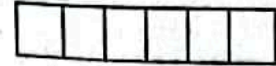


FM

FIRST MID TERM TEST - 2023

SCIENCE

10 - STD



Time : 1.30 Hrs

Marks : 50

I Choose the correct answer.

8 X 1 = 8

1. One kilogram force equals to
a) 9.8 dyne b) $9.8 \times 10^4 \text{ N}$ c) $9.8 \times 10^4 \text{ dyne}$ d) 980 dyne
2. Power of a lens is -4D, then its focal length is
a) 4 m b) -40 m c) -0.25 m d) -2.5 m
3. The volume occupied by 4.4g of CO_2 at 3 S.T.P.
a) 22.4 litre b) 2.24 litre c) 0.24 litre d) 0.1 litre
4. Ores of Aluminium a) Galena b) Zinc blende c) Bauxite d) Hematite
5. Glycolysis takes place in
a) Mitochondria b) Cytoplasm c) Chloroplast d) Ribosomes
6. The animals which give birth to young ones are
a) oviparous b) viviparous c) ovoviviparous d) all the above
7. The disease caused by decrease in the number of thrombocytes
a) Anemia b) Leucocytosis c) Leukopenia d) Thrombocytopenia
8. Vomiting centre is located in
a) Medulla oblongata b) Stomach c) Cerebrum d) Hypothalamus

II Answer any six of the following. Question number 16 is compulsory.

4 X 3 = 12

9. Why does the sky appear in blue colour.
10. Write the different types of isotopes of Oxygen and its percentage abundance.
11. What is rust? Give the equation for formation of rust.
12. What are the factors affecting photosynthesis?
13. How is diastema formed in rabbit?
14. What is cohesion?
15. Match the following.

a) Nissl's granules:	-	Forebrain
b) Hypothalamus	-	Peripheral Nervous system
c) Cerebellum	-	Cytone
d) Schwann cell	-	Hind brain

16. Calculate the velocity of a moving body of mass 5 kg whose linear momentum is 2.5 Kgms^{-1} ?

III Answer any four of the following. Question number 22 is compulsory.

17. Differentiate the eye defects. Myopia and Hyper metropia. 4 X 4 = 16
18. Classify the following molecules based on their atomicity and fill in the table.
Fluorine [F_2], Carbon di oxide (CO_2), Glucose ($\text{C}_6\text{H}_{12}\text{O}_6$), Hydrogen iodide (HI), Phosphorous (P_4), Ozone (O_3).

Molecule	Di atomic	Tri atomic	Poly atomic
Homo			
Hetero			

19. How does the light dependent reaction differ from the light independent reaction? What are the end product and reactants in each? Where does each reaction occur within the chloroplast?
20. What is transpiration? Give the importance of transpiration.
21. a) Draw and label the parts of Neuron. b) Name the parts of the hind brain
22. A is a silvery white metal. A combines with O_2 to form B at 800°C , the alloy of A is used in making the aircraft. Find A and B.

IV Answer the following questions in detail.

2 X 7 = 14

23. a) Define inertia. Give its classification with example. (5)
b) Define Newton's second law (2) (OR)
a) Derive the relationship between Relative molecular mass and vapour density. (5)
b) Calculate the molecular mass of CO_2 . (2)
24. a) Explain the male reproductive system of rabbit with a labelled diagram. (5)
b) Write the dental formula of rabbit. (2) (OR)
a) Write the functions of blood. (5) b) What is the importance of valves in the heart. (2)

FM 10 - அறிவியல் (EM) ஒரு பக்கம்