

Class : 10

Register  
Number

UNIT TEST - 1, JULY - 2024

Time Allowed : 1.30 Hours]

SCIENCE

[Max. Marks : 50

PART - I

I. Choose the best answer.

9x1= 9

1. Inertia of a body depends on
  - a) Weight of the object
  - b) Acceleration due to gravity of the planet
  - c) Mass of the object
  - d) Both a and b
2. In which of the following sport the burning effect of force used.
  - (a) Swimming
  - (b) Tennis
  - (c) Cycling
  - (d) Hockey
3. Power of Lens is - 4D then its Focal Length is -----
  - (a) 4m
  - (b) -40m
  - (c) -0.25m
  - (d) -2.5m
4. Mass of 1 mole Nitrogen Atom is
  - (a) 28 amu
  - (b) 14 amu
  - (c) 25 g
  - (d) 14 g
5. The volume occupied by 1 mole of Diatomic gas at S.T.P is
  - (a) 11.2 Litre
  - (b) 5.6 Litre
  - (c) 22.4 Litre
  - (d) 44.8 Litre
6. Kreb's Cycle takes place in
  - (a) Chloroplast
  - (b) Mitochondrial Matrix
  - (c) Stomata
  - (d) Inner Mitochondrial Membrane
7. The body of Leech has
  - (a) 23 Segments
  - (b) 33 Segments
  - (c) 38 Segments
  - (d) 30 Segments
8. Pharyngeal Ganglion in Leech is a part of
  - (a) Excretory System
  - (b) Nervous System
  - (c) Reproductive System
  - (d) Respiratory System
9. Mammals are ----- animals.
  - (a) Cold Blooded
  - (b) Warm Blooded
  - (c) Poikilothermic
  - (d) All the above

PART - II

Answer any four of the following questions. (Q.No.15 is compulsory)

4x2=8

1. State Newton's Second Law.

2. Say True or False of the Statement. If false give the correct statement.

- a) Molar mass of  $\text{CO}_2$  is 42 g.
- b) Noble gases are diatomic.

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12. Name the three basic Tissue System in Flowering Plants.
13. Write the Dental Formula of Rabbit.
14. Draw and label the Structure of Oxysome.
15. Draw a ray diagram to show the image formed by a convex lens when the object is placed between F and 2F.

**PART - III**

III. Answer any three of the following. (Q.No.20 is compulsory)

3x4=12

16. Differentiate Mass and Weight.
17. List any Four properties of Light.
18. Differentiate Monocot Root and Dicot Root.
19. List out the Parasitic adaptation of Leech.
20. Calculate the number of Moles in
  - a) 27 g of Al
  - b)  $1.51 \times 10^{23}$  molecules of  $\text{NH}_4\text{Cl}$

**PART - IV**

IV. Note : Answer in detail.

3x7=21

21. a)
  - i) What are the types of Inertia.
  - ii) State and Prove the Law of Conservation of Linear Momentum.

(OR)

- b)
  - i) Differentiate the eye defects of Myopia and Hypermetropia.
  - ii) Why does the sky appear in blue colour?

22. a)
  - i) Give the Salient features of "Modern Atomic Theory".
  - ii) Define : Atomicity.

(OR)

- b)
  - i) What is rust? Give the equation for the formation of rust.
  - ii) Write different methods of preventing corrosion.

23. a)
  - i) Explain the structure of Chloroplast.
  - ii) Write the reaction for photosynthesis.

(OR)

- b)
  - i) What does CNS stands for?
  - ii) Why is the Teeth of Rabbit called Heterodont?
  - iii) How does locomotion takes place in leech?

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