

M.L. Khanna DAV Public School

Sector VI, Dwarka, New Delhi 110075

Periodic Test - I (2025-26)

Subject: Science

M.M. 25

Class: IX

Duration: 1 hr

General Instructions:

- There are in total 4 sections in the paper A,B,C,D.
- There are in total 13 questions.
- All questions are mandatory.
- The paper has 1-mark MCQ's and Assertion- Reason questions.
- There are 3-mark case study questions.

SECTION A

1. The boiling point of alcohol is 78°C . What is the temperature in Kelvin scale? 1
(A) 373 K (B) 351 K (C) 375 K (D) 78 K
2. Which of the following describes the liquid phase? 1
(A) It has a definite shape and a definite volume
(B) It has a definite shape but not a definite volume
(C) It has a definite volume but not a definite shape
(D) It has neither a definite shape nor a definite volume
3. Ribosomes are a center for: 1
(A) Respiration
(B) Photosynthesis
(C) Protein synthesis
(D) Fat synthesis

Directions: In each of the following questions, a statement of Assertion is given, and a corresponding statement of Reason is given just below it. Of the statements, given below, mark the correct answer as:

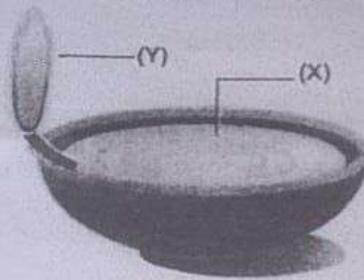
- (A) Both assertion and reason are true, and reason is the correct explanation of assertion.
- (B) Both assertion and reason are true, but reason is not the correct explanation of assertion.

- (C) Assertion is true, but reason is false.
(D) Assertion is false, but reason is true.
(E) Both are false.

4. **Assertion:** Gases exert pressure on the walls of the container. 1
Reason: The intermolecular force of attraction is very strong in gases.
5. **Assertion:** Leucoplasts perform photosynthesis. 1
Reason: Chloroplasts store fats, starch and proteins.

SECTION B

6. It is a hot summer day, Priyanshi and Ali are wearing cotton and nylon clothes respectively. Who would be more comfortable and why? 2
7. Why do we see water droplets on the outer surface of a glass containing ice cold water? 2
8. The diagram below shows the burning of an oil lamp. 2



Draw the arrangement of particles of position 'X' and 'Y' when the lamp is burning.

9. Name the organelles which show the analogy written as under-
- Storage sacs of the cell _____
 - Transporting channels of cells _____
 - Packaging and dispatching units of the cell _____
 - Digestive bag of the cell _____

SECTION C

10. a. Give two points of difference between evaporation and boiling. 3
 b. The rate of evaporation of an aqueous solution decrease with an increase in humidity. Why?
14. Draw a well labelled diagram of an eukaryotic nucleus. How is it different from nucleoid. (any 3 labelling +1 difference) 3

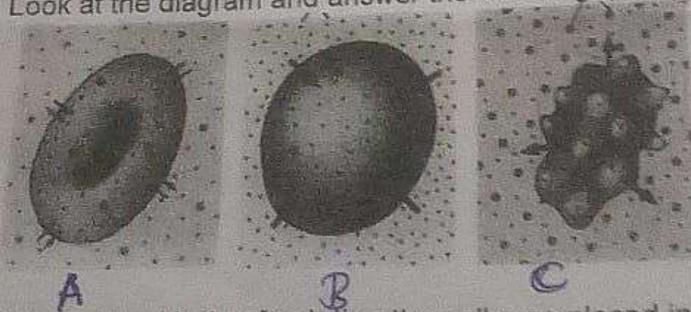
SECTION D

12. While heating ice in a beaker with a thermometer suspended in it, a student recorded the following observations:

Time (in min.)	0	1	2	3	4	5	6	7	8	10	15	20	30	35
Temp. (in °C)	-3	-1	0	0	5	8	12	15	19	22	30	30	30	30

Based on the above observations, answer the following questions:

- (a) State the change(s) observed between 2-3 min. and name the process involved. 3
- (b) Between 30-35 min., the temperature remains constant. State the reason for this. Name the heat involved in the process and define it.
13. Look at the diagram and answer the following questions:



- (A) Name the kinds of solution the cells are placed in A, B and C.
- (B) What will happen if a plant cell is kept in solution C.
- (C) If RBC's are placed in solution B what change will be seen.