

**DARSHAN ACADEMY**  
**SUMMER HOLIDAY HOMEWORK (2022-23)**  
**CLASS IX**  
**ENGLISH**

**Q.1.** Exploring expository writing-

\*Collect information about the author of the Poem - The Road Not Taken and answer the following questions:

- Birth and childhood of Robert Frost.
- What kind of careers did Robert Frost have in order to support his family?
- How do you know that Robert Frost was dedicated to writing poetry?
- Write about the awards and honours Robert Frost received in his lifetime.
- Why do you think he chose to write about topics such as rural life and life in new England?

Note: Paste picture of Robert Frost also.

**Q.2.** A peaceful protest march was launched by students all over India against the growing crime against women in the capital city. All the news channels gave wide coverage to the rally inviting different opinions on the issue. Make a diary entry in 100-150 words expressing your feelings on the same.

**LITERARY SECTION**

**Q.3.** Read chapters The Lost Child, The Adventure of Toto, In The Kingdom of Fools from Supplementary Reader and answer the following questions in about 100-120 words:

- (a) How does the child in the story, `The Lost Child` lose himself? How far is he responsible for his predicament?
- b) The child's behaviour changes after he is separated from his parents. Elaborate.
- c) Name all the people who were tried in the king's court and give reasons for each of their trials.
- d) How did the Guru manage to save the disciple's life? What does it reveal about the king and his minister?
- e) When does the family realise they cannot keep Toto with them anymore?

**Q.4.** List some common topics for assessment of listening and speaking skills.

Prepare any five and write in English CW notebook.

- i. Digital Payments- issues and opportunities in India
- ii. Women in cricket
- iii. Craze of IPL matches
- iv. Unity in diversity
- v. Women are the backbone of society or Women empowerment
- vi. Role of school in shaping the life of a child
- vii. Save girl child
- viii. Impact of T.V advertisement on children
- ix. My favourite political personality
- x. Honour Killing

हिन्दी कोर्स-‘ए’ 002

कक्षा-नौ

ग्रीष्मावकाश असाइनमेंट

निर्देशानुसार हल कीजिए -

प्रश्न1-पाठ 1 'दो बैलों की कथा'से 10 उपसर्ग तथा 10 प्रत्यय वाले शब्द छांटकर उनमें से मूल शब्द, उपसर्ग व प्रत्यय अलग-अलग कर के लिखिए।

प्रश्न 2-पाठ 1 'दो बैलों की कथा' में प्रयुक्त मुहावरे छांटकर वाक्य प्रयोग करिए।

प्रश्न 3-स्वतंत्रता सेनानियों से संबंधित एलबम तैयार करें व उनका संक्षिप्त परिचय लिखिए।

प्रश्न 4-सत्याग्रह, शताब्दी, यथाशक्ति, महाराजा, दशानन, आजीवन, गजानन, दिनोंदिन, पाठशाला, रात-दिन आदि समस्त पदों का विग्रहकर भेद लिखिए।

प्रश्न 5-पाठ 'ल्हासा की ओर' में से पांच समासिक शब्द छांटकर समास का नाम लिखिए-

प्रश्न 6-गद्य तथा काव्य में पढाए गए पाठों में दिए गए गद्यांशों/ काव्यांशों के आधार पर अति लघु उत्तरात्मक प्रश्नोत्तर लिखिए। ।

गद्यांशों पर आधारित प्रश्नों के उत्तर लिखिए (दो बैलों की कथा)

झूरी

प्रातःकाल

.....कोई भूसी।

क-हीरा-मोती की आँखों में विद्रोह और स्नेह का मिला-जुला भाव क्यों झलक रहा था?

ख-झूरी ने प्रातःकाल क्या देखा? तथा उस पर क्या प्रतिक्रिया प्रकट की?

ग-बालसभा ने क्या निश्चय किया तथा उनके लिए क्या किया?

आज दोनों के.....हो गई थी।

क-भैरों की लडकी बैलों को दो रोटियां रोज क्यों खिलाती थी?

ख-लडकी का बैलों से आत्मीय संबंध का क्या कारण था?

ग-आत्मीयता से क्या तात्पर्य है?

राह में..... कुआं है।

क-दोनों बैलो ने अन्य पशुओं को स्वार्थी क्यों कहा?

ख-बधिक से क्या तात्पर्य है?

ग-अचानक बैलों को क्या अहसास हुआ? उनकी थकान व दुर्बलता कैसे गायब हो गई।

प्रश्न. 7 कबीर जी का कोई एक दोहा सस्वर याद करिए।

प्रश्न 8 सी0बी0एस0ई द्वारा लिए गए परीक्षा से संबंधित निर्णय पर चिन्ता व्यक्त करते हुए दो मित्रों की बातचीत को संवाद के रूप में लिखिए।

प्रश्न 9-लम्बे समय के पश्चात स्कूल खुलने पर अपना अनुभव प्रकट करते हुए मित्र को पत्र लिखिए।

प्रश्न 10-व्याकरण पुस्तक में से कोई दो हल रहित अपठित गद्यांश करिए।

प्रश्न 11-‘अपनी किसी यात्रा का वर्णन 120-150 शब्दों में करिए।

नोट-संपूर्ण कार्य गृहकार्य नोट बुक में करें

दर्शन अकादमी  
ग्रीष्मावकाश कार्य (2022-23)  
कक्षा नौवीं (विषय- हिंदी ब)

1. निम्नलिखित प्रश्नों के उत्तर लिखिए  
(क) "दुःख का अधिकार" कहानी देश में फैले अंधविश्वासों और ऊँच-नीच के भेद भाव का पर्दाफाश करती है? स्पष्ट कीजिये  
(ख) "गिल्लू की गतिविधियों के आधार पर लिखिए कि पशु -पक्षी भी बाल सुलभ-क्रीड़ाओं में किस प्रकार आनंद लेते हैं?
2. शब्द और पद में अंतर उदाहरण सहित स्पष्ट करें।
3. निम्नलिखित शब्दों में से मूल शब्द और प्रत्यय अलग-अलग कीजिये  
चमकीली , गरीबी , दुखी , बुढ़िया , धकावट
4. निम्नलिखित शब्दों में से मूल शब्द और उपसर्ग अलग-अलग कीजिये  
निर्वाह , निर्गुण , उपचार , अधिकार , बेहया
5. "सत्यमेव जयते" विषय पर अनुच्छेद लिखिए।
6. विद्यालय में वृक्षारोपण समारोह का वर्णन करते हुए पिता जी को पत्र लिखिए।
7. अपने जीवन लक्ष्य निर्धारण के बारे में दो मित्रों की बातचीत को संवाद के रूप में लिखिए।

# **MATHEMATICS**

## **SECTION – A**

(LOTS)

- 1) Write decimal representation of  $3 / 11$  .
- 2) Find value of  $(7^3 \times 5^4)^0$  .
- 3) Write rationalizing factor of  $\frac{5}{7+\sqrt{3}}$  .
- 4) Find the measure of an angle which is  $32^\circ$  less than its supplement.
- 5) Simplify  $(64)^{-3}$ .
- 6) Is  $3x^5 - 17/x + 4x^2 + 9a$  polynomial in  $x$  ?
- 7) Write degree of polynomial  $5x^4 - 3x^7 + 20x$ .
- 8) Write coefficient of  $x^3$  in  $2x^5 - 5x^3 + 10$ .
- 9) Write any binomial in  $x$  having degree 15.
- 10) What is the zero of  $2x - 1$ ?

## **SECTION – B**

- 11) Rationalise the denominator  $30/(5\sqrt{3} - 3\sqrt{5})$
- 12) Simplify  $(2+\sqrt{3})(4\sqrt{3}-6)$
- 13) Simplify  $\sqrt[3]{216} \div \sqrt{16}$
- 14) If  $x=\sqrt{2} - 1$ , then write the value of  $1/x$ .
- 15) Is 2 a zero of  $5x^3 - 3x + 14$ ?
- 16) Find value of  $f(x) = 2x^2 + 7x + 3$  at  $x = -3$  .

17) Find the value of  $76^2 - 24^2$  using identity.

18. National Association For The Blind (NAB) aimed to empower and well-inform visually challenged population of our country, thus enabling them to lead a life of dignity and productivity.



Ravi donated ₹  $\left(x^3 + \frac{1}{x^3}\right)$  to NAB. When his cousin asks to tell the amount donated by him, he gave a below hint.

$$x + \frac{1}{x} = 10$$

Answer the following questions :

(A)  $(x + a)(x + b) = x^2 + \dots\dots\dots x + ab$

(i)  $a + b$

(ii)  $ab$

(iii)  $a - b$

(iv)  $\frac{a}{b}$

(B)  $(x - y)^3 =$

(i)  $x^3 - y^3 - 3xy$

(ii)  $x^3 - y^3 - 3xy(x - y)$

(ii)  $x^3 - y^3 - 3xy(x + y)$

(iv)  $x^3 - y^3$

(C) Which mathematical concept is involved in the above situation ?

(i) Polynomial

(ii) Circle

(iii) Lines and angles

(iv) Triangle

(D) Find the amount donated by Ravi.

(i) ₹ 1000

(ii) ₹ 850

(iii) ₹ 970

(iv) ₹ 900

(E) Find the amount donated by Ravi if  $x + \frac{1}{x} = 7$ .

(i) ₹ 522

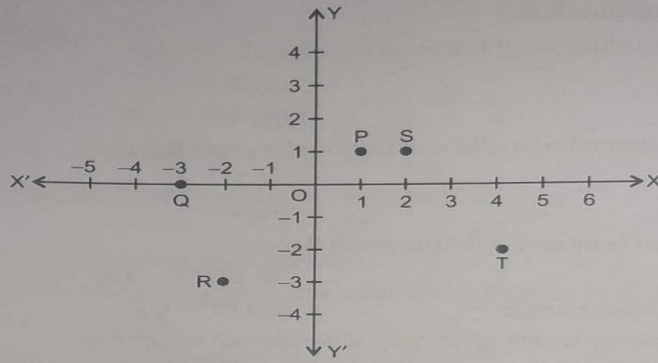
(ii) ₹ 422

(iii) ₹ 222

(iv) ₹ 322

... .. three more friends joined th

19. Five friends playing a game in which they are standing at different positions, P, S, T, R and Q.



Rohan is watching them playing. Few questions came to Rohan's mind while watching the game. Give answer to his questions by looking at the figure.

- (A) What are the coordinates of P?  
 (i)  $(-1, 1)$  (ii)  $(1, -1)$   
 (iii)  $(1, 1)$  (iv)  $(-1, -1)$
- (B) Name the point whose y-coordinate is zero :  
 (i) P (ii) Q  
 (iii) R (iv) S
- (C) Name the polygon formed on joining all these five points in an order.  
 (i) Quadrilateral (ii) Hexagon  
 (iii) Pentagon (iv) Triangle
- (D) Name the point lying in the third quadrant.  
 (i) R (ii) P  
 (iii) Q (iv) T
- (E)  $(x, y) = (y, x)$ , if :  
 (i)  $x > y$  (ii)  $x < y$   
 (iii)  $\frac{x}{y} = 1$  (iv)  $x = \frac{1}{y}$

### SECTION – C

20) Solve for x:

a)  $4^{2x} = \frac{1}{32}$

b)  $25^{x-1} \times 5^{2x+1} = 10^2 \times 5 + 5^3$

21) a) The angles of a triangle are in the ratio 5:3:7 what is the type of the triangle?

b) In which quadrant point  $(-3, -4)$  lies ?

22) Without actual division show that  $2x^4 - 5x^3 + 2x^2 - x + 2$  is exactly divisible by  $x^2 - 3x + 2$ .

23) The polynomial  $p(x) = x^4 - 2x^3 + 3x^2 - 9x + 3a - 7$  when divided by  $x + 1$  leaves the remainder 20, find value of a. Also find the remainder when  $p(x)$  is divided by  $x + 2$ .

24) If  $a = \sqrt{2} + 1$ , find value of:

i)  $a + 1/a$

ii)  $a - 1/a$

25) If  $(x + 2k)$  is a factor of  $f(x) = x^5 - 4k^2x^3 + 3x + 2k + 3$ , find k.

26) Factorise:

a)  $1029 - 3x^3$

b)  $2y^2 + 9y - 5$

27) a) Find the remainder when  $f(x) = 9x^3 - 3x^2 + 14x - 3$  is divided by  $g(x) = 3x - 1$ .

b) Check whether  $2x - 3$  is factor of  $2x^3 - 9x^2 + x + 12$  or not.

(HOTS)

28) Represent  $\sqrt{7.5}$  on the number line.

29) Represent  $\sqrt{6}$  on the number line.

SECTION – D

30) Convert 5.23  $\dot{9}$  into the form  $\frac{p}{q}$ .

31) If  $x+y=9$  and  $xy=20$ , then find the value of  $x^2+y^2$ .

32) If  $p(x) = 6x^2 - 5x - 1$ , find the value of  $3p(-1) + 2p(0)$ .

33) a) If  $a^2 + \frac{1}{a^2} = 14$ , find the value of  $a^3 + \frac{1}{a^3}$

b) If  $x + \frac{1}{x} = 3$ , find the value of  $x^4 + \frac{1}{x^4}$

34) values of a and b if  $\frac{5\sqrt{2}+3}{5\sqrt{2}-7} = a-b\sqrt{2}$ .

35) Simplify  $\left(\frac{16}{81}\right)^{-3/4} \times \left[\left(\frac{25}{9}\right)^{-3/2} + \left(\frac{125}{8}\right)^{2/3}\right]$

36) Factorise  $2x^3+3x^2-5x-6$ .

37) If  $y=2$  and  $y=0$  are the zeros of the polynomial  $f(y) = 2y^3 - 5y^2 + ay + b$ . Find the value of a and b.

38) Show that :  $(x^{(a-b)a+b} \cdot (x^{(b-c)b+c} \cdot (x^{(c-a)c+a} = 1$

39) If  $x=3+2\sqrt{2}$ , find value of:

i)  $\sqrt{x} - \frac{1}{\sqrt{x}}$

ii)  $x^2 + \frac{1}{x^2}$

40) Find values of x and y if  $\frac{2}{7+3\sqrt{5}} = x + y\sqrt{5}$

42) State and prove the angle sum property of the triangle.

43) AB, CD and EF are three concurrent lines passing through the point O such that OF bisect  $\angle BOD$ . If  $\angle BOF=35^\circ$ , FIND  $\angle BOC$  and  $\angle AOD$ .

44) If the bisectors of a pair of alternate angles formed by a transversal with two given lines are parallel, prove that the given lines are parallel.

45) Locate the points A(2,0), B(6,0) and C(4,6) on the graph paper, then find area of the figure obtained.



# SCIENCE

## BIOLOGY

### LOTS

#### PROJECT(Any one)

- Prepare a model to compare Plant cell and Animal cell using common household items like grains and pulses & waste materials

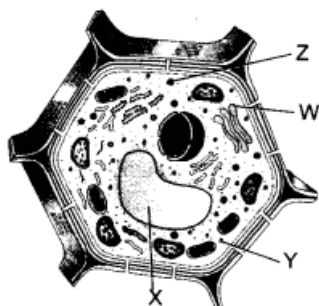
#### OR

- Prepare a Power Point Presentation on the topics mentioned below as per your roll numbers.

CHAPTER	TOPIC	ROLL NUMBERS
Chapter-1	Matter in our surroundings	1-3
Chapter 2	Is Matter Around Us Pure	4-6
Chapter 3	Atoms and Molecules	7-9
Chapter 5	The Fundamental Unit of Life	10-12
Chapter 6	Plant Tissues	13-15
Chapter 7	Animal Tissue.	16-18
Chapter 8	Diversity in Living Organisms	19-21
Chapter 9	Motion	22-24
Chapter 10	Force and Laws of Motion	25-27
Chapter 11	Gravitation	28-30
Chapter 13	Work, Power And Energy	31-33
Chapter 14	Why Do we Fall Ill? - Natural Resources - Different types of Diseases.	34-36 37-39 40-42

**Q1** How will absence of any one of the cell organelle affect the cell's working?

**Q2** Label W, X, Y and Z.



(I) What is the covering membrane of X known as?

(II) Which of them contains hydrolytic enzymes?

(III) Which one of them takes part in storage, modification and packaging of various chemicals.

### Q3. MULTIPLE CHOICE QUESTIONS:

(i) Rita is making a temporary mount of onion peel. What precautions should be taken to avoid the entry of air bubbles on the slide?

- (a) Coverslip should be dropped on to the peel from a certain height.
- (b) Peel should be allowed to fold over itself once or twice.
- (c) Coverslip should be gently dropped over the peel.
- (d) Peel should be immersed in stain for over an hour.

(ii) Diagrams of cells of an onion peel were labelled by four students as given below. The correctly labelled diagram is

- (a) nucleus, cytoplasm,
- (b) nucleus, vacuole.
- (c) vacuole, nucleus.
- (d) cytoplasm, vacuole.

(iii) Identify figures A and B.



Fig. A

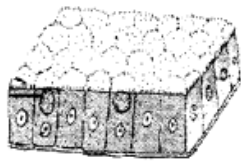
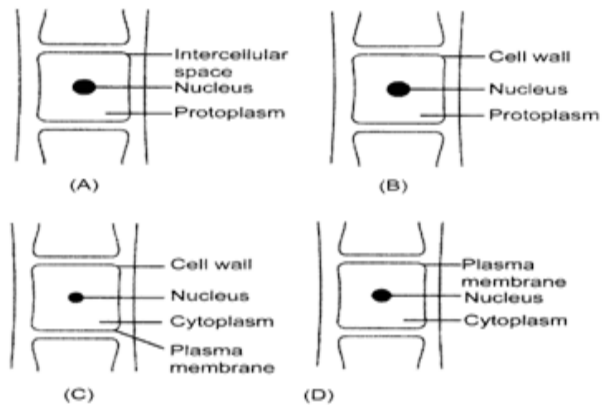


Fig. B

1. Which is called tessellated and pavement epithelium?
2. Which one lines gastro-intestinal tract and epiglottis?
3. Which one allows diffusion of substances?



### HOTS

Q1 Why is endocytosis found in animals only?

Q2 What will happen if -

- (a) Almonds are soaked in water.
- (b) Excess amount of fertiliser is added to green grass lawn.

Q3 Ram, a student of class IX, suffered from fever with headache. After blood test the doctor confirmed that he was suffering from Dengue & platelets count in his sample was also low

- (a) What does a doctor advise if the Platelets count is very low?
- (b) What precautions one should to overcome the situation?

Q4 Label X and Y

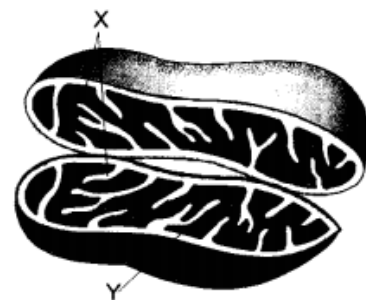
1. What is the function of X?

What is the composition of Y?

2. Identify the above diagram and what is its common name?

Q5 Why are xylem & Phloem called complex tissues?

How they are different from each other?



### CHEMISTRY

#### LOTS

Q1 Name S.I unit of measuring temperature. The boiling point of water is 100°C under normal atmospheric pressure. Convert this temperature to S.I Units.

Q2. A balloon when kept in sun, bursts after some time. Why?

Q3 Asha was making tea in a kettle. Suddenly she felt intense heat from the puff of steam gushing out of the spout of the kettle. She wondered whether the temperature of the steam was higher than that of the water boiling in the kettle. Comment.

#### Q4 MULTIPLE CHOICE QUESTIONS:

(i) On converting 308 K, 329 K and 391 K to Celsius scale, the correct sequence of temperatures will be:

- (a) 33°C, 56°C and 118°C
- (b) 35°C, 56°C and 119°C
- (c) 35°C, 56°C and 118°C
- (d) 56°, 119°C and 35° C

- (ii) In tincture of iodine, find the solute and solvent?  
 (a) alcohol is the solute and iodine are the solvent  
 (b) iodine is the solute and alcohol are the solvent  
 (c) any component can be considered as solute or solvent  
 (d) tincture of iodine is not a solution

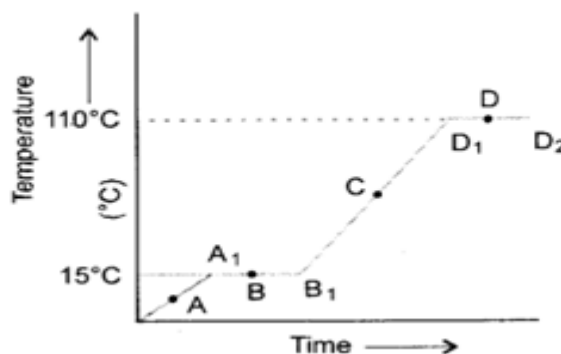
### HOTS

Q1 Give Reasons:

- (a) People sprinkle water on a roof after a hot summer day?  
 (b) A wooden table should be called a solid.  
 © Dogs generally hang out their tongue in summer

Q2 The temperature-time graph given below shows the heating curve for pure wax. From the graph answer the following:

- (a) What is the melting point of the substance?  
 (b) What is its boiling point?  
 (c) Which portions of the graph indicate that change of state is taking place.  
 (d) Name the terms used for heat absorbed during change of states involved in above processes.



Q3 A sample of water under study was found to boil at 102°C at normal temperature and pressure. Is the water pure? Will this water freeze at 0°C? Comment.

Q4 Study the given diagram and answer the following questions:

- (a) Write the chemical reaction involved in the process.  
 (b) Mention the colour of:  
 1. Copper powder and  
 2. the substance formed after heating it.

Q7 On suffering from high fever, which will lower your body temperature more-ice- or ice-cold water? Why?

### PHYSICS

#### LOTS

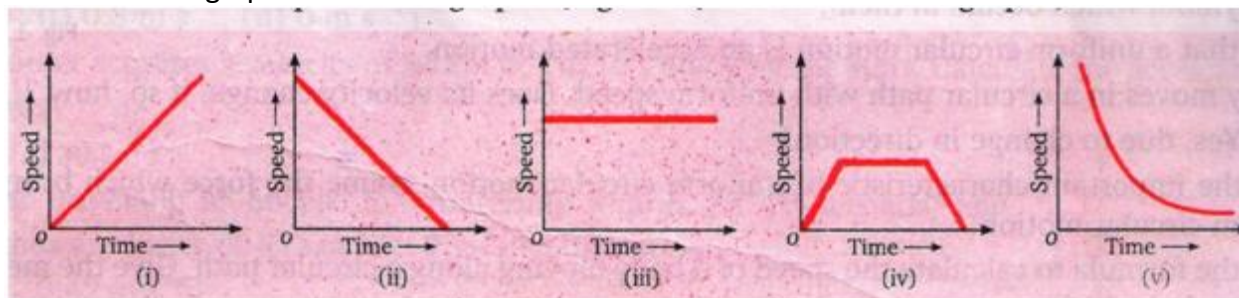
Q1 Make a working model on any topic of your choice.

Q2 Four cars A, B, C and D are moving on a levelled road. Their distance versus time graphs is shown in figure. Which car is the slowest?

Q3 Why does (second)<sup>2</sup> in the unit of acceleration?

Q4 Given below are some speed time graphs.

In which of the graph-

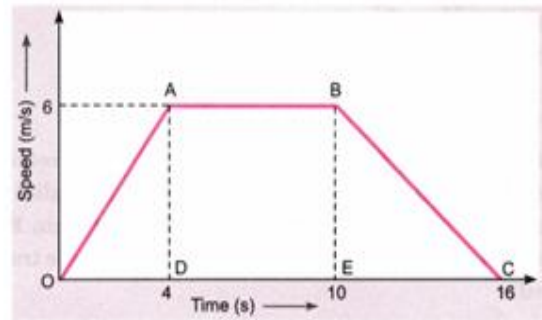


- (a) Speed is constant    (b) Speed is increasing    (c) speed is decreasing    (d) What happens in (iv & v)

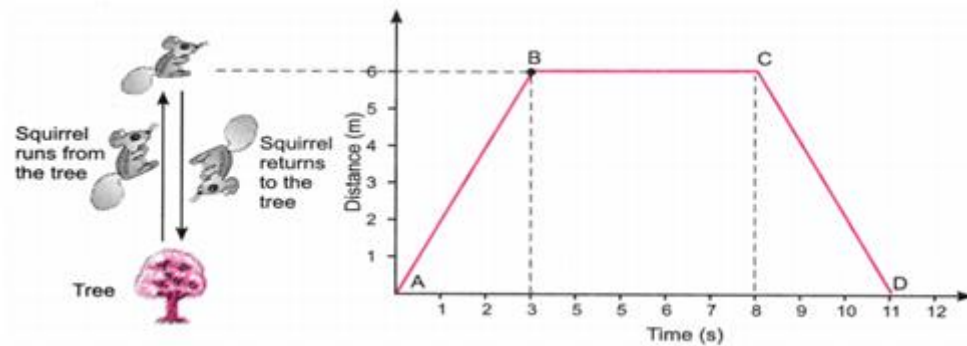
## HOTS

Q1 Study the speed-time graph of a body given here and answer the following questions:

- (a) What type of motion is represented by OA?
- (b) What type of motion is represented by AB?
- (c) What type of motion is represented by BC?
- (d) Find out the acceleration of the body.
- (e) Calculate the retardation of the body.
- (f) Find out the distance travelled by the body from A to B.



Q2 Suppose a squirrel is moving at a steady speed from the base of a tree towards some nuts. It then stays in the same position for a while, eating the nuts, before returning to the tree at the same speed. A graph can be plotted with distance on the x-axis and the time on y-axis.



Observe the graph carefully and answer the following questions.

- (i) Which part of the graph shows the squirrel moving away from the tree?
- (ii) Name the point on the graph which is 6 m away from the base of the tree.
- (iii) Which part of the graph shows that the squirrel is not moving?
- (iv) Which part of the graph shows that the squirrel is returning to the tree?
- (v) Calculate the speed of the squirrel from the graph during its journey.

## **SOCIAL SCIENCE**

### **HISTORY: CHAPTER 1 (HOTS)**

1. Why was the meeting of the Estate General called?
2. Who formed the National Assembly?
3. Why did Louis XVI want to increase the taxes?
4. How did France become Constitutional Monarchy?
5. Explain the contribution of the philosophers in the French Revolution?
6. 'Ideas of liberty and democratic rights were the most important legacy of the French Revolution'. Explain the statement in the light of the French Revolution.
7. 'The period from 1793 to 1794 is referred to as a 'Reign of Terror'.' Give three points in support of the statement.
8. How did the revolution affect the everyday life of the people of France?

**MAP WORK:** On the political map of Europe, locate and name the following countries:

1. France
2. Spain
3. Austria
4. Britain
5. Portugal
6. Netherland
7. Belgium
8. Russia
9. Switzerland
10. Germany
11. Italy

**PROJECT WORK:** Draw the symbols used by the French people to communicate important ideas in the late 18th century

### **GEOGRAPHY: Chapter 1 (LOTS)**

1. Why is the knowledge of latitudes and longitudes important for people?
2. Which routes are the oldest and provide India's relationships with other countries?
3. Which meridian has been selected as the Standard meridian of India?
4. How has the long coastline been beneficial to India?

**5.** Map based questions:

On the given political Map of India Mark and label the following:

- a) I.S.T
- b) The Arabian Sea
- c) Smallest State
- d) Largest State

### **POLITICAL SCIENCE (HOTS)**

**1.** Read the given extract and answer the following questions:

Zimbabwe attained independence from White minority rule in 1980. Since then, the country has been ruled by ZANU-PF, the party that led the freedom struggle, its leader, Robert Mugabe, ruled the country since independence. Elections were held regularly and always won by ZANU-PF. President Mugabe was popular but also used unfair practices in elections. Over the years his government changed the constitution several times to increase the power of the President and make him less accountable. Opposition party workers were harassed and their meeting disrupted.

**Answer the following MCQs by choosing the most appropriate option:**

1 Which party of Zimbabwe led the freedom struggle?

- (a) PRI
- (b) ZANU-PF
- (c) National People's Congress
- (d) None of the above

2 -----was the President of Zimbabwe since independence.

- (a) General Musharraf
- (b) Saddam Hussein

(c) Robert Mugabe

(d) None of the above

3 How did the ruling party in Zimbabwe deal with the opposition party?

(a) party meeting got disrupted

(b) party workers were harassed

(c) both a) & (b)

(d) None of the above

4 Robert Mugabe was forced out of office in:

(a) 2014

(b) 2015

(c) 2016

(d) 2017

5. Read the cartoons given in the chapter 'What is Democracy? Why Democracy?' and write two sentences about each cartoon

**ECONOMICS: Chapter 1 and 2 (LOTS)**

1. What is meant by working capital?
2. In which type of activity is Dairy farming included?
3. What is the major disadvantage of using HYV seeds in agriculture?
4. What is meant by the Green Revolution? Write any two main features?
5. Highlight three differences between traditional and modern farming methods.
6. What is Land? Suggest any three ways to sustain Land.

## **INFORMATION TECHNOLOGY**

### **LOTS**

- 1.What is a word processor?
- 2.How will you count the total words of a document?
- 3.Name some popular word processing softwares.
- 4.Discuss the various types of keys available on a computer keyboard.
- 5.What is the use of save as command?
- 6.Name any two offline and online word processing softwares.
- 7.Differentiate between Home Keys and Guide Keys.
- 8.What do you understand by WYSIWYG?

### **HOTS**

- 1.What is the default alignment of text in a document?
- 2.What is the importance of password in the document? How will you protect the document using password in Writer?
3. What precautions are required to ensure that ICT use is safe?
- 4.Write the steps to use the find and replace command. and mention its shortcut also.
- 5.Explain the role of typing ergonomics.
- 6.What is mail merge? Write down the steps to create mailing labels to paste on wedding cards?
- 7.How is IT used in libraries?
- 8.Which are the different areas of healthcare where IT is used? And how?