SUMMATIVE ASSESSMENT – I
MODEL QUESTION PAPER
IX CLASS - PHYSICAL SCIENCE
(English Version)
Part – A & B

Time: 2.45 min **Marks: 40**

Instructions:

(i) This paper contains **Part-A** and **Part-B**.
(ii) Part-A contains 3 sections, answer the questions under Part-A on separate answer book. Write the answer to the questions under Part-b on the Question paper itself and attach it to the answer book of Part-A..
(iii) Answer all the Questions internal choice to the questions under section III.
(iv) In the duration of 2.45hrs, 15 minutes of time is allotted to read the question paper.

Time: 2 hours **PART – A** **Marks: 30**

Instructions:

1. Part-A comprises of three sections I, II, III.
2. All the questions are compulsory.
3. There is no overall choice. However, there is an internal choice to the questions under Section-III.

SECTION – I

NOTE: 1. Answer all the Questions.
2. Answer each question in 1 or 2 sentences.
3. Each question carries ONE mark. 4 x 1 = 4 marks

1. The smell of hot sizzling food reaches you several metres away. What is the phenomenon behind it? (AS-1)
2. "Speed is a scalar and velocity is a vector". Explain. (AS-1)
3. Some of the leaves may get detached from a tree when we vigorously shake its branches. Why? (AS-1)
4. Name the technique to separate camphor from salt. (AS-1)

SECTION – II

NOTE: 1. Answer all the questions.
2. Answer each question in 4 or 5 sentences.
3. Each question carries TWO marks. 2 x 5 = 10 marks

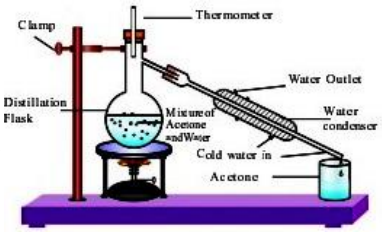
5. Srinu said boiling water produces more severe burns than steam. Kavya said steam produces more severe burns than boiling water. To whom do you support? Explain. (AS-1)
6. Your friend asks you the differences between speed and velocity. How can you make him to know it by asking some questions? (AS-2)
7. A bowling ball of 6.0 kg moves with2.2m/s velocity. Calculate the momentum of the bal (AS-1)
8. Give two examples of Tyndall effect. (AS-1)
9. An object has moved through a distance and it has zero displacement. Is it true or false? How can you support your answer? (AS-2)

SECTION – III

NOTE:1. Answer all the questions.

2. Answer each question in 8 or 10 sentences.
3. There is internal choice for each question. Only one option from each question is to be attempted.
4. Each question carries FOUR marks. 4 x 4 = 16 marks

10. See the figure and answer the following.



1) Which separation technique is this?
2) Which type of components is separated by this technique?
3) At what temperature of the substances this type of separation is used?
4) What conclusion do you get from the above? (AS-4)

(OR)

Observe the following figure and answer the questions.

a) Which law is explained by this activity?
b) State that law.
c) Give two other examples of that law. (AS-4)

11. You are provide glass tube with a scale, ammonium solution, hydrochloric acid, pieces of cotton and rubber cork. By using all these how can you observe the speed of diffusion of two gasses? (AS-3)

(OR)

Matter is divided into pure substance and mixture. Pure substance is divided into elements and compounds. Mixture is divided into homogeneous and heterogeneous. Examples of element, compound, homogeneous and heterogeneous are copper, water,salt water and water in oil respectively. By using this information prepare a mind map. (AS-1)

12. Write the equations of uniform accelerated motion and explain the terms they contain. (AS-1)

(OR)

"In the absence of a net external force on the system, the momentum of the system remains unchanged." Explain with an example. (AS-3)

13. Using following data, draw time - displacement graph for a moving object: (AS-5)

Time (s)	0	2	4	6	8	10	12	14	16
Displacement (m)	0	2	4	4	4	6	4	2	0

(OR)

Draw the figure of the apparatus used for the separation of immiscible liquids and label it. (AS-5)

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MODEL QUESTION PAPER
IX CLASS - PHYSICAL SCIENCE
(English Version)
Part - B

Time : 30 minutes **Marks : 10**

Instructions:
(i) Answer all the questions.
(ii) Each question carries ½ mark.
(iii) Marks will not be awarded in any case of over-writing, rewritten or erased answers.
(iv) Write the correct answer for the following questions in the brackets provided against them.

SECTION – IV

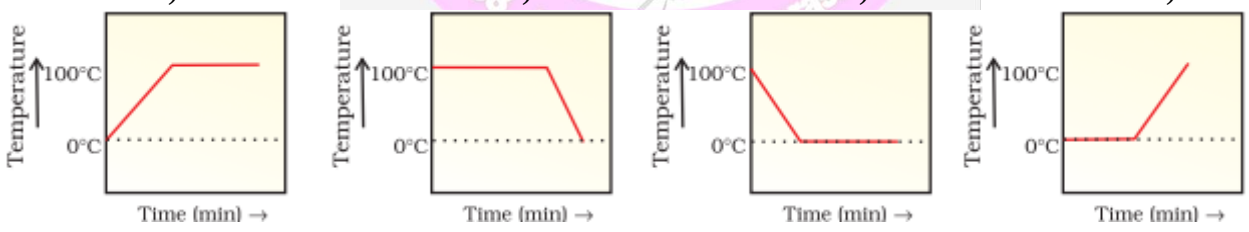
NOTE : 1. Answer all the questions.
2. Each question carries 1/2 mark. 20 x 1/2 = 10 marks

14. A few substances are arranged in the increasing order of 'forces of attraction' between their particles. Which one of the following represents a correct arrangement? ( )
a) Water, air, wind b) Oxygen, water, sugar c) Air, sugar, oil d) Salt, juice, air

15. A: Evaporation is effected by wind speed.
B: Fusion means changing solid to liquid. ( )
a) A and B are correct b) A correct, B wrong
c) A wrong, B correct d) A and B are wrong

16. A student heats a beaker containing ice and water. He measures the temperature of the content of the beaker as a function of time. Which of the following would correctly represent the result? ( )

a) b) c) d)



17. **Assertion:** when we mix water with salt and stir thoroughly there is no change in the water level.
Reason: Liquid particles have some space between them. ( )
a) Both assertion and reason are correct
b) Both assertion and reason are correct. Reason doesn't support assertion.
c) Assertion is correct, reason is wrong.
d) Assertion is wrong, reason is correct.

18. Rate of change of velocity is ( )
a) force b) acceleration c) displacement d) speed

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19. Which are correct statements? i) Speed at an instant is instantaneous speed. ( )
ii) Velocity is speed in specific direction.
iii) Speed and velocity have same units.
a) i only b) i, ii
c) ii, iii d) i, ii, iii

20. A passenger in a moving train tosses a coin which falls behind him. It means that motion of the train is ( )
a) accelerated b) along circular tracks c) retarded d) uniform

21. The final velocity (v) = ( )
a) u - at b) ut - a c) u + at d) ut + a

22. Which one is wrongly paired? ( )
a) solution – soda water b) suspension – ink
c) emulsion – oil and water d) colloidal dispersion – Starch

23. Match the following set A and set B ( )

Set-A	Set-B
A) time	i) m/s
B) displacement	ii) sec
C) speed	iii) m
D) acceleratin	iv) m/s^2

a) A-i, B-iii, C-ii, D-iv b) A-ii, B-iv, C-i, D-iii
c) A-i, B-iv, C-ii, D-iii d) A-ii, B-iii, C-i, D-iv

24. A student added salt in water. Then which is formed ( )
a) solute b) solvent c) solution d) mixture

25. Rocket works on the principle of conservation of ( )
a) mass b) energy c) velocity d) momentum

26. Which of the following are homogeneous in nature? ( )
(i) ice (ii) wood (iii) soil (iv) air
a) (i) and (iii) b) (ii) and (iv) c) (i) and (iv) d) (iii) and (iv)

27. Which is the following is correct for Inertia ( )
(i) It is the tendency of a body to resist change of state.
(ii) It is derived from Newton's 2nd law.
(iii) Mass is the measure of Inertia.
a) (i) and (ii) b) (ii) and (iii) c) (i) and (iii) d) (i), (ii) and (iii)

28. Two people push a car, one with a force of 120N and other with a force of 80N in the same direction for3s. Then the impulse provided to the car is ( )
a) 360N.s b) 24N.s c) 120N.s d) 600N.s

29. Arrange the statements in an order according to the Newton's three laws explain. ( )
i) What happens when one object exerts a force on another object?
ii) What happens to an object when non-zero net force acts on it?
iii) What happens to an object when no net force acts on it?
a) (i),(iii),(ii) b) (i),(ii),(iii) c) (iii),(ii),(i) d) (iii),(i),(ii)

30. Which of the following is different physical quantity ( )
a) distance b) displacement
c) velocity d) acceleration

31. Colloidal dispersion **:** Fog **::** Suspension **:** ( )
a) Milk b) Blood
c) Nail polish d) Boot polish

32. The solution in which no more solute can be dissolved in a certain temperature is ( )
a) unsaturated solution b) saturated solution
c) supersaturated solution d) none of the above

33. Melting point of ice : Boiling point of water :: ( )
a) 0^oC : 273K b) 373K : 0^oC
c) 373K : 100^oC d) 273K : 100^oC

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Answers for Bit Paper

14. b	15. b	16. d	17. a	18. b
19. d	20. a	21. c	22. d	23. d
24. c	25. d	26. c	27. c	28. d
29. c	30. a	31. c	32. b	33. d

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