



FIRST MID - TERM TEST - 2022

Standard - X
SCIENCE

Reg.No.

--	--	--	--	--

Marks: 50

Time: 1.30 hrs.

I. Choose the correct answer:

10×1=10

1. The basis of modern periodic law is _____.
a) atomic number b) atomic mass c) isotopic mass
d) number of neutrons
2. Which of the following is a triatomic molecule?
a) Glucose b).Helium c) Carbon dioxide d) Hydrogen
3. The endarch condition is the characteristic feature of
a) root b) stem c) leaves d) flower
4. The gram molecular mass of oxygen molecule is
a) 16 g b) 18 g c) 32 g d) 17 g
5. Mammals are _____ animals.
a) Cold blooded b) Warm blooded c) Poikilothermic d) All the above
6. Where should an object be placed so that a real and inverted image of same size is obtained by a convex lens
a) f b) 2f c) infinity d) between f and 2f
7. The body of leech has
a) 23 segments b) 33 segments c) 38 segments d) 30 segments
8. The mass of a body is measured on planet Earth as M Kg. When it is taken to a planet of radius half that of the Earth then its value will be _____ kg.
a) 4M b) 2M c) M/4 d) M
9. Which is formed during anaerobic respiration
a) Carbohydrate b) Ethyl alcohol c) Acetyl CoA d) Pyruvate
10. 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 & b

II. Answer any five questions (Question number 18 is compulsory) :

$4Fe + 3O_2 \rightarrow 2Fe_2O_3$ $5 \times 2 = 10$

11. What is rust ? Give the equation for formation of rust.
12. Draw and label the structure of oxysomes.
13. What is respiratory quotient?
14. Define : Atomicity.
15. Draw a ray diagram to show the image formed by a convex lens when the object is placed between F and 2F.

16. Match the following:

- | | |
|--|--------------------------------|
| 1 Newton's I law | - Propulsion of a rocket |
| 2 Newton's II law | - Stable equilibrium of a body |
| 3 Newton's III law | - Law of force |
| 4 Law of conservation of Linear momentum | - Flying nature of bird |

17. How is disatema formed in rabbit? .

18. State Newton's second law.

III. Answer any four questions. (Question number 26 is compulsory)

4×4=16

19. What is photosynthesis? Write the reaction for photosynthesis?
20. Differentiate : Aerobic and Anaerobic respiration.
21. List out the parasitic adaptations in leech.
22. How is metal corrosion prevented?
23. Differentiate mass and weight.
24. List any five properties of light.
25. Calculate the number of water molecule present in one drop of water which weighs 0.18g.
26. What are the types of inertia? Give an example for each type.

IV. Answer all the question:

2×7=14

27. Differentiate the following a) Monocot root and Dicot root.

(OR)

A is a reddish brown metal, which combines with O_2 at < 1370 k gives B, a black coloured compound. At a temperature > 1370 k, A gives C which is red in colour. Find A, B and C with reaction.

28. Give the sailent features of "Modern atomic theory".

(OR)

Differentiate the eye defects: Myopia and Hypermetropia.