

# DARSHAN ACADEMY

## SUMMER HOLIDAY HOMEWORK (SESSION 2022-2023)

### CLASS - X

### **SUBJECT: ENGLISH**

#### **LOTS**

- Q1. What did Lencho compare the raindrops to and why?
- Q2. Why did Lencho write a letter to God?
- Q3. Why was Lencho angry after he counted the money?
- Q4. Why were two national anthems sung?
- Q5. Who were the persons sworn in on 10<sup>th</sup> of May? What did Mandela pledge to obey?
- Q6. Why should the tiger snarl around houses at the edge of the forest?
- Q7. Why do you think the tiger looks at the stars?
- Q8. What encouraged Hari Singh to make Anil his next prey?
- Q9. What did Anil and Hari agree upon to be the mode of payment?

#### **HOTS**

- Q1. How did the postmaster decide to resolve Lencho's problem?
- Q2. What is the ironical about the ending of the story? (A Letter to God)
- Q3. What did Mandela think for oppressor and oppressed?
- Q4. What do you understand by 'apartheid'? Describe the effect of the policy of apartheid on the people of South Africa?
- Q5. Why does Mandela say that the sacrifices of the African patriot cannot be repaid?
- Q6. Describe some of the activities of a tiger behind the bars of its cage.
- Q7. How does a tiger create terror for the villagers?

#### **APPLICATION / EXTRAPOLATION BASED QUESTION**

- Q1. 'Humanity still exists', this is what get to know after reading 'A letter to God' in which firm faith in God of a poor farmer and helpfulness of the post office employees are aptly depicted thought. Elaborate.
- Q2. Describe the value of freedom for the human beings and how it is important for the growth of civilization and humanism as described in the lesson. ( Nelson Mandela)
- Q3. How was Mandela's concept of freedom different in boyhood and youth than what it was in his mature age? How were 'transitory freedoms' changed into his hunger for the freedom of his people?
- Q4. Is it right to confine wild animals into cages? Why or why not?
- Q5. 'But neither his lips nor his eyes showed anything'. Anil did not show that he knew about the theft. What kind of a person do you think Anil was? Also throw light on the values you learn from his character.

#### **WRITING SKILLS**

- Q1. You are Ashish/Astha, a resident of #254, Vigyan Vihar, Amla, Madhya Pradesh. You are worried to see your younger brother's frequent habit of using internet as a homework tool.

Write a letter to the Editor of a famous newspaper expressing your concern over the youth who seem to be so dependent upon the computers in the present times. (100- 120words)

**ASSESSMENT OF LISTENING AND SPEAKING (ASL)**

Q Prepare yourself on any two topics of ASL from the list of common topics for ASL given below (to be conducted in June 2022):

- Time and tide wait for none
- Health and hygiene in pandemic
- Women empowerment
- Cyber bullying
- Do exam results alone determine a child's worth?
- What is better: Paper books or E-books?
- Disaster Management
- Importance of education in one's life
- Impact of social media on children
- Nature/Music has the power to heal
- Technology is changing our lives.

## हिन्दी कोर्स—'ए' 002

### (LOTS)

प्रश्न 1—पाठ 1 'नेताजी का चश्मा' से सरल, संयुक्त और मिश्र वाक्य (5-5) छोटकर लिखिए।

प्रश्न-2: निर्देशानुसार वाक्य परिवर्तित करिए—

- 1 गली में शोर होने पर सब लोग बाहर आ गए। मिश्र
- 2 वह आया परंतु कुछ नहीं बोला। सरल,
- 3 वह कल यहाँ आया और सब से बात कर के चला गया। सरल,
- 4 दहाड़ते शेर ने हिरन पर हमला किया। संयुक्त
- 5 जब मैंने बालक को रोते हुए देखा, तो उससे कारण पूछा। संयुक्त
- 6 वह छत पर बैठकर पढ़ने लगी। मिश्र
- 7 मेरा मित्र मेहनती और ईमानदार है। सरल,
- 8 हम आना चाहते थे पर पिताजी नहीं माने। मिश्र
- 9 मजदूर गड़बा खोद चुके थे अतः चले गए। मिश्र
- 10 मोहन ने जो कार्ड छपवाए, वे शादी के थे। सरल

प्रश्न 3—मिश्र वाक्य के कितने भेद हैं? उदाहरण सहित लिखिए।

### (LOTS)

नेताजी का चश्मा:

प्रश्न 4—गद्यांशों पर आधारित प्रश्नों के उत्तर अभ्यास उत्तर पुस्तिका में लिखिए—  
हालदार साहब.....हिस्से के बारे में

- हालदार साहब कब और किस कस्बे से गुजरते थे?
- नगरपालिका द्वारा कस्बे में क्या-क्या कार्य करवाए जाते थे ?
- नगरपालिका ने नेताजी के प्रति अपनी कृतज्ञता किस प्रकार प्रकट की ?

मूर्ति संगमरमर.....लेकिन चश्मा रीयल।

- मूर्तिकार के प्रयास को सफल और सराहनीय क्यों कहा गया है?
- मूर्ति लोगों में राष्ट्रप्रेम की भावना जगाने में कैसे सक्षम थी ?
- हालदार साहब के चेहरे पर मुस्कान फैलने का क्या कारण था ?

प्रश्न 5—पाठ—'सूरदास के पद' पद्यांशों पर आधारित प्रश्न—:

- (1) ऊधौ तुम.....जागी।
- (क) गोंपियों द्वारा उद्धव को बडभागी क्यों कहा गया है ?
- (ख) गोंपियों ने अपनी तुलना किससे की है और क्यों?

(ग) उद्धव ने गोंपियों की मनोदशा को समझने का प्रयास क्यों नहीं किया?

(2) मन की मन.....न लही ।

(क) गोंपियों की कौन सी बात उनके मन में रह गयी ?

(ख) योग संदेश का गोंपियों पर क्या प्रभाव पडा ?

(ग) गोंपियों के अनुसार श्रीकृष्ण ने किस मर्यादा का पालन नहीं किया ?

प्रश्न-6 (HOTS) नेताजी का चश्मा:

- नगरपालिका कस्बे मेंक्या-क्या कार्य करवाती है ?आप की उसमें क्या भूमिका हो सकती है?
- चौराहों पर महापुरुषों की मूर्तियाँ लगाने के पीछे क्याउ ददेश्य होसकते है? विचार व्यक्त कीजिए।
- विक्रमसंवत कलैंडर वर्ष तथा महीनों के नाम क्रमानुसार लिखिए ।

प्रश्न 7-बाल गोबिन भगत' पाठ में जो ग्राम्य संस्कृति की झलक मिलती है, वह आपके आसपास के वातावरण से कैसे भिन्न है ?

प्रश्न 8-कोरोना वायरस के प्रकोप से ग्रसित मजदूर वर्ग की व्यथा प्रकट करते हुए मित्र को पत्र लिखिए।

प्रश्न 9-'महान व्यक्तित्व सुभाषचंद्रबोस' विषय पर 100 से 150 शब्दों में अनुच्छेद लिखिए।

प्रश्न 10-व्याकरण पुस्तक में से हल करिए।

(कोई दो) अपठित गद्यांशपृष्ठ संख्या- 2-5

(कोई दो) अपठित पद्यांशपृष्ठ संख्या- 31-34

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

1. निम्नलिखित प्रश्नों के उत्तर लिखिए

(क) "बड़े भाई साहब" पाठ आपको दो भाइयों की कहानी लगी अथवा आधुनिक शिक्षा पद्धति पर किया गया व्यंग्य ? स्पष्ट कीजिये।

(ख) कबीर जी ने निंदक का क्या महत्त्व बताया है ?

(ग) "हरिहर काका" कहानी समाज के किस कटु सत्य को उजागर करती है? स्पष्ट कीजिये। क्या मात्र पैसा ही आज पारिवारिक रिश्तों की मिठास का आधार रह गया है? आप इससे कितना सहमत हैं ? अपने विचार व्यक्त कीजिये

2. मुहावरों का वाक्य में प्रयोग करें।

सिर फिरना , चम्पत हो जाना . दबे पाँव आना , जी ललचाना , प्राण सूखना

3. "करत करत अभ्यास के जड़मति होत सुजान" विषय पर अनुच्छेद लिखिए।

4. कोरोना के बढ़ते प्रकोप की ओर भारतीय स्वास्थ्य संगठन का ध्यान आकृष्ट करने के लिए किसी दैनिक समाचार पत्र के संपादक को पत्र लिखिए।

5. "सच्चाई की हमेशा जीत होती है" विषय पर एक लघु कथा लिखिए।

## **MATHEMATICS**

### **(LOTS)**

- (1) Find the zeroes of the following quadratic polynomials and verify the relationship between the zeroes and the coefficients
  - (i)  $6x^2 - 3 - 7x$
  - (ii)  $3x^2 - x - 4$
- (2) Find a quadratic polynomial each with given numbers as the sum and product of its zeroes respectively
  - (i)  $\frac{-1}{4}, \frac{1}{4}$
  - (ii)  $\sqrt{2}, \frac{1}{3}$
- (3) On dividing  $x^3 - 3x^2 + 4x + 5$  by a polynomial  $g(x)$ , the quotient and remainder were  $x - 2$  and  $-2x + 4$ , respectively. Find  $g(x)$ .
- (4) Use Euclid's algorithm to find the H.C.F. of 4052 and 1257.
- (5) The age of two friends Ani and Bijju differ by 3 years Ani's father Dharam is twice as old as Ani and Bijju is twice as old as his sister Cathy. The ages of Cathy and Dharam differ by 30 years. Find the ages of Ani and Bijju.
- (6) Find the value of  $k$  for which the quadratic equation  $(3k+1)x^2 + 2(k+1)x + 1 = 0$  has equal roots. Also find these roots.
- (7) Check whether  $6^n$  can end with the digit zero for any natural number  $n$ .
- (8) Explain  $7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 + 5$  is composite numbers.
- (9) Prove that  $\sqrt{2}$  is an irrational number.
- (10) Prove that  $\sqrt{3}$  is an irrational number.
- (11) Prove that  $3 + \sqrt{5}$  is an irrational number.
- (12) Half the perimeter of the garden, whose length is 4m. more than its width is 36m. Find the dimensions of the garden
- (13) Solve the following pair of linear equations by the substitution method
  - (i)  $\frac{3x}{2} - \frac{y}{2} = -2, \frac{x}{3} + \frac{y}{2} = \frac{13}{6}$
  - (ii)  $3x - y = 3, 9x - 3y = 9$
- (14) Form a pair of linear equations for the following problems and find their solution by substitution method
  - (i) The larger of two supplementary angles exceeds the smaller by  $18^\circ$ . Find all the angles.
  - (ii) The coach of a cricket team buys 7 bats and 6 balls for Rs.3800. Later she buys 3 bats and 5 balls for Rs. 1750. Find the cost of each bat and each ball.
- (15) Solve the following pair of linear equations by elimination method
  - (i)  $3x + 4y = 10, 2x - 2y = 2$
  - (ii)  $3x - 5y = 4, 9x - 2y = 7$
- (16) Solve the following pair of linear equations by cross multiplication method
  - (i)  $8x + 5y = 9, 3x + 2y = 4$
- (17) For which value of  $K$  will be the following pair of linear equations have no solution
  - (i)  $3x + y = 9, (2k - 1)x + (k - 1)y = 2k + 1$
- (18) Draw the graph of  $2x + y = 6$  and  $2x - y = -2$ . Shade the region bounded by these lines and  $x$  - axis. Find the area of the shaded region.
- (19) Two numbers are in the ratio of 1:3. If 5 is added to both the numbers, the ratio becomes 1:2. Find the numbers.

(20) (case study) India is competitive manufacturing location due to the low cost of manpower and strong technical and engineering capabilities contributing to higher quality production runs. The production of TV sets in a factory increases uniformly by a fixed number every year. It produced 16000 sets in 6th year and 22600 in 9th year.



*(Image credit goes to the owner)*

**Based on the above information, answer the following questions:**

1. Find the production during the first year.
  2. Find the production during 8th year.
  3. Find the production during first 3 years.
  4. In which year, the production is Rs 29,200.
  5. Find the difference of the production during 7th year and 4th year.
- (21) Find the sum of all-natural numbers between 200 and 1502 which are exactly divisible by 3.
- (22) If 4 numbers in AP are such that their sum is 50 and the greatest number is 4 times the least, then find the numbers.
- (23) The numerator of a fraction is 4 less than the denominator. If the numerator is decreased by 2 and the denominator is increased by 1, then the denominator is eight times the numerator. Find the fraction.
- (24) What is the probability of a sure event?
- (25) From a well shuffled pack of cards, a card is drawn at random. Find the probability of getting a black queen.
- (26) Aastha tosses two different coins simultaneously. Find the probability of getting at one tail.
- (27) A box contains 5 red marbles, 8 white marbles and 4 green marbles. One marble is taken out of the box at random. What is the probability that the marble taken out will be

- (i) red (ii) white (iii) not green

**(HOTS)**

(28) Find all the zeroes of  $2x^4 - 3x^3 - 3x^2 + 6x - 2$ , if two of its zeroes are  $\sqrt{2}$ ,  $-\sqrt{2}$

(29) Divide the polynomial  $P(x)$  by the polynomial  $g(x)$  and find the quotient and remainder

$P(x) = x^4 - 3x^2 + 4x + 5$        $g(x) = x^2 - 1$

(30) On comparing the ratios  $\frac{a_1}{a_2}$ ,  $\frac{b_1}{b_2}$  and  $\frac{c_1}{c_2}$  find out whether the following pair of linear equations are consistent or inconsistent

(i)  $3x + 2y = 5$ ,  $2x - 3y = 7$

(ii)  $2x - 3y = 8$ ,  $4x - 6y = 9$

(31) Shivani can row downstream 20km. in 2 hours, and upstream 4Km. in 2 hours. Find her speed of rowing in still water and the speed of current.

(32) The sum of two-digit number and the number formed by interchanging the digits is 110. If 10 is subtracted from the first number, the new number is 4 more than 5 times the sum of the digits in the first number. Find the first number.

(33) The age of the father is twice the sum of the ages of his two children. After two years, his age will be equal to the sum of the ages of his children. Find the age of the father.

(34) A die is thrown once. Find the probability of getting:

- (i) a prime number      (ii) a number lying between 2 and 6.      (iii) an odd number

(35) (case study) Your friend Veer wants to participate in a 200m race. He can currently run that distance in 51 seconds and with each day of practice it takes him 2 seconds less. He wants to do in 31 seconds.



1. Which of the following terms are in AP for the given situation

- a) 51, 53, 55....      b) 51, 49, 47....  
c) -51, -53, -55....      d) 51, 55, 59...

2. What is the minimum number of days he needs to practice till his goal is achieved

- a) 10      b) 12  
c) 11      d) 9

3. Which of the following term is not in the AP of the above given situation

- a) 41      b) 30  
c) 37      d) 39

4. If nth term of an AP is given by  $a_n = 2n + 3$  then common difference of an AP is



a) 2

b) 3

c) 5

d) 1

5. The value of  $x$ , for which  $2x$ ,  $x+ 10$ ,  $3x + 2$  are three consecutive terms of an AP

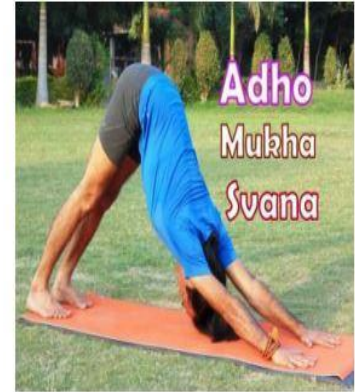
a) 6

b) -6

c) 18

d) -18

(36) An asana is a body posture, originally and still a general term for a sitting meditation pose, and later extended in hatha yoga and modern yoga as exercise, to any type of pose or position, adding reclining, standing, inverted, twisting, and balancing poses. In the figure, one can observe that poses can be related to representation of quadratic polynomial.



1. The shape of the poses shown is

a) Spiral

b) Ellipse

c) Linear

d) Parabola

2. The graph of parabola opens downwards, if \_\_\_\_\_

a)  $a \geq 0$

b)  $a = 0$

c)  $a < 0$

d)  $a > 0$

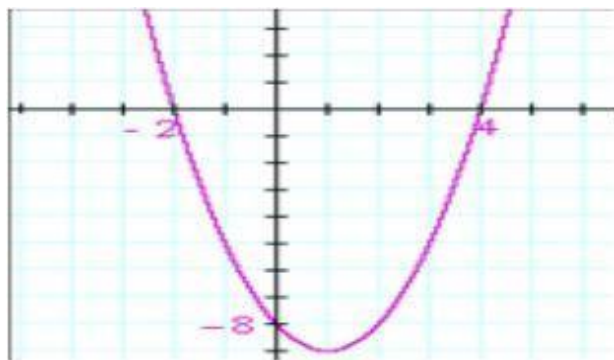
3. In the graph, how many zeroes are there for the polynomial?

a) 0

b) 1

c) 2

d) 3



there

4. The two zeroes in the above shown graph are

a) 2, 4

b) -2, 4

c) -8, 4

d) 2, -8

## SCIENCE

### PHYSICS

**Q1 PROJECT :** Make a Model to show how an electric motor converts electric energy into mechanical energy.

#### LOTS

**Q2** 'The refractive index of carbon disulphide is 1.63.' What is the meaning of this statement in relation to speed of light?

**Q3** A doctor has prescribed a corrective lens of power +1.5 D. Find the focal length of the lens. Is the prescribed lens diverging or converging?

**Q4** 'The refractive index of carbon disulphide is 1.63.' What is the meaning of this statement in relation to speed of light?

**Q5** (a) What is meant by 'power of a lens'?

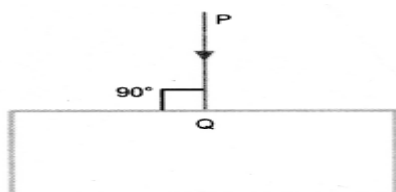
(b) State and define the S.I. unit of power of a lens.

(c) A convex lens of focal length 25 cm and a concave lens of focal length 10 cm are placed in close contact with each other. Calculate the lens power of this combination.

#### HOTS

**Q1** Prove that if a ray of light enters a rectangular glass slab obliquely and emerges from the opposite face of the glass slab, the emergent ray will be parallel to the incident ray.

**Q2** A ray of light PQ is incident on a glass slab as shown. Write the values of angle of incidence and angle of refraction for this ray of light.



**Q3** One day Rajesh told Ram to show magic he focused the rays of sunlight on the bare arm of Ram. After few seconds, Ram felt pain and removed his arm away. Rajesh was laughing at Ram.

1. Name the type of lens Rajesh had.
2. Why did Ram feel pain?
3. What kind of mirrors are used in big shopping stores to watch activities of customers?

**Q4 (I)** An object of size 7.0 cm is placed at 27 cm in front of a concave mirror of focal length 18 cm. At what distance from the mirror should a screen be placed, so that a sharp focussed image can be obtained? Find the size and the nature of the image.

**(II)** An object 50 cm tall is placed on the principal axis of a convex lens. Its 20 cm tall image is formed on the screen placed at a distance of 10 cm from the lens. Calculate the focal length of the lens

**Q 5** Akhil, a student of class X when entered in a small hall an amusement park along with his younger brother. There, they saw they looked very funny in large size mirrors. In front of one of the mirrors. Their faces were normal, their bellies were fat and legs were short. Akhil's younger brother was frightened and tried to hit the mirror with his foot. However, Akhil stopped him to do so.

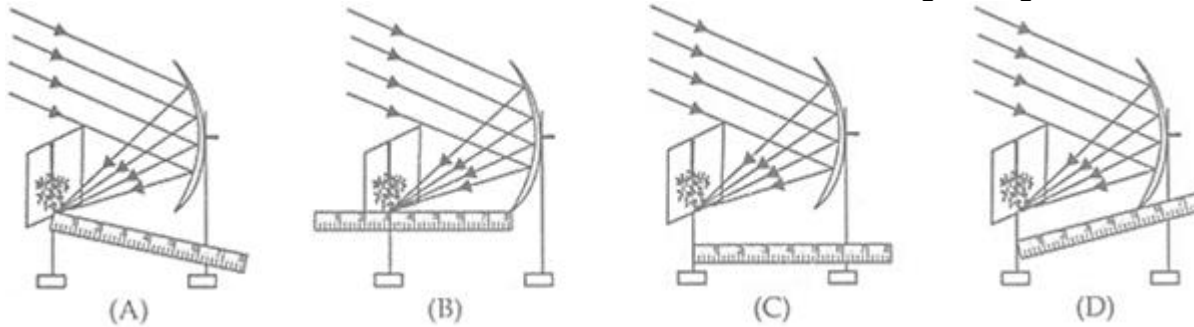
1 Name the type of mirror in front of which Akhil and his brother were standing?

2 What is the cause of the distortion of their images?

3 Name the type of mirror used in a solar furnace. How is high temperature achieved by this device?

**MULTIPLE CHOICE QUESTIONS:**

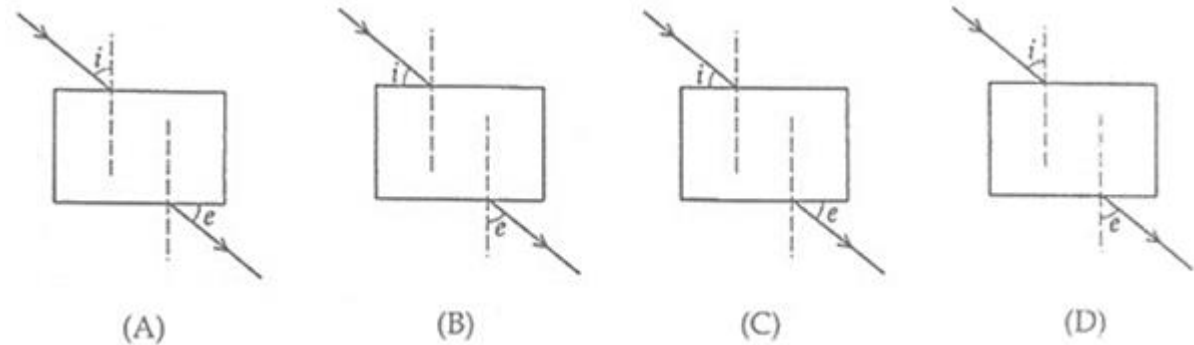
**Q6(i)** Four students A, B, C and D performed the experiment to determine the focal length of a concave mirror by obtaining the image of a distant tree on a screen. They measured the distances between the screen and the mirror as shown in the diagrams given below:



The correct way to measure accurate focal length of the mirror is:

- (a) A
- (b) B
- (c) C
- (d) D

**(ii)** A student does the experiment on tracing the path of a ray of light passing through a rectangular glass slab for different angles of incidence. He can get a correct measure of the angle of incidence and the angle of emergence by following the labelling indicated in figure:



- (a) A
- (b) B
- (c) C
- (d) D

**ASSERTION BASED QUESTIONS**

**Q7 Direction** In each of the following questions, a statement of Assertion is given by the corresponding statement of Reason. Of the statements, mark the correct answer as

- (a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.
- (b) If both Assertion and Reason are true, but Reason is not the correct explanation of Assertion.
- (c) If Assertion is true, but Reason is false.
- (d) If Assertion is false, but Reason is true.
- (e) If Assertion and Reason both are false.

**(i) Assertion:** Convex mirror is preferred for rearview mirror in vehicles.

**Reason:** The field view of a convex mirror is lesser than that of concave mirror.

**(ii) Assertion:** Lateral displacement is the distance between incident ray and the emergent ray.

**Reason:** The wider the glass slab, the larger the lateral displacement.

## **CHEMISTRY**

### **CHAPTER - 1 Chemical reactions and equations**

### **CHAPTER - 2 Acids, bases and salts**

\*Make two mind maps to show different types of reactions & preparation of Salts with two uses of each on A4 Sheet.

### **LOTS**

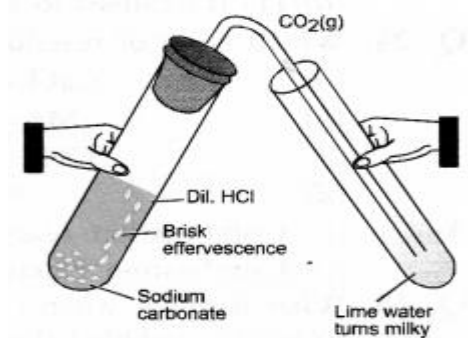
**Q1** A student took 2-3 g of a substance X in a glass beaker & poured water over it slowly. He observed bubbles along with hissing noise. The beaker becomes quite hot. Identify X. What type of reaction is it?

**Q2.** A substance X used for coating iron articles is added to a blue solution of a reddish brown metal. The color of the solution gets discharged Identify X and Y & also the type of reaction.

**Q3** Name two salts that are used in black and white photography

**Q4** Aluminium is a reactive metal but is still used for packing food articles. Why?

**Q5** Identify the type of reaction in the given picture:

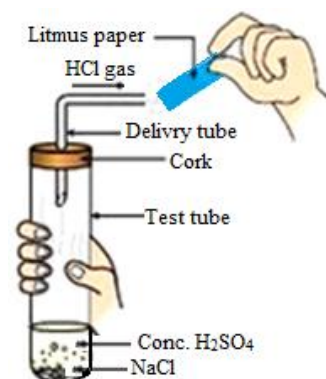


**Q6** What is a redox reaction? When a magnesium ribbon burns in air with a dazzling flame and forms a white ash; is magnesium oxidised or reduced? Why?

**Q7** A baker found that the cake prepared by him is hard and small in size. Which ingredient has he forgotten to add that would have made the cake fluffy? Give reason.

### **MULTIPLE CHOICE QUESTIONS:**

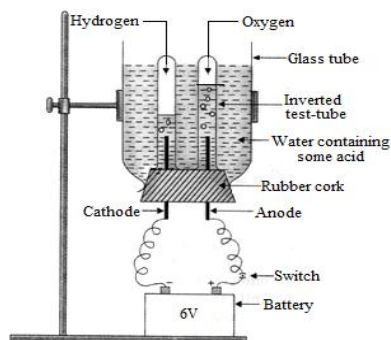
**Q8 (i)** The figure given below represents the experiment carried out between conc. sulphuric acid and sodium chloride, which react with each other to form HCl gas.



Blue litmus paper is brought near the mouth of the delivery tube to check the presence of HCl acid but no change is observed in the color of litmus paper because:

- The litmus paper used is dry
- The litmus paper used is moist
- Blue litmus paper does not change its color with an acid
- The litmus paper is kept very close to the mouth of the delivery tube.

(ii) Following is given a diagram showing an experimental set-up:



The given set-up is used to carry out:

- Distillation of water
- Purification of water
- Electrolysis of water
- Hydrolysis

(iii) The displacement reaction between iron (III) oxide and a metal X is used for welding the rail tracks. Here X is:

- Copper granules
- Magnesium ribbon
- Sodium pellets
- Aluminium dust

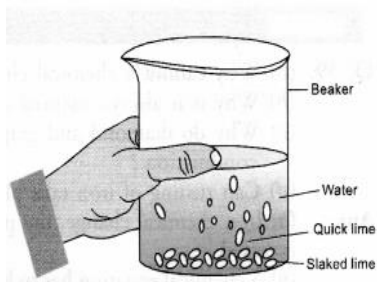
### HOTS

**Q1** A student working in the laboratory added some water to a syrupy liquid taken in a tube. The tube immediately cracked and the liquid which escaped out of it, produced blisters on the skin of the student. What actually happened explain ?

**Q2.** While playing in the garden Kamlu was stung by a wasp and started crying. Her mother immediately applied a coating of tooth paste on the affected area and then took her to the doctor.

- Why did Kamlu cry ?
- What does wasp sting contain ?
- Why did her mother apply tooth paste on the affected area ?

**Q 3.** A house wife wanted her house to be white washed. She bought 10 kg of quick lime from the market and dissolved in 30 litres of water.



**Q4A** silvery white metal X is in the form of ribbons. Upon ignition, it burns with a dazzling white flame to form white powder Y. When water is added to the powder Y, it partially dissolves to form a substance Z which is used as an antacid.

- What is metal X ?
- Name the white powder Y.
- What is the substance Z ?
- Write the chemical reactions that are taking place.

**Q5** What will you observe when :-

1. A methyl orange drop is added to dilute hydrochloric acid.
2. A drop of phenolphthalein is added to the solution of lime water.

**Q6** Mohan was working in a factory. He purchased a new cycle but kept it in the open. After two months he found that the cycle chain and even the handles got rusted. His friend advised him to apply a coating of rust proof paint to the cycle and not to keep it in the open in future.

1. Why was the cycle rusted ?
2. What is the role of rust proof paint?

**Q7** Ram was suffering from a stomach pain for a number of days. He consulted a doctor who advised him to take two antacid tablets after each meal for about a week and avoid spicy food. Ram followed the advice strictly and was cured.

1. What was the problem faced by Ram ?
2. How did doctor help him?
3. Write the chemical equation if any.

**Q8** A silvery white metal X is in the form of ribbons. Upon ignition, it burns with a dazzling white flame to form white powder Y. When water is added to the powder Y, it partially dissolves to form a substance Z which is used as an antacid.

- (a) What is metal X ?
- (b) Name the white powder Y.
- (c) What is the substance Z ?
- (d) Write the chemical reactions that are taking place.

## **BIOLOGY**

### **CHAPTER: LIFE PROCESSES**

#### **LOTS-**

Q1. What are the end products of anaerobic respiration?

i. water and CO<sub>2</sub>

ii. ATP and CO<sub>2</sub>

iii. ATP and Alcohol

iv. Alcohol and lactic acid

Q2. When both kidney fails to work, what are the other options doctor advice to the patient?

Q3. How do roots respire under water logged condition in mangrove plants?

Q4. Name the respiratory organs of the following:

- a) fish    b).earthworm    c).mosquito    d).bird

Q5.Name the organ where final digestion takes place ?

a.stomach   b. buccal cavity   c.large intestine   d. small intestine.

Q6.Where does photosynthesis takes place in plants? What are the raw materials used during the process?

**HOTS**

Q7.What happens to the rate of breathing during vigorous exercise and why?

Q8.Name the hormones secreted by pancreas. Is it related with the normal digestion of food?

Q 9.How aerobic respiration different from anaerobic respiration?

Q10 10All living organisms are dependent on light for their nourishment.'Justify the statement.

Q11. Draw a well labeled diagram of human alimentary canal and label the important glands and organs in it.

## **SOCIAL SCIENCE**

### **HISTORY**

#### **TOPIC-THE RISE OF NATIONALISM IN EUROPE (LOTS)**

- Q1. Explain the main features of the Civil Code of 1804.
- Q2. Explain any three features of the class of landed aristocracy of Europe.
- Q3. What made the Balkan areas more explosive?
- Q4. What was Zollverein? Mention its main features.
- Q5. Mention the provisions of the Treaty of Vienna of 1815.
- Q6. Explain any three features of the 'Nation State' that emerged in Europe in the 20th century.

#### **(HOTS)**

- Q7. What values are found in a nation according to Renan?
- Q8. 'The 1830s were years of great economic hardship in Europe.' Justify the Statement.
- Q9. During the years following the Congress of Vienna(1815), why did the liberal-nationalists go underground? Why were the secret societies formed? Describe their aims and activities with special reference to the activities.
- Q.10 Explain the concept of liberal nationalism which developed in Europe in the early 19th century.

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

1. Britain 2. France 3. Germany 4. Italy 5. Austria 6. Poland  
7. Spain 8. Greece 9. Switzerland 10. Romania 11. Bulgaria

### **(POLITICAL SCIENCE)**

#### **TOPIC - POWER SHARING (LOTS)**

- Q1. Mention the majoritarian measures to establish Sinhala supremacy in Sri Lanka?
- Q.2 How did Belgian's accommodations help to avoid civil war in Belgium?
- Q.3 What were the demands of the Sri Lankan Tamils? How did they struggle to achieve them?

#### **(HOTS)**

- Q.4 Power sharing is the very spirit of democracy'. Justify the statement.
- Q.5 Why is horizontal distribution of power often referred to as a system of 'check and balance'? Explain.
- Q.6 Differentiate between horizontal and vertical division of powers.
- Q.7 State the main elements of the power sharing model evolved in Belgium.

### **GEOGRAPHY**

#### **TOPIC: RESOURCES AND DEVELOPMENT (LOTS)**

Q1.

**Read the text given below and answer the following questions:**

In June 1992, more than 100 heads of states met in Rio-de-Janeiro in Brazil, for the first international Earth summit. The summit was convened to address urgent problems of environmental protection and socio-economic development at the global level. The assembled leaders signed the Declaration on Global Climatic Change and Biological Diversity. The Rio Convention endorsed the global Forest Principles and adopted Agenda 21 for achieving Sustainable Development in the 21st century.



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

1 The so called first international Earth summit was convened for:

- (a) addressing urgent problems of environmental protection.
- (b) addressing socio-economic development at the global level.
- (c) Both (a) and (b)
- (d) None of the above

2 The passage is mainly related to:

- (a) Global climatic change
- (b) Rio-de-Janeiro Earth Summit 1992
- (c) Sustainable development
- (d) Agenda 21

3 Agenda 21 is the flowchart of action to be taken by the assembled nations to:

- (a) achieve environmental protection.
- (b) fulfill the needs of the future generations.
- (c) combat the hurdles that debar sustainable development.
- (d) attain socio-economic development at global level.

4 The term used to achieve development without damaging the environment and without compromising with the needs of the future generations is:

- (a) socio-economic development
- (b) Agenda 21
- (c) Global environmental development
- (d) Sustainable development

Q5. 'Resource is a function of human activities' Justify the statement.

Q6. List the problems which resulted due to indiscriminate use of resources by man.

Q7 Write a note on good practices towards conserving natural resources.

Q8. From your everyday experiences write a short proposal on how you can conserve water.

## **ECONOMICS**

### **TOPIC – DEVELOPMENT**

(Very Short Questions-(LOTS))

Q.1 Why does Kerala have a low infant mortality rate?

Q.2 How is the average income of a country calculated?

Q.3 How Will We Calculate Body Mass Index?

Short questions -(HOTS)

Q.4 Why do different persons have different notions of development? Explain.

Q.5 Money in your pocket cannot buy all the goods and services that you may need to live well.'Is it true or not? Elucidate.

Q.6 Average income is an important criterion for development'. Justify.

(Long Questions-HOTS)

Q.7 'The issue of sustainability is important for development'. Explain.

Q.8 Why is literacy essential for economic development? Explain.

## **INFORMATION TECHNOLOGY**

### **Digital Documentation**

(LOTS)

1. What are Styles? What are the advantages of using Styles?
2. How can we create our own styles?
3. Explain any four graphic filters.
4. What do you understand by the term Anchoring?
5. Explain the use of Mail merge.
6. Explain different ways of creating a template.
7. What are templates? What are the advantages of using templates?
8. Give examples of databases in which the data source can be created.

### **Communication Skills**

1. What is communication?
2. Name the oldest mode of communication.
3. Differentiate between verbal & non- verbal communication.
4. What are the different aspects of non- verbal communication?
5. \_\_\_\_\_ is the acknowledgement sent to the sender in the communication process.