

10

Register No.

First Mid-Term Test - 2024

Time : 1.30 Hours

SCIENCE

Marks : 50

Part-I

(8x1=8)

- I) Choose the best answer
- Inertia of a body depends on
 - weight of the object
 - acceleration due to gravity of the planet
 - mass of the object
 - both (a) & (b)
 - Power of a lens is - 4D, then its focal length is
 - 4 m
 - 40 m
 - 0.25 m
 - 2.5 m
 - Which of the following is a triatomic molecule?
 - Glucose
 - Helium
 - Carbon dioxide
 - Hydrogen.
 - group contains the member of the halogen family.
 - 17th
 - 15th
 - 18th
 - 16th
 - The endarch condition is the characteristic feature of
 - root
 - stem
 - leaves
 - flower
 - The body of leech has
 - 23 segments
 - 33 segments
 - 38 segments
 - 30 segments
 - The wall of the human heart is made of
 - Endocardium
 - Epicardium
 - Myocardium
 - All of the above
 - There are pairs of cranial nerves and pairs of spinal nerves.
 - 12, 31
 - 31, 12
 - 12, 13
 - 12, 21

Part-II

- II) Answer any six questions (Question no.16 is compulsory)
(6x2=12)

- State Newton's second law.
- Draw a ray diagram to show the image formed by a convex lens when the object is placed between F and 2F
- What is rust? Give the equation for the formation of rust.
- Write a short note on mesophyll.
- Give the common name of the Hirudinaria granulosa
 - What does CNS stand for?
- What is the importance of valves in the heart?

15. What are the structures involved in the protection of brain?
16. Find the percentage of nitrogen in ammonia.

Part-III

III) Answer any four questions (Question no.22 is compulsory) (4x4=16)

17. What are the types of inertia? Give an example for each type.
18. Differentiate the eye defects: Myopia and Hypermetropia.
19. Give the salient features of "Modern atomic theory"
20. a) Draw and label the structure of oxysomes.
b) Write the dental formula of rabbit.
21. Enumerate the functions of blood.
22. A is a silvery white metal. A combines with O_2 to form B at $800^\circ C$. the alloy of A is used in making the aircraft. Find A and B.

Part - IV

IV) Answer all the questions 2X7=14

23. a) List any five properties of light?
b) State Rayleigh's law of scattering.
(or)
a) Define: Relative atomic mass.
b) Write the different types of isotopes of oxygen and its percentage abundance.
c) Define Atomicity.
d) Give any one example for hetero diatomic molecule.
24. a) Differentiate Monocot root and Dicot root
b) List out the parasitic adaptations in the leech
(or)
a) Classify neurons based on its structure.
b) Why is the colour of the blood red?
c) What is respiratory quotient?