INDIAN SCHOOL AL WADI AL KABIR

PRE-MID TERM EXAMINATION (2024-25)

CLASS: VIII **Sub: SCIENCE** **MAX.MARKS: 30**

DATE: 02-06-2024 **Set -I** **TIME: 1 HOUR**

General Instructions:

i. All questions are compulsory. Marks are indicated against each section.
*ii. The question paper comprises of **4** pages and **15** questions in 5 sections A, B, C, D and E.*
*iii. Q 1 to Q 4 in **section A** -MCQ and carries ONE mark each. Write the correct answer along with the option in the answer script.*
*iv. Q 5 to Q 7 in **section A** -Assertion and Reason type and carry ONE mark each.*
*v. Q 8 to Q 10 in **section B** are Short Answer Type Questions and carry TWO marks each.*
*vi. Q 11 TO Q 13 in **section C** are Short Answer Type Questions and carry THREE marks each.*
*vii. Q 14 in **section D** is a Long Answer Type Question and carries FIVE marks.*
*viii. Q 15 in **section E** is a Case study/Paragraph Question and carries THREE marks.*
ix. Write the same question number as given in the question paper.
x. Whitener should not be used in the answer script.
xi. Diagrams should be drawn using a pencil.

SECTION A (7×1=7)

1. To make soft dough, a small amount of yeast powder, sugar, and warm water are added to the flour. Identify the product formed and the change that occurred.
   a) Oxygen is produced during respiration that increases the volume of the dough.
   b) Water vapour is produced during respiration that decreases the volume of the dough.
   c) Carbon dioxide is produced during respiration that increases the volume of the dough.
   d) Carbon dioxide is produced during respiration that decreases the volume of the dough.

2. Sand is often used to extinguish fire. Which of the following best explains the reason?
   a) Sand spoils the fuel.
   b) Sand cuts off the oxygen supply.
   c) Sand reacts with the fuel to make it non-combustible.
   d) Sand provides more oxygen to extinguish the fire.

3. Two friends Gaurav and Samik took two glass plates and two lighted candles. Gaurav held the glass plate into the luminous zone of the flame and Samik held it slightly above the candle flame. Which of the following statements is correct?
   a) Both Gaurav's and Samik's glass plates will get blackish soot deposition.
   b) Neither Samik's nor Gaurav's glass plate will have blackish soot deposition.
   c) Gaurav's glass plate will have blackish soot deposition but Samik's glass plate will not.
   d) Samik's glass plate will have blackish soot deposition but Gaurav's glass plate will not.

4. A student is making a list of diseases caused by microorganisms in other living organisms. Which table correctly shows the diseases listed by the student?

a)

HUMAN	PLANT	ANIMAL
Chicken Pox-bacteria	Rust of wheat -fungi	Anthrax-virus
Typhoid-bacteria	Citrus canker-virus	Foot and mouth disease-bacteria

b)

HUMAN	PLANT	ANIMAL
Chicken Pox-virus	Rust of wheat -fungi	Anthrax-bacterium
Typhoid-bacteria	Citrus canker-bacteria	Foot and mouth disease-virus

c)

HUMAN	PLANT	ANIMAL
Chicken Pox-virus	Rust of wheat -bacteria	Anthrax-bacteria
Typhoid-virus	Citrus canker-virus	Foot and mouth disease-bacteria

d)

HUMAN	PLANT	ANIMAL
Chicken Pox-protozoa	Rust of wheat -bacteria	Anthrax-fungi
Typhoid-virus	Citrus canker-fungi	Foot and mouth disease-bacteria

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i), (ii), (iii), and (iv) as given below.

i) Both A and R are true and R is the correct explanation of the assertion.

ii) Both A and R are true but R is not the correct explanation of the assertion.

iii) A is true but R is false.

iv) A is false but R is true

5. **Assertion (A):** Magnesium and charcoal are combustible substances.
Reason (R): Substances that can burn in air to produce heat and light are called combustible substances.

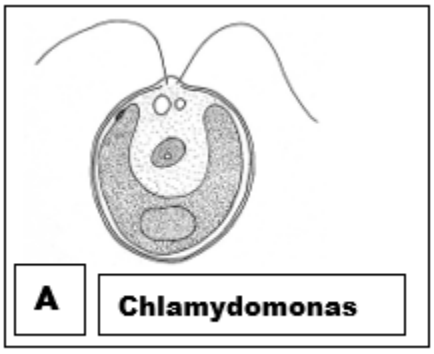
6. **Assertion (A):** Disease-causing microorganisms are called pathogens.
Reason (R): To prevent the spread of diseases, it is better to keep a distance from the infected person.

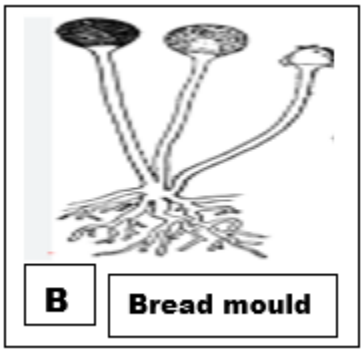
7. **Assertion (A):** Milk is converted into curd by bacteria.
Reason (R): Lactobacillus promotes the formation of curd.

SECTION B (3×2=6)

8. a) Why are viruses considered to be on the borderline between living and non-living things?

   b) Identify the groups to which the following microbes belong to:





9. a) We can even boil water in a paper cup. Rasiya got confused by her brother's statement. Do you agree with this? If yes, justify the statement.

   b) State the difference between rapid and spontaneous combustion.

10. Draw a neat and labelled diagram showing the different zones of a candle flame.

SECTION C (3×3=9)

11. a) Explain the importance of microorganisms in cleaning the environment.

    b) (i) What is nitrogen fixation?

    (ii) What are the different ways by which nitrogen gets fixed in the soil?

12. a) (i) What is a vaccine?

    (ii) Explain how does a vaccine work.

    b) What precautions must be taken while taking antibiotics?

13. a) It is difficult to burn a heap of green leaves but dry leaves catch fire easily. Explain.

    b) What are the characteristics of a good fuel?

    c) Although wood has a very high calorific value, we still discourage it as a fuel. Why?

SECTION D (1×5=5)

14. a) State the conditions necessary for combustion to take place.

b) 60 kg of fuel was completely burnt for an experiment. The heat produced was measured to be 2,40,000 kJ. Calculate the calorific value of the fuel.

c) Why is carbon dioxide fire extinguisher considered as an excellent fire extinguisher?

SECTION E (3×1=3)

15. Read the passage and answer the following questions:

Microorganisms spoil our food. Spoiled food emits a bad smell, tastes bad, and changes colour. Food preservation is the method of preserving food from being spoiled by microbes. There are some common methods of preserving food in our homes. Sodium benzoate and sodium metabisulphite are common preservatives that can save food from attack by microorganisms.

Meat and fish are covered with dry salt to prevent the growth of bacteria. Jams, jellies and squashes are preserved by sugar. Sugar reduces the moisture content, inhibiting the growth of bacteria that spoil food. Oil and vinegar prevent spoilage of pickles because bacteria cannot live in such an environment. Pasteurised milk can be consumed without boiling as it is free from harmful microbes. The milk is heated to about 70°C for 15 to 30 seconds and then suddenly chilled and stored. By doing so, it prevents the growth of microbes. It is called pasteurisation.

i) What is meant by food preservation?

ii) What role does sugar play in the preservation of food?

iii) Explain the process of pasteurisation.