calc begin with?
A) +
B) #
C) =
D) *

6. Which of the following functions finds the largest value in a range?
A) AVERAGE()
B) MIN()
C) MAX()
D) COUNT()

7. The feature used to arrange data in ascending or descending order is called:
A) Sorting
B) Filtering
C) Validation
D) Alignment

8. The shortcut key to open the Format Cells dialog box in Calc is:
A) Ctrl + C
B) Ctrl + 1
C) Ctrl + F
D) Ctrl + S

9. Data Validation in Calc is used to:
A) Change text color
B) Allow only specific data entry in cells
C) Sort data automatically
D) Copy formula from one cell to another

10. Which function is used to count the number of cells containing numeric values?
A) COUNT()
B) SUM()
C) AVERAGE()
D) MAX()

ARTIFICIAL INTELLIGENCE

Unit: Data Literacy

SECTION A: Multiple Choice Questions

1. What does the term "data literacy" mean?

a) The ability to read books about data

b) The ability to understand, interpret, and communicate with data

c) The ability to type data quickly

d) The ability to delete data

2. In the Data Pyramid, what comes immediately after raw data?

a) Wisdom

b) Knowledge

c) Information

d) Intelligence

3. Which of the following is NOT a step in data acquisition?

a) Data Discovery

b) Data Augmentation

c) Data Generation

d) Data Deletion

4. What is data augmentation?

a) Deleting existing data

b) Increasing data amount and diversity by transforming existing data

c) Collecting new data from surveys

d) Ignoring duplicate data

5. Which of these is an example of primary data source?

a) Wikipedia articles

b) Research papers

c) Surveys and interviews

d) News websites

SECTION B: Short Answer Questions

6. Explain the Data Pyramid with all four levels.

7. What are THREE key skills required to become data literate?

8. Differentiate between Data Discovery and Data Generation with examples.

9. How can a data literate person make better decisions while shopping online?

10. What is the importance of data pre-processing in data literacy?