/FML   **FIRST MID TERM TEST - 2024**

10 - Std   **SCIENCE**

Salem

Time : 1.30 Hrs   Marks : 50

I   **Answer all the questions. Choose the correct answer. 7 X 1 = 7**

1. In which of the following sport the turning of effect of force used

   a) swimming   b) tennis

   c) cycling   d) hockey

2. The eye defect 'presbyopia' can be corrected

   a) convex lens   b) concave lens

   c) convex mirror   d) Bi focal lenses

3. The number of periods and groups in the periodic table are_____.

   a) 6,16   b) 7,17   c) 8,18   d) 7,18

4. The volume occupied by 1 mole of a diatomic gas at S.T.P is

   a. 11.2 litre   b) 5.6 litre   c) 22.4 litre   d) 44.8 litre

5. Which is the correct sequence of blood flow

   (a) ventricle –>atrium –> vein–> arteries

   (b) atrium–> ventricle –> veins –> arteries

   (c) atrium –> ventricle –> arteries –> vein

   (d) ventricles –> vein –> atrium –> arteries.

6. Node of Ranvier is found in

   (a) muscles   (b) axons   (c) dendrites   (d) cyton

7. The endarch condition is the characteristic feature of

   a) root   b) stem   c) leaves   d) flower

II   **Answer any <u>Five</u> questions only. Question No. 14 is Compulsory.**

8. Differentiate mass and weight.   **5 X 2 = 10**

9. State Snell's law.

10. What is rust? Give the equation for formation of rust.

11. Draw and label the structure of oxysomes.

12. What are the structures involved in the protection of brain?

13. What is the importance of valves in the heart?

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14. A mechanic unscrew a nut by applying a force of 140 N with a spanner of length 40 cm. What should be the length of the spanner if a force of 40 N is applied to unscrew the same nut?

III Answer any Three Questions only. Question No. 20 is Compulsory.

3 X 4 = 12

15. Describe rocket propulsion.
16. Differentiate convex lens and concave lens.
17. Write the differences between atoms and molecules
18. Classify neurons based on its structure.
19. Enumerate the functions of blood.
20. Calculate the gram molecular mass of the following.
     i) H_2O ii) CO_2

IV Answer All the questions.

3 x 7 = 21

21. (a) (i) State Newton's laws of motion?
         (ii) Define inertia. Give its classification.

                        (OR)

    (b) (i) List any five properties of light.
        (ii) What are the causes of 'Myopia'?

22. (a) (i) Write any Four salient features of "Modern atomic theory".
        (ii) Define: Atomicity
        (iii) Gram Atomic Mass of nitrogen is _____

   (OR)

    (b) (i) 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.

    (ii) Write the name of the Aluminium Alloy used to make pressure cookers, and also name the metals used in this alloy.

23. (a) (i) Write the dental formula of rabbit.
    (ii) List out the parasitic adaptations in leech. (OR)
    (b) (i) How are arteries and veins structurally different from one another?   (ii) Define reflex arc.

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