Class : 9

Register Number

COMMON QUARTERLY EXAMINATION - 2024 - 25

SCIENCE

Time Allowed : 3.00 Hours]

[Max. Marks : 75

12x1= 12

I. Choose the correct answer.

1. Which among the following is not a device to measure mass?
   a) Spring balance   b) Beam Balance   c) Physical balance   d) Digital balance

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. ------------- has the same properties throughout the sample.
   a) Pure substance   b) Mixture   c) Colloid   d) Suspension

5. Change in the number of neutrons in an atom changes it to
   a) An ion   b) An isotope   c) As isobar   d) Another element

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. A animal without Skull is
   a) Acrania   b) Acephalia   c) Apteria   d) Acoelomate

9. Air sacs and pneumatic bones are seen in
   a) Fish   b) Frog   c) Bird   d) Bat

10. Aerenchyma is found in
    a) Epiphytes   b) Hydrophytes   c) Halophytes   d) Xerophytes

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

12. A presentation consists of Many ----------
    a) Pages   b) Slides   c) Placeholders   d) Messages

PART - II

II. Answer any seven 7) questions only Question no 22 is compulsory.   7x2=14

13. Match the following.
    (a) Length   -   Kelvin
    (b) Mass   -   Meter
    (c) Time   -   Kilogram
    (d) Temperature   -   Second

14. Compare speed and velocity.

15. On what factors the pressure exerted by the liquid depends on?

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16. Define Sublimation.

17. Write the electronic configuration of K and Cl.
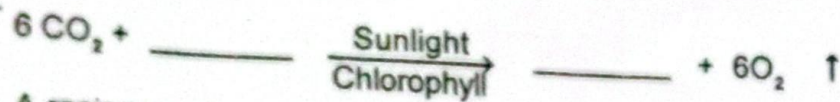
16. **State whether true or false. If false, correct the statement.**
   (a) Metals can gain electrons   (b) Group 17 elements are named as halogens.

19. List the respiratory Organs of Amphibians.

20. What is the Complex Tissue? Name the various kinds of Complex tissues?

21. **Fill in the Blanks:**

$$6\,CO_2 + \underline{\hspace{2cm}} \xrightarrow[\text{Chlorophyll}]{\text{Sunlight}} \underline{\hspace{2cm}} + 6O_2 \uparrow$$

22. A racing car has a uniform acceleration of $4\ ms^{-2}$. What distance it covers in 10s after the start?

PART - III

III. **Answer any 7 questions: (Q.No.32 is compulsory)**   7x4=28

23. Differentiate Mass and Weight.

24. Explain different types of Motion?

25. Describe the construction and Working of Mercury Barometer?

26. How are Homogenous solutions different from Heterogeneous solution? Explain with example?

27. Draw the Structure of Oxygen and Sulphur Atoms.

28. State any four features of modern periodic table.

29. List four characteristic features of fishes.

30. Write about the elements of xylem.

31. Differentiate between Tropic and Nastic movements?

32. State the Gay Lussac's law of combining Volumes. Explain with an Illustration.

PART - IV

IV. **Answer all the question.**   3x7=21

33. a) i) Write the rules that are followed in writing the symbols of Units in SI System.
   (ii) Define Velocity.

   (OR)

   b) (i) Explain the construction and working of a Hydrometer with diagram.

34. a) i) Write the differences between elements and compound and give an example for each.
   ii) Name the components in each of the following mixtures.
        a) Ice Cream   b) Lemonade   c) Soil

   (OR)

   b) i) Explain the postulates of Bohr's atomic model.
   ii) State Modern Periodic Law.

35. a) i) Give an account on Phylum Arthropoda.
   ii) Define Transpiration.

   (OR)

   b) i) List out the differences between Mitosis and Meiosis.
   ii) Draw the structure of Stomata.

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