ENGLISH

Q1. Answer the following questions with reference to the context.

1. "A plague of locusts would have left more than this..."
a) Who says and to whom?
b) With what/whom is 'a plague of locusts' being compared?
c) What is the tone of the speaker?
d) According to the speaker, what would be the after-effect of the event?

2. "Has given my heart
 A change of mood
 And saved some part
 Of a day I had rued."
a) What had given the poet 'a change of mood'?
b) What had the poet thought of that day?
c) How was some part of the day saved for the poet?
d) Pick out the antonym of 'happy'.

3. "A few moments later, we all lifted our eyes in awe as a spectacular array of South African jets, helicopters and troop carriers roared in perfect formation over the Union Buildings."
a) What does the expression — 'a spectacular array' mean?
b) Why did the spectators lift their eyes in awe?
c) What was the occasion of display?
d) Where did the inauguration ceremony take place and why?

4. "He hears the last voice at night,
 The patrolling cars,
 And stares with his brilliant eyes
 At the brilliant stars."
a) What sound does the tiger hear at night?
b) How do his eyes look?
c) At what does he look at night?
d) Which word in the stanza means 'looks intently'?

5. "He turned his aeroplane slowly to the north, in front of my Dakota, so that it would be easier for me to follow him. I was very happy to go behind the strange aeroplane like an obedient child."
a) Who does 'He' refers to in the first sentence?

b) Why did the pilot of the black aeroplane bring his plane in front of the Dakota aeroplane?
c) How was the pilot of the Dakota plane an obedient child?
d) How did the pilot of Dakota land safely through the storm?

6. **"If when you're walking around your yard**
 You meet a creature there,
 Who hugs you very, very hard
 Be sure it is a Bear."
a) What is the nature of a bear?
b) Where can you meet the bear?
c) What does the bear do on meeting a person?
d) Pick out the antonym of 'flexible'.

7. "Let me put it more clearly, since no one will believe that a thirteen-year-old girl is completely alone in the world. And I'm not. I have loving parents and a sixteen-year-old sister, and there are about thirty people I can call friends. I have a family, loving aunts and a good home. No, on the surface I seem to have everything, except my one true friend. All I think about when I'm with friends is having a good time. I can't bring myself to talk about anything but ordinary everyday things. We don't seem to be able to get any closer, and that's the problem. Maybe it's my fault that we don't confide in each other. In any case, that's just how things are, and unfortunately they're not liable to change. This is why I've started the diary."
a) Why was Anne Frank disturbed even when she had loving parents, relatives and friends?
b) Why did Anne decide to write a diary?
c) Find the word that means the same as 'unluckily'.
d) To confide in somebody is to ………

Q2. Answer the questions briefly. (50-60 words)
   1. What were Lencho's feelings when the rain/hail had stopped?
   2. What does 'fire' and ice' stand for and what is the general opinion regarding the world?
   3. Do you sympathise with the seagull? Give reasons.
   4. What is the message that Frederick wants to give to the readers through the lesson 'The Black Aeroplane'?
   5. Explain the line, "And no one buys a ball back. Money is external".

Q3. Answer the following questions in detail. (100-200 words)
   1. What does Mandela mean to say that the oppressor and the oppressed alike are robbed of their humanity?
   2. Do you agree that Anne Frank was far more intelligent, mature and witty than her age? Give a reasoned answer.
   3. "He had never been known to refuse food; he would tackle a meal at any hour of the day or night." Herriot believed that Tricky's problem was his greed. Did he lack tolerance? What values would you like Tricky to imbibe? Elucidate.

Q4. You are Trisha/ Trishan of C-105, Safdarjung Enclave, New Delhi. You are extremely disturbed on reading about the attacks of elderly people living alone. Write a letter to the

editor of Times of India, 34, K.G.Marg, New Delhi sensitizing people and drawing their attention to this grave issue.

Q5. Fill in the blanks with correct forms of verbs given in the brackets:

We (a)_____ (live) in the 21st century and (b)_____(come) a long way since the generation of our parents and grandparents, but the idea of feminism, where a woman (c)_____(value) as equally as her male counterpart, is a seed that (d)_____(sow) since time immemorial. We (e)_____(have) women from Rani of Jhansi to Shabana Azmi to Oprah Winfrey in today's times who (f)_____(consider) feminists.

Q6. There is an error in each line. Write the incorrect word and the correct word in the space provided:

	Incorrect	Correct
There was a king. He used to ask three question	(a)_____	_____
of all the people who came to him. The	(b)_____	_____
first question is: Who is the best of all humans?	(c)_____	_____
The second was: What is a best time? And	(d)_____	_____
the third: What is the best in all actions?	(e)_____	_____
The king was very anxious to know a answer	(f)_____	_____
to these questions. One day he went to a forest	(g)_____	_____
and was moving about the hills or plains.	(h)_____	_____
He saw a ashram and wanted to take some rest there.	(i)_____	_____

MATHEMATICS

Do the following experiments in your Mathematics Lab File:

(Write Procedure, materials used, observations and result for each experiment.)

1. **Pythagoras Theorem:** Prove the Pythagoras theorem by paper folding and cutting technique.
   Use different bright coloured sheets of paper for the experiment. Paste the cutouts thus obtained in your file.
2. **The volume of a cylinder and cone:** Make a cone and a cylinder of equal height and equal radius, using waste plastic bottles, quick fix or cellotape and verify the relationship between their volumes experimentally. (Volume of the Cone = $\frac{1}{3}$ x Volume of the Cylinder)

3. **Tangents of a circle:** A tangent is any line that touches a circle at a point (known as the point of contact). Prove that any tangent of a circle is perpendicular to the radius of the circle at the point of contact by folding origami sheets. Paste the folded sheets in your file.
4. **The spinning wheel experiment:** Make a spinning wheel using waste materials (like cardboard, old plastic plates etc). Decorate the disc with bright colored papers by making 8 equal sectors on it and make an indicator at the centre of the wheel. Write the numbers 1 – 8 in the sectors and perform your own probability experiments. Find the probability of at least 5 events (For eg. Find the probability of getting the number 7 if the spinner is rotated 20 times.)

Maths Assignment (to be done in class work Set A notebook)

Polynomials
1. Find the quadratic polynomial, the sum and the product of whose zeroes are $^1/_2$, and –2 .
2. Find the values of m and n for which x = 2 and –3 are zeroes of the polynomial: $3x^2 – 2mx + 2n$.
3. Check whether $x^2 + 4$ is factor of $x^4 + 9x^2 + 20$.
4. Divide the polynomial $(x^4 + 1)$ by $(x – 1)$ and verify the division algorithm.
5. Find all zeroes of $x^4 – 3x^3 – 5x^2 + 21x – 14$, if two of its zeroes are $\sqrt{7}$ and $– \sqrt{7}$.
6. On dividing $x^3 – 3x^2 + x + 2$ by a polynomial g(x), the quotient and remainder were x – 2 and –2x + 4 respectively, find g(x).
7. Find k so that $x^2 + 2x + k$ is a factor of $2x^4 + x^3 – 14 x^2 + 5x + 6$. Also find all the zeroes of the two polynomials.
8. Given that $x – \sqrt{5}$ is a factor of the cubic polynomial $x^3 – 3\sqrt{5}x^2 + 13x – 3 \sqrt{5}$, find all the zeroes of the polynomial.

Pair of linear equations in two variables

1. Ankita travels 14 km to her home partly by rickshaw and partly by bus. She takes half an hour if she travels 2 km by rickshaw, and the remaining distance by bus. On the other and, if she travels 4 km by rickshaw and the remaining distance by bus, she takes 9 minutes longer. Find the speed of the rickshaw and of the bus.

2. A person, rowing at the rate of 5 km/h in still water, takes thrice as much time in going 40 km upstream as in going 40 km downstream. Find the speed of the stream. A motor boat can travel 30 km upstream and 28 km downstream in 7 hours. It can travel 21 km upstream and return in 5 hours. Find the speed of the boat in still water and the speed of the stream.

3. A two-digit number is obtained by either multiplying the sum of the digits by 8 and then subtracting 5 or by multiplying the difference of the digits by 16 and then adding 3. Find the number.

4. A railway half ticket costs half the full fare, but the reservation charges are the same on a half ticket as on a full ticket. One reserved first class ticket from the station A to B costs Rs 2530. Also, one reserved first class ticket and one reserved first class half ticket from A to B costs Rs 3810. Find the full first class fare from station A to B, and also the reservation charges for a ticket.

5. Susan invested certain amount of money in two schemes A and B, which offer interest at the rate of 8% per annum and 9% per annum, respectively. She received Rs 1860 as annual interest. However, had she interchanged the amount of investments in the two schemes, she would have received Rs 20 more as annual interest. How much money did she invest in each scheme?

6. Vijay had some bananas, and he divided them into two lots A and B. He sold the first lot at the rate of Rs 2 for 3 bananas and the second lot at the rate of Re 1 per banana, and got a total of Rs 400. If he had sold the first lot at the rate of Re 1 per banana, and the second lot at the rate of Rs 4 for 5 bananas, find his total collection.

Arithmetic Progressions

1. Find the sum of first 25 terms of an A.P. whose nth term is given by $t_n = 2 - 3n$.
2. How many terms of A.P. $-6, -11/2, -5,\ldots$ are needed to give the sum -25 ? Explain double answer.
3. In an A.P., if the 5th and 12th terms are 30 and 65 respectively, what is the sum of first 20 terms?
4. A man saves Rs 32,000 during first year, Rs 36,000 in the next year and Rs 40,000 in the third year. If he continues his savings in this sequence, in how many years will he saves Rs 2,00,000?
5. Find the middle term of A.P. 1,4,7,......................,97.
6. The sum of three numbers in A.P. is 36 and the sum of their squares is 450. Find the numbers.
7. Find the first negative term of the A.P. 2000, 1990, 1980, 1970,…….
8. A club consists of members whose ages are in A.P. the common difference being 4 months. If the youngest member of the club is 8 year old and the sum of ages of all the members is 168 years, find the total number of members in the club.

SCIENCE

PROJECT

As the demand for energy has increased, so has the number of alternatives for its

production. One such alternative is nuclear energy.

What to do :

1. Explore and find out the nuclear power plants located in different parts of India.
2. Draw the diagram of a nuclear reactor.
3. Explain the principle and working of nuclear power plant.
4. List the disadvantages and advantages of nuclear power plant.
5. Research out the various raw materials used, and the components used in setting up a nuclear power plant.

ASSIGNMENT (Management of natural resources)

1. What is rain water harvesting? How can it be done at local level? What are the benefits?

2. Why are the Arabari forests of Bengal known to be a good example of conserved forest?

3.What is sustainable development ? State its two objectives.

4. Why is reuse considered better than recycling?

5.What is an equitable distribution of resources in a society and why is it necessary ? State any two factors which work against an equitable distribution of resources?

6.Explain with example where active involvement of local people lead to efficient management of forest.

7.What was " Chipko Andolan"? How did this Andolan ultimately benefit the local people and the environment?

8.Why are forests considered " biodiversity hot spots" ? Lists any two ways in which an individual can contribute to the management of forests and wildlife.

9. List any four advantages of properly managed watershed management.

10. List three advantages associated with water harvesting at community level.

11.List any four advantages of water stored in the ground.

12. Give an account of the four stakeholders of forest.

13.Explain the traditional water harvesting system with a suitable diagram. Write about the techniques of water harvesting.

14.Why do we need to manage our resources?

15. List four disadvantages of using fossil fuels for the production of energy.

16. Building of big dams gives rise to some problems. List three main problems that may arise. Suggest a solution to any one of these problems.

17. Write two main causes of the pollution of water of the river Ganga. State how pollution and contamination of river prove harmful for the health of the people of neighbouring areas.

SOCIAL STUDIES

ASSIGNMENT : ECONOMICS

1. Find out the present sources of energy that are used by the people in India. What could be the other possibilities fifty years from now ?

2. List the main criterion used by the World Bank in classifying different countries? Point out the limitations of this criterion.

3. While 'averages' are useful for comparison, they also hide disparities. Give arguments to support the statement.

4. How do we count the various good and services and know the total production in each sector?

5. Why is the tertiary sector becoming so important in India ? Enumerate any four reasons for this development .

6. Why do you think MNREGA is referred to as 'Right to work'?

7. In what ways can employment be increased in rural and urban areas?

8. Why are demand deposits considered as money ?

9. Prove with an argument that there is a great need to expand formal sources of credit in India.

10. Point out the differences between formal and informal sources of credit.

PROJECT WORK

Delhi is paired with Sikkim under 'Ek Bharat Shrestha Bharat programme'. The objective of the programme is to imbibe the innate chord of binding and brotherhood.

Tourism department, Government of Sikkim is organizing a cultural eventin New Delhi to create awareness of the vast and diverse cultural heritage of Sikkim.

You are an officer working under the tourism department of Sikkim and you have to organize this event highlighting the rich heritage, customs and traditions of the state of Sikkim. Design a brochure incorporating the following:

- Geography of the state
- Major ethnic groups in Sikkim and Official languages
- Religious customs and Major Music & Dance forms
- Family structures
- Famous cuisines and Traditional clothing
- Sex Ratio and Literacy rate (Find out the status of elementary education)
- Natural resources found in the region
- Famous places and personalities

COMPUTER APPLICATIONS

Assignment Questions

(To be attempted in the Computer Applications register)

Q1   What is a web page? Explain the structure-wise components of a web page.

Q2   What is a web browser? Explain the two types of web browsers.

Q3   What are the roles of web servers and web browsers?

Q4   What is a protocol? How do protocols affect Internet

Q5   Write short notes on the following protocols:
      (i) HTTP
      (ii) HTTPS
      (iii)TCP/IP
      (iv)SMTP
      (v) FTP

Q6   What is blogging? What are its advantages and disadvantages?

Q7   Explain in brief the structure of an email message.

Q8   What is a search engine? How does it work? Name 5 popular search engines.

Q9   Compare e-mail and videoconferencing

Q10 Define the following terms:
(i) e-learning
(ii) e-shopping
(iii)e-reservation
(iv)e-group

Q11 What do you mean by social networking? List 5 merits and 5 demerits of social networking?

Q12 Explain the different structural tags of HTML.

Q13 What are the various tags used for styling fonts in HTML?

Q14 Differentiate between container tags and empty tags in HTML.

Q15 What are the different types of lists used in HTML? Explain the various tags used for each.

HINDI

कक्षा- दसवीं

1)आप भविष्य में क्या बनना चाहते हैं और क्यों ?
80-100 शब्दों में अनुच्छेद लिखिए ।

आप जिस क्षेत्र में जाना चाहते हैं, उसकी जानकारी
प्राप्त करें व वहाँ तक पहुँचने या प्रवेश लेने के लिए
आप कैसे तैयारी करेंगे ? आपको क्या प्रक्रिया
अपनानी होगी ? विस्तार में वर्णन करें ।

2) 'हरिहर काका ' की कहानी पढ़िए तथा अपनी
कल्पना के आधार पर उसमें परिवर्तन करते हुए
समाधान सहित   100-200 शब्दों में एक
सचित्र लघु - कथा लिखिए ।