Class : 9

Register Number

COMMON HALFYEARLY EXAMINATION - 2022 - 23
SCIENCE

Time Allowed : 3.00 Hours]

[Max. Marks : 75

I Choose the correct answer.

12x1= 12

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 size of an air bubble rising up in water
   a) decreases   b) increases   c) remains same   d) may increase or decrease

3. Resistance of a wire depends on,
   a) Temperature   b) Geometry   c) nature of material   d) All the above

4. We can create enlarged, Virtual images with
   a) Concave mirror   b) Convex mirror   c) Plane mirror   d) None of these

5. When we mix a drop of ink in water we get a ---------
   a) Haterogeneous mixture   (b) Compound
   (c) Homogeneous mixture   (d) Suspension

6. The term nucleons refer to
   a) Protons and electrons   b) Only neutrons
   c) electrons and neutrons   d) Protons and neutrons

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. Companion Cells are closely associated with
   a) Sieve elements   b) Vessel elements   c) Trichomes   d) Guard cells

10. Bile helps in the digestion of
    a) Proteins   b) Sugar   c) fats   d) Carbohydrates

11. Diptheria affects the
    a) Lungs   b) throat   c) Blood   d) liver

12. --------- is a structured delivery of information.
    a) slide show   b) page   c) Word Art   d) Presentation.

II Write any seven questions only. (Q.No.22 is compulsory)

7x2=14

13. Compare Speed and Velocity
14. On what factors the Pressure exerted by the Liquid depends on?
15. List the main parts of an electric motor.
16. Write the electronic configuration of K and Cl.
17. What are the uses of Plaster of Paris?
18. **Match the following.**
    a) Coelenterata   -   Snail
    b) Platyhelminthes   -   Starfish
    c) Echinodermata   -   Tapeworm
    d) Mollusca   -   Hydra
19. What is Complex tissue? Name the various kinds of Complex tissues?
20. Mention any two Vital functions of human kidney.
21. **Give abbreviations for the following.**
    (a) FCI   b) FPO

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22. Find the Oxidation number of the elements in the following compound.

    (a) C in CO_2

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

23. Differentiate Mass and Weight.

24. **a)** Fill in the blanks.

    i) The instrument used to measure atmospheric pressure is --------

    ii) A drinking straw works on the existence of ----------

    b) **State Whether ture or false. If false correct the statement.**

    i) Ammeter is connected in Parallel in any electric circuit.

    ii) Current can produce Magnetic field.

25. Explain two types of transformer.

26. Write the differences between elements and compounds and give an example for each.

27. **a)** **Match the following.**

    a) Dalton   -   Hydrogen atom model

    b) Chadwick   -   Discovery of nucleus

    c) Rutherford   -   First atomic theory

    d) Neils Bohr   -   Plum pudding model

                    -   Discovery of neutrons

    b) State Modern Periodic Law.

28. Write any four uses of bases.

29. List four characteristic features of fishes.

30. How will you differentiate the different types of transpiration?

31. Give an account of Classification of Bacteria based on the shape.

32. **a)** Light enters from air into a glass plate having refractive index 1.5. What is the speed of light in glass. (Speed of light in vaccum $3 \times 10^8 ms^{-1}$)

    b) Find the mass of an object Weighing 98 N.

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

33. **a)** Explain different types of Motion.

    b) What is meant by Magnification? Write its expression.

<div align="center">(OR)</div>

    a) Explain the construction and working of a hydrometer with diagram.

    b) Define Electric current and give its unit.

34. **a)** Explain Tyndall effect and Brownian movement with suitable diagram.

    b) Write any two limitations of Mendeleev's Periodic table.

<div align="center">(OR)</div>

    a) List down the differences between Ionic and Covalent compounds.

    b) Define Aquaregia.

35. **a)** List out the differences between Mitosis and Meiosis.

    b) Define Transpiration.

<div align="center">(OR)</div>

    a) How are Vitamins useful to us? Tabulate the sources, deficiency diseases and symptoms of fat soluble Vitamins.

    b) **Differentiate :** Absorbtion and Assimilation.

<div align="right">CH / 9 / Sci / 2</div>