



**ENGLISH**

**Q1. Read the following extract and answer the questions that follow: -**

His father looked at him red – eyed, in his familiar tyrant’s way. His mother, melted by the free spirit of the day was tender, and giving him her finger to hold. said, “look child, what is before you!”

- a. When did the father look red – eyed at the child?
- b. Who is a tyrant? Was the father actually a tyrant?
- c. What was the ‘free spirit of the day’ that made the mother ‘tender’?
- d. Why did the mother ask the child to look before him?

**Q2. Multiple choice questions: -**

1. What festival were the people going to celebrate?
  - a. The festival of Holi
  - b. The festival of spring
  - c. The festival of Dussehra
  - d. The festival of Diwali
2. Who was the little boy going with?
  - a. With his father
  - b. With his mother
  - c. With his father and mother
  - d. None of the above
3. How was the little boy feeling while going to the fair?
  - a. Nervous
  - b. Frightened
  - c. Sad and unhappy
  - d. Full of life and joy
4. How did the flowering mustard field look?
  - a. White like silver
  - b. Red like a rose
  - c. Pale like melting gold
  - d. Lovely like a rainbow
5. What was it that attracted the child on the footpath?
  - a. The butterflies
  - b. The dragon flies
  - c. The Doves
  - d. The little insects and worms

**Q3.** The following paragraph has not been edited. Identify the error in each line and write it along with THE correction.

|   | Error        | Correction |
|---|--------------|------------|
| For Rahul Dravid cricket was a way to life,       | a. <b>to</b> | <b>of</b>  |
| A Reflection of his grooming. It was quietly      | b. _____     | _____      |
| Evident on the time of his retirement too. Dravid | c. _____     | _____      |
| Draws a list of friends                           | d. _____     | _____      |
| And broke a news two days ahead of the moment in  | e. _____     | _____      |
| Bengaluru. .                                      |              |            |

**Q4.** Rearrange the following words to make meaningful sentences.

- thirst – quenchers / one of the best / water – melon / in summer / is.
- Cultivated in / 96 countries / it is / around / the world.
- Grown / about 5000 years / first / ago / it was / in Africa.
- Reducing / is / effective / water – melon / blood / pressure / in.

## HINDI

**प्र1.** वाक्य क्या है? इसकी परिभाषा उदाहरण सहित बताइए।

**प्र2.** वाक्य भेद किन-किन आधारों पर किया जाता है?

**प्र3.** अर्थ के आधार पर वाक्य कितने प्रकार के होते हैं? उनके नाम लिखिए।

**प्र4.** निम्नलिखित वाक्यों के अर्थ के आधार पर भेद लिखिए।

- यदि चौकीदार जाग रहा होता तो चोरी न होती। संकेतवाचक।
- सुमन तुमने मेरी बात का ज़वाब नहीं दिया .....।
- अरे! बारिश आ गयी।.....
- ईश्वर आपको सदैव स्वस्थ एवं प्रसन्न रखें।.....
- शायद माली ने सभी पौधों को पानी दे दिया होगा।.....
- यह पत्र आज ही लैटर बॉक्स में डाल देना।.....

**प्र5.** निम्नलिखित वाक्यों को निर्देशानुसार बदल कर लिखिए।

- झूरी बैलों को मारता-पीटता था। (निषेधवाचक वाक्य)
- यह उपहार बहुत कीमती और सुंदर है। (विस्मयादिबोधक)
- यदि किसान समय पर फसल बोता तो अच्छी उपज मिलती। (विधानवाचक)
- जने-अनजाने आज के माहौल में हमारा चरित्र बदल रहा है। (प्रश्नवाचक)
- इस साल यह पुल बन जाएगा। (संदेहवाचक)

## MATHEMATICS

### Exponent KEY POINTS

- (a). If 'a' is any real number and 'n' is a natural number, then  $a^n$  represents the product of n factors each of which is 'a'.

i.e.:  $a^n = \underbrace{a.a.a. \dots\dots\dots a}_{n \text{ factors}}$

- (b). If a and n are natural numbers the i.e.  $a^n$ . a is called the base and n is called the Exponent.

- (c). Laws of exponent: - if  $a > 0$  is a real number and m and n are rational numbers, then

1.  $a^m \times a^n = a^{m+n}$  4.  $\left(\frac{a}{b}\right)^n = a^n/b^n, b \neq 0$

2.  $a^m / a^n = a^{m-n} : m > n$  5.  $a^{-1} = \frac{1}{a}$

3.  $(a^m)^n = (a)^{mn}$  6.  $a^m b^m = (ab)^m$

- (d). If a is any real number and n is a positive integer then,

$$a^{-x} = \frac{1}{a^x} \text{ if } a^{-x} = 1 \text{ if } a \neq 0$$

- (e). If a is any real number except zero, then

$$a^0 = 1, a \neq 0$$

Q1. Solve :-

- a.  $(64)^{1/2}$   
b.  $(125)^{1/3}$

Q2. Simplify: -

- a.  $2^{2/3} \cdot 2^{1/5}$   
b.  $\frac{(1)^7}{3^3}$

Q3. If  $a = 2, b = 3$ , then find the values of following.

$$(a^b + b^a)^{-1}$$

Q4. Evaluate: -

$$[81^{1/2} (64^{1/3} + 125^{1/3})^3]^{1/4}$$

Q5. Prove that: -  $\frac{2^{30} + 2^{29} + 2^{28}}{2^{31} + 2^{30} - 2^{29}} = \frac{7}{10}$

Q6. Find the value of x: if  $2^4 \times 2^5 = (2^5)^x$

Q7. Find the value of x: if  $\left(\frac{3}{4}\right)^6 \times \left(\frac{16}{9}\right)^5 = \left(\frac{4}{3}\right)^{x+2}$

Q8. If  $a^x = b, b^y = c$  and  $c^z = a$ , then prove the  $xyz = 1$

Q9. Find the value of  $\frac{1^0 + 2^0 + \dots\dots\dots + 10^0}{3^0 + 4^0 + \dots\dots\dots + 12^0}$

Q10. Find the value of  $x^{a-b} \cdot x^{b-c} \cdot x^{c-a}$

## **SCIENCE**

### **PHYSICS: -**

- Q1. Write the difference between Displacement and Distance.
- Q2. An object travels 16 minutes in 4 seconds and then another 16 minutes in 2 seconds. What is average speed of the object?
- Q3. Show the Displacement of a particle is zero but distance is not zero.
- Q4. What is uniform motion and non-uniform motion?
- Q5. A train travels from one station to another at the speed of 40 km per hour and returns to the first station at a speed of 60 km per hour. Calculate the average speed and average velocity of the train.

### **BIOLOGY: -**

- Q1. What is Cell and who discovered cell?
- Q2. Why is cell called the Structural and functional unit of life?
- Q3. Who gave cell theory? Write its main postulates.
- Q4. Differentiate between the following:-
  - a. Prokaryotic Cells and Eukaryotic Cells
  - Unicellular and Multicellular organisms

### **CHEMISTRY: -**

#### **SECTION - A**

- 1. During evaporation, particles of a liquid change to vapors only:
  - (a) From the surface
  - (b) From the bulk
  - (c) From both surface and bulk
  - (d) Neither from surface nor from bulk
- 2. Which of the following will not undergo sublimation?
  - (a) Camphor
  - (b) Ammonium Chloride
  - (c) Iodine
  - (d) Sodium Chloride
- 3. On increasing the temperature of a gas
  - (a) Its K.E increases
  - (b) Its K.E decreases
  - (c) Its gets converted into liquid
  - (d) Its particles come closer to each other
- 4. The latent heat of vaporization of water is
  - a.  $2.26 \times 10^5 \text{ J kg}^{-1}$
  - b.  $22.6 \times 10^5 \text{ J kg}^{-1}$
  - c.  $22.6 \times 10^6 \text{ J kg}^{-1}$
  - d.  $6.22 \times 10^5 \text{ J kg}^{-1}$
- 5. Which one of the following sets of phenomena would increase on raising the temperature?
  - (a) Diffusion, evaporation, compression of gases
  - (b) Evaporation, compression of gases, solubility
  - (c) Evaporation, diffusion, expansion of gases
  - (d) Evaporation, solubility, diffusion, compression of gases

### SECTION-B

1. Convert the following temperature to Celsius scale:  
a. 300 K                      b. 573 K.
  2. What is the physical state of water at 250°C?
  3. For any substance, why does the temperature remain constant during the change of state?
  4. Suggest a method to liquefy atmospheric gases.
  5. Why does a desert cooler cool better on a hot dry day?
  6. How does the water kept in an earthen pot (matka) become cool during summer?
  7. Why does our palm feel cold when we put some acetone or petrol or perfume on it?
  8. Why are we able to sip hot tea or milk faster from a saucer rather than a cup?
  9. What type of clothes should we wear in summer?
  10. Give two reasons to justify—  
(a) Water at room temperature is a liquid.  
(b) An iron Almirah is a solid at room temperature.
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### SOCIAL STUDY

#### : - Tick the correct Answers

- Q1. What are the factors of production?  
a. Land  
b. Capital  
c. Labor  
d. All of the above
- Q2. Which of the following is used in modern farming method?  
a. Chemical fertilizers  
b. HYV seeds  
c. Both  
d. None of these
- Q3. Which of the following is working capital?  
a. Cash  
b. Tools  
c. Furniture  
d. Machine
- Q4. The concept of Green revolution was associated with use of  
a. Chemical fertilizers  
b. HYV seeds  
c. Pesticides  
d. All of these
- Q5. A farmer who works on a piece of less than 2 hectare of land is treated as  
a. Small farmer  
b. Medium farmer  
c. Large farmer  
d. None of the above

#### True / False:-

1. Farming is the main Economic activity in Palampur. (            )
2. Bigha is a standard unit of measurement of land in chapter. (            )
3. Money in hand is an example of working capital. (            )
4. Potato is used for cattle feed.(     )
5. Dairy, Transport & shop keeping also comes under the farming activities.(     )

### **QUESTIONS: -**

- Q1. Name the nearest town to Palampur.
  - Q2. How many families are there in the Palampur Village?
  - Q3. Major Part of the village land is owned by whom?
  - Q4. What part of the Palampur Village population is formed by the Dalits?
  - Q5. What are the important sources of irrigation? And Why?
  - Q6. Modern farming methods require more inputs which are manufactured in industry. Do you agree?
  - Q7. Explain the various factors of production.
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### **COMPUTER**

- Q1. What are two types of secondary memory?
- Q2. Define Computer System?
- Q3. What do you mean by Output?
- Q4. What do you mean by Input?
- Q5. What is RAM and ROM?
- Q6. How is the speed of a computer expressed?
- Q7. What is Storage?
- Q8. What is processing?
- Q9. Define the different types of measurements of memory?
- Q10. How is SRAM different from DRAM?

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