Indian School Al Wadi Al Kabir

Pre-Midterm Examination (2026-2027)

Subject: SCIENCE

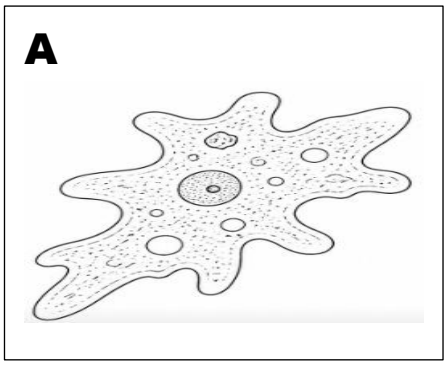
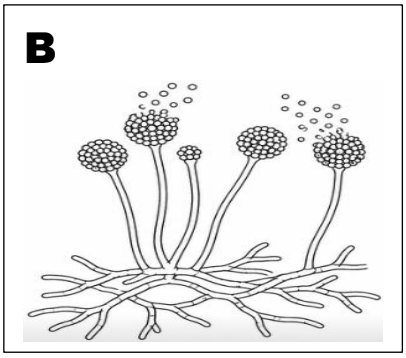
Class: VIII Max. Marks: 30

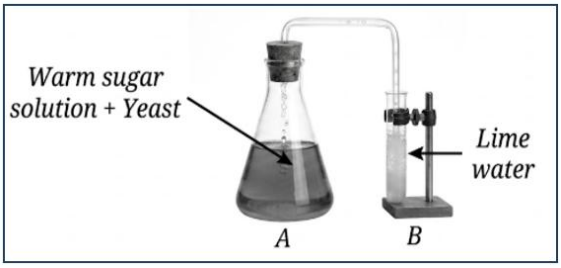
Date:18/05/2026 SET -II Time: 1 Hour

General Instructions:

i. *All questions are compulsory. Marks are indicated against each section.*
ii. *The question paper comprises **3** pages and **15** questions in 5 sections: A, B, C, D, and E.*
iii. *Q 1 to Q 4 in **section A** -MCQ carry **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 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 the one given in the question paper.*
x. *Correction fluid should not be used in the answer script.*
xi. *Diagrams should be drawn using a pencil.*

Q. No	**SECTION A (1X7=7)**	**Marks**
1	Which microorganism converts milk into curd? (a) Rhizobium (b) Lactobacillus (c) Saccharomyces (d) Penicillium	1
2	Which of the following household devices primarily operates on the magnetic effect of electric current? (a) Electric stove (b) Electric iron (c) Electric kettle (d) Electric fan	1
3	What role does science play in protecting Earth's environment? (a) Creating pollution. (b) Observing and understanding changes. (c) Increasing temperature. (d) Blocking sunlight.	1
4	An electrician opens a faulty electric bell and notices a coil of wire wound around an iron core. What is the function of this specific component in the electric bell? (a) It converts electrical energy directly into sound energy. (b) It acts as a temporary magnet only when current flows through it. (c) It is a permanent resistor used to limit the flow of current. (d) It converts mechanical energy into electrical energy.	1

	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 (A), (B), (C), and (D) as given below ***(A) Both A and R are true, and R is the correct explanation of the assertion.*** ***(B) Both A and R are true, but R is not the correct explanation of the assertion.*** ***(C) A is true, but R is false.*** ***(D) A is false, but R is true***	
5	**Assertion(A):** Dry fruits and vegetables are sold nowadays in airtight packets. **Reason(R):** The sealed airtight packets prevent the attack of microbes.	1
6	**Assertion (A):** The polarity (North and South poles) of an electromagnet can be reversed. **Reason (R):** The direction of current in the coil can be reversed, which changes the polarity of the electromagnet.	1
7	**Assertion (A):** A scientist's work is completed when they collect data from an experiment. **Reason(R):** Data must be analysed to draw conclusions and test hypotheses.	1
	SECTION B (2X3=6)	
8	**Identify** the given microorganisms A and B and **name the group** that they belong to:  	2
9	State the various steps involved in scientific investigation.	2
10	a) Why is observation considered critical in science? b) Why does a puri puff up while frying?	2
	SECTION C (3X3=9)	
11	a) What key observation by Hans Christian Oersted showed a connection between electric current and magnetism? b) **Explain** any **two** ways by which the strength of an electromagnet can be changed.	3
12	a) State the function of glycerin when observing cells under a microscope. b) Draw a neat diagram of a nerve cell and mention its function. c) What role does sugar play in the preservation of food?	3

13	a) What is a foldscope? b) Observe the set-up shown in the picture below and answer the following questions.  i) Name and define the process taking place in the conical flask. ii) What do you observe in test tube B after four hours? Why do you think this happened?	3
	SECTION D (5X1=5)	
14	a) Draw a neat diagram of a plant cell and label the following parts: i) Vacuole ii) Cell wall b) Explain the role of microorganisms in cleaning the environment. c) Why are viruses considered to be on the borderline between living and non-living things? d) Microalgae Spirulina is called a superfood. Give a reason.	5
	SECTION E (3 X1=3)	
15	Read the passage given below and answer the following questions.	
	Swapna showed great curiosity while learning about magnets and lifting electromagnets, and she was excited to explore how they work. She learned that the Earth behaves like a giant magnet because deep inside the Earth, the movement of liquid iron in the core produces electric currents, which create a magnetic field. She also learned about lifting electromagnets, which are strong electromagnets that can be attached to cranes. When the electric current is switched ON, the electromagnet becomes strong and lifts heavy objects. When the current is switched OFF, it loses its magnetic property and releases the objects. These cannot lift plastic items because plastic is not a magnetic material and is not attracted by a magnet. An iron core is used in lifting electromagnets because it increases their strength. These are widely used in factories and scrap yards. i) Why does Earth behave like a giant magnet? ii) Can a lifting electromagnet lift a heavy piece of plastic? Explain your answer. iii) Why is an iron core used in lifting electromagnets?	3

All the Best