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SUMMATIVE ASSESSMENT - I - 2021 - 2022
GENERAL SCIENCE - Paper - I

Physical Science

(English Medium)

PART - A & B

Class : IX]

(Max. Marks : 40)

[Time : 2.45 Hrs.

Instructions :

1. There are four sections in question paper.
2. Part - A answers should be written in separate answer sheet.
3. Answer all the questions.
4. There is an internal choice in Section - III of Part - A.
5. Every answer should be written visibly and neatly.

Marks : 30]

PART - A

[Time : 2 hrs.

SECTION - I

Note : 1. Answer all the questions.

2. Each question carries 1 mark.

3. Answer each question in 1 or 2 sentences.

4 x 1 = 4

1. Which separation techniques will you apply for the separation of
 - a) Different pigments from an extract of flower parts.
 - b) Ammonium chloride from a mixture of sodium chloride and ammonium chloride.
2. What do you know about magnification ?
3. Imagine what would happen if we donot have standard symbols for elements ?
4. Which machine is used in a diagnostic laboratory, to test blood samples and urine samples ?

[Turn Over

SECTION - II

Note : 1. Answer all the questions.

2. Each question carries 2 marks.

5 x 2 = 10

5. Correct your friend who says, "the car rounded the curve at a constant velocity of 70 km./h."

6. Read the following paragraph and answer the following questions.

A solution of sugar is prepared by dissolving sugar in water. Tincture of iodine is made by dissolving iodine in alcohol.

a) What is solute in sugar solution ?

b) What is solvent in tincture of iodine ?

7. Abhi trying to find momentum of 10 kg. ball, moving with a velocity of 2.5 m/s. Can you help him ?

8. Calculate the molecular mass of H_2SO_4 .

9. What are the materials required to find the acceleration and velocity of an object moving on an inclined track ?

SECTION - III

Note : 1. Answer all the questions.

2. Each question has internal choice.

3. Each question carries 4 marks.

4 x 4 = 16

10. a) An object moving with 6 m. per second execute an acceleration 2 m/s^2 in next 3 seconds. How much distance it covered ?

(Or)

b) Explain Newton's second and third laws with suitable examples.

11. a) How do you demonstrate Tyndall effect in milk and salt solution ?

(Or)

b) How do you conduct a lab activity to observe the change in the mass before and after a chemical reaction ?

[Contd... 3rd

12. a) The values of object distance (u) and image distance (v) are tabulated in the experiment to find the focal length of a concave mirror, as follows.

Sl.No.	Object distance (u)	Image distance (v)
1.	30 cm.	Infinity
2.	40 cm.	120 cm.
3.	50 cm.	75 cm.
4.	60 cm.	60 cm.

Answer the following questions.

- What is the focal length of the concave mirror ?
- What is the radius of curvature of the mirror ?
- At what distance, the object be placed to get a virtual image ?
- If object is kept at 50 cm. from pole, what are the characteristics of the image formed ?

(Or)

- b) Complete the following table, using Criss - Cross Formula.

Anions \rightarrow	Chloride	Sulphate	Phosphate
Cations \downarrow	(Cl)	(SO ₄ ⁻²)	(PO ₄ ⁻³)
Potassium (K ⁺)			
Zinc (Zn ⁺²)		ZnSO ₄	
Aluminium (Al ⁺³)			

13. a) Show the formation of image with a ray diagram when an object is placed on the principal axis of a concave mirror away from the centre of curvature. Write the characteristics of image formed.

(Or)

- b) Draw the figure of arrangement of apparatus for fractional distillation and label the parts.



SUMMATIVE ASSESSMENT - I - 2021 - 2022**GENERAL SCIENCE - Paper - I****Physical Science****(English Medium)****PART - B****Class : IX]****(Max. Marks : 10)****[Time : 30 Mnts.**

Academic standard	AS ₁	AS ₂	AS ₃	AS ₄	AS ₅	AS ₆	Total	Grade
Q. No.s	1,2,8,10,14,15,16, 17,18,19,21,23,24,25, 26,27,29,30,31,33	3,5,20,22	9,11	6,12	13	4,7,28,32	33	
Allotted Marks	16	4	6	6	4	4	40	
Total								

Name of the Student : Roll No.:

- Note :- 1) Choose the correct answers from the options given below and write them in CAPITAL LETTERS.
- 2) Each question carries half mark.
- 3) Rewrite and over writing questions are not valid.

SECTION - IV**20 x ½ = 10**

14. Which of the following is not a scalar quantity? []
- A) Mass B) Length C) Velocity D) Time
15. S.I Units of Momentum = _____ []
- A) Kg-m/sec² B) Kg/sec
- C) Kg-m D) Kg-m/sec
16. Which of the following gases have the smell of rotten eggs? []
- A) Hydrogen B) Oxygen
- C) Hydrogen Sulphide D) Sulphur dioxide

[Turn Over

17. The symbol of Calcium is _____ []

- A) C B) Ca C) CA D) CL

18. Identify the mirror formula _____ []

A) $\frac{1}{f} = \frac{1}{u} - \frac{1}{v}$

B) $\frac{1}{f} = \frac{1}{v} - \frac{1}{u}$

C) $\frac{1}{u} = \frac{1}{v} + \frac{1}{f}$

D) $\frac{1}{f} = \frac{1}{u} + \frac{1}{v}$

19. The natural tendency of objects to resist a change in their state of rest is called _____ []

- A) Impulse B) Inertia C) Momentum D) A and B

20. When we go through deep forest, the following effect can be observed []

- A) Photoelectric effect B) Raman effect
C) Tyndall effect D) Compton effect

21. Who proposed the law which states that "a given chemical substance always contains the same elements combined in a fixed proportions by mass" []

- A) Joseph L. Proust B) John Dalton
C) Antaine Lavoisier D) John Berzelius

22. The velocity of a car is increasing from 25 Km/h to 30 Km/h in one sec and from 30 Km/h to 35 Km/h in next sec. Then acceleration of the car is _____ Km/h per sec. []

- A) 25 B) 30 C) 5 D) 35

23. When the net force acting on a body is zero, the body is _____ in _____ []

- A) Motion B) Rest
C) Equilibrium D) None

24. Which of the following substances is not pure ? []
A) Sodium Chloride B) Copper Sulphate
C) Gold D) Air
25. If atoms of different elements combine then _____ is formed. []
A) Solution B) Element
C) Compound D) Mixture
26. Instantaneous speed can be represented by _____ of the curve at a given instant of time. []
A) Distance B) Mid point C) A & B D) Slope
27. The measurement of amount of solute that dissolve in a solvent at constant temperature is _____ []
A) Solubility B) Dilution C) Concentration D) Saturation
28. When a bird fly, it push the air downwards with its wings with a force of 10 N, then the force applied by the air to push the bird in upward direction is _____ []
A) 98 N B) 10 N C) 100 N D) 9.8 N
29. The Latin name of Tungsten is _____ []
A) Natrium B) Wolfrum C) Kalium D) Cuprum
30. Change in momentum depends on []
A) Magnitude of force B) Time
C) Both A & B D) None
31. The valency of carbonate ion is _____ []
A) 2 B) 3 C) 4 D) 1
32. If a car is travelling westwards with a constant speed of 20 m/s, what is the resultant force acting on it ? []
A) 20 N B) 0 N C) 10 N D) 120 N
33. Which of the following is a diatomic molecule ? []
A) Oxygen B) Argon C) Ozone D) Sulphur