KENDRIYA VIDYALAYA PERIODIC TEST:1 – 2024-25 CLASS – IX SUBJECT: SCIENCE (086)

MAX. MARKS: 40 TIME: 90 Min.

General Instructions:

- All questions are compulsory.
- The question paper has four sections and 23 questions. All questions are compulsory.
- Section A has 15 questions of 1 marks each; Section B has 3 questions of 2 marks each; Section C has 3 questions of 3 marks each and Section D has 2 questions of 5 marks each.
- Internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.

SECTION A					
1)	In a water-sugar solution (a) water is solute and sugar is solvent. (b) water is solvent and sugar is solute. (c) water is solute and water is also solvent. (d) none of these	1			
2)	Which of the following are physical changes? (i) Melting of iron metal (ii) Rusting of iron (iii) Bending of an iron rod (iv) Drawing a wire of iron metal (a) (i), (ii) and (iii) (b) (i), (ii) and (iv) (c) (i), (iii) and (iv) (d) (ii), (iii) and (iv)	1			
3)	The numerical ratio of displacement to distance for a moving object is (a) always less than 1 (b) always equal to 1 (c) always more than 1 (d) equal or less than 1	1			
4)	When a beam of light is passed through a colloidal solution, it gets (a) reflected (b) absorbed (c) scattered. (d) refracted	1			
5)	From the given U – t graph, it can be inferred that the object is t (a) in uniform motion (b) at rest (c) in non-uniform motion (d) moving with uniform acceleration	1			
6)	Identify the false statement. (a) Colloids are homogeneous (b) Colloids show Tyndall effect (c) Colloids show Brownian movement (d) The size of colloidal particles ranges between 1-100 nm.	1			

7)	Four cars A, B, C and D are moving on a levelled road. Their distance versus time graphs are shown in the adjacent figure. Choose the correct statement. Time (s) Time (s) (a) Car A is faster than car D. (b) Car B is the slowest.	1
0)	(c) Car D is faster than car C. (d) Car C is the slowest.	
8)	Which of the following is a homogeneous mixture? (a) Solution of sugar in water (b) Chalk powder in water (c) Kerosene oil in water (d) None of these	1
9)	In which of the following cases of motions, the distance moved and the magnitude of displacement are equal? (a) If the car is moving on a straight road (b) If the car is moving in Circular path (c) The pendulum is moving to and fro (d) The earth is revolving around the sun.	1
10)	Mercury and bromine are both (a) liquid at room temperature (b) solid at room temperature (c) gases at room temperature (d) both (a) and (b)	1
11)	A body thrown vertically upwards reaches a maximum height h. It then returns to ground. The distance and the displacement travelled by the body respectively are (a) 2h, zero (b) h, zero (c) zero, 2h (d) zero, h	1
	(CCT QUESTIONS: Q.12 to 15)	•
singl man orga perfo	wenhoek discovered the free-living cells in pond water for the first time. Robert Brown discovered the nucleus in the cell may constitute a whole organism as in Amoeba. These organisms are called unicellular organisms. On the other cells group together in a single body and assume different functions in it to form various body parts in multicellulatinisms. The shape and size of cells are related to the specific function they perform. Each living cell has the capacity form certain basic functions that are characteristic of all living forms. Each kind of cell organelle performs a special further as making new material in the cell. clearing up the waste material from the cell and so on.	er hand, r :o
12)	Cells were first discovered by: (a) Robert Hooke (b) Leeuwenhoek (c) Schleiden (d) Virchow	1
13)	Which of the following is a unicellular organism? (a) Fungi (b) Plants (c) Chlamydomonas (d) Animal	1

1.1	Who suggested that all cells arise from pre-existing cells?	1
14)	(a) Robert Hooke. (b) Leeuwenhoek	
	(c) Schleiden. (d) Virchow	1
	(d) Virchow	
15)	Which of the following is an incorrect statement?	
13)	I. Each living cell has the capacity to perform certain basic functions.	
	II. There is a division of labour in multicellular organisms.	
	III. Each kind of cell organelle performs a special function.	
	IV. All activities inside the cell do not interact with the environment.	
	a. (I) and (II)	1
	b. (II) and (III)	
	c (III) and (IV)	
	d. Only (IV)	
	a. Only (IV)	
	SECTION B	!
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16)	A solution contains 60 g of sugar in 480 g of water. Calculate the concentration of solution in terms of mass by mass	_
	percentage of the solution.	2
17\	Differentiate between	
17)	(i) The functions of RER and SER	
	(ii) Plasma membrane and cell wall.	2
	(ii) Flasifia membrane and cell wall.	
18)	A body travels in a semi-circular path of radius 10 m starting its motion from point 'A' to point 'B'. Calculate the distance and	
10)	displacement.	2
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	SECTION C	
19)	Give any three points of difference between true solution, colloidal solution and suspension.	3
20)		
20)	Observe the given figure and answer the questions.	
	(a) What has happened to cell A and B? Explain.	
	(b) Identify the type of solution into which cells A and B are placed.	
	(c) Name and explain the process that has taken place in cells A and B.	
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	(A) (B)	
	Or	
	Give the differences between prokaryotic cells and eukaryotic cells.	
	Give the differences between prokaryotic cens and edikaryotic cens.	
21)	(a) What is 'Tyndall effect'?	
	(b) Give any two points of difference between Homogeneous and Heterogeneous mixture.	,
		3
1	SECTION D	
	SECTION D	

