QUARTERLY EXAMINATION - 2024

9. Std   **SCIENCE**   Reg.No [   ]

Time : 3.00 Hours   MARKS: 75

Instructions :

1. Write clearly and legibly without mistakes and overwriting utilising the maximum time allotted for the exam.
2. Answer should be in your own style without changing the main core concept.
3. Use only black or blue ink pen to write the exam.

I   **Choose the correct answer.**   **12 x 1 = 12**

     Answer all the questions.

1. 1 Metric ton is equal to
   a) 100 quintals   b)10 quintals   c) 1/10 quintals   d) 1/100 quintals

2. The centrifugal force is
   a) a real force   b) the force of reaction of centripetal force
   c) a virtual force   d) Directed towards the centre of the circular path

3. Clouds float in atmosphere because of their low
   a) Density   b) Pressure   c) Velocity   d) Mass

4. Among the following .... is a mixture
   a) common salt   b) Juice   c) Carbon dioxide   d)pure silver.

5. In Which orbital closest to the nucleus
   a) K   b) L   c) M   d) N

6. The correct electronic Configuration of potassium is
   a) 2,8,9   b) 2,8,1   c) 2,8,8,1   d) 2,8,8,3

7. Elements in the modern periodic table are arranged in ...... groups and ...... periods.
   a) 7,18   b) 18,7   c) 17,8   d) 8,17

8. The animal without skull is
   a) Acrania   b) Acephalia   c) Apteria   d) Acoelomate.

9. Smooth muscles occur in
   a) Uterus   b) artery   c) vein   d) All of the above

10. Transpiration takes place through ....
    a) Fruit   b) Seed   c) Flower   d) Stomata

11. .... in a leaf is required for photosynthesis
    a) Chlorophyll   b) Transpiration   c) CO_2 d) Water

12. Which key should be presses to run a slide show?
    a)FI   b) Tab   c) F5   d) F2

II   **Answer any seven questions for the following. Question number 22 is Compulsary**

13. What is the full form of SI system.   **7 X 2 = 14**
14. Distinguish distance and displacement

15. Match the following.
    a) Density   – $h\rho g$
    b) Pascal's law   –   Milk
    c) Pressure exerted by a fluid – Mass/volume
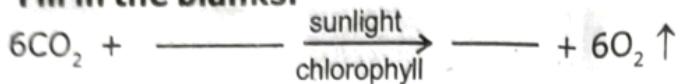   d) Lactometer   –   Pressure

16. Define. Sublimation
17. State modern periodic law
18. Why are frogs said to be amphibians?
19. **State true or false.**
    a) Phloem is made up of tracheids.
    b) Vessels are found in collenchyma.
20. **Fill in the blanks.**
    $$6CO_2 + \underline{\qquad} \xrightarrow[\text{chlorophyll}]{\text{sunlight}} \underline{\qquad} + 6O_2 \uparrow$$
21. What is a presentation?
22. Calculate the atomic number of an element whose mass number is 39 and number of neutrons is 20. Also find the name of the element.

III   **Answer any seven for the following questions.**   7 x 4 = 28
      Question number 32 is Compulsory

23. Differntiate mass and weight
24. Explain different types of motion.
25. State the laws of flotation.
26. Write the differences between elements and compounds and give an example for each.
27. State any five features of modern periodic table
28. List five characteristic features of fishes.
29. In which stage of mitosis the chromosomes align in an equatorial plate? How?
30. Mention the differences between stomatal and Lenticular transpiration.
31. a) What is chlorophyll?
    b)Name the part of plant which shows positive geotropism. Why .
32. Calculate the numbers of Neutrons, protons and electrons :
    i) Atomic number 3 and mass number 7
    ii) Atomic number 92 and mass number 238

IV   **Answer the following question.**   3 x 7 = 21

33. Explain the Constrution and working of a hydrometer with diagram.
    (OR)
    Explain a method to find the thickness of a hollow tea cup.
34. Explain Tyndall effect and Brownian movement with suitable diagram.
    (OR)
    Explain the postulates of Bohr's atomic model.
35. List out the differences between mitosis and meiosis.
    (OR)
    How will you differentiate the diffent types of transpitation?