HALF YEARLY EXAMINATION - 2023

Class : 9   **SCIENCE**   Reg.No [   ]

Time : 2-30 Hours   Marks : 75

PART - I

I) Choose the Most appropriate answer from the given four alternative and write the option code and the corresponding Answer.   **12X1=12**

1. 1 Quintal is equal to

    a) 100 kg   b) 1000kg   c) 10 kg   d) 1/10 kg

2. Clouds float in atmosphere because of their low

    a) density   b) pressure   c) velocity   d) mass

3. In an electrolyte the current is due to the flow of

    a) electrons   b) positive ions   c) both (a) and (b)   d) neither (a) nor (b)

4. .... is used as reflectiors in torchlight

    a) Concave mirror   b) plane mirror   c) convex mirror   d) Convex lens

5. .... atom (s) are present in one molecule of oxygen.

    a) 1   b) 3   c) 2   d) 4

6. The number of neutrons present in $_{13}AI^{27}$ is ....

    a) 13   b) 14   c) 27   d) 15

7. Example for liquid metal is ....

    a) Bromine   b) Sodium   c) Mercury   d) Lead

8. The element that would form cation by losing electrons in a chemical reaction is ....

    a) F   b) O   c) Na   d) S

9. Poikilothermic organisms are

    a) Fish, Frog, Lizard, man   b) Fish, Frog, Lizard, Cow

    c) Fish, Frog, Lizard, snake   d) Fish, Frog lizard, Crow

10. Which of the following is a complex tissue?

    a) Parenchyma   b) Collenchyma   c) Xylem   d) Sclerenchyma

11. Which of the following is not a part of female reproductove system?

    a) ovary   b) Uterus   c) Testes   d) Fallopian tube

12. The organ affected by jaundice is ....

    a) Kidney   b) Heat   c) liver   d) Spleen

PART - II

II) Answer any 7 Questions: Q.No.22 Compulsory   **7x2=14**

13. Define least count of any device.
14. what do you understand about negative acceleration?
15. Define electric current and given its unit
16. What are nucleons?

17. Fill in the following table according to the type of bonds formed in the given molecule
$CaCl_2$, H_2O, CaO, CO, KBr, HCl, CCl_4, HF, CO_2

Ionic bond	Covalent bond	coordinate Covalent bond

18. State : Modern periodic law,
19. What are the effects of consuming adulterated food?
20. Differentiate : Absorption and Assimilation
21. Write the Significane of meiosis cell division
22. The speed of light in air is 3×10^8 m/s and in glass it is 2×10^8 m/s. what is the refractive index of glass?

PART - III

III) Answer any 7 Questions. Q.No.32 Compulsory.   7x4=28

23. Explain different types of motion.
24. State the laws of flotation
25. What are the applications of Electromagnets?
26. Write notes on chromatography
27. What conclusions were made from the observations of Gold foil experiment?
28. Define : oxidising agent and reducing agent and Give an example for each type
29. Write about the elements of xylem.
30. Enumerate the funcitons of Liver.
31. i) What is the way of spreading dengue? write its symptoms.
    ii) Can you get pregnant with no fallopian tubes? Clarify,
32. An athlete completes one round of a circular track of diameter 200m in 40s. What will be the distance covered and the displacement at the end of 2m and 20s?

PART - IV

IV) Answer All the questions (Draw diagram wherever necessary).   3x7=21

33. a) i) Explain the construction and working of a hydro meter with diagram
       ii) State Fleming's left hand rule.
    [OR]
    b) i) Draw ray diagrams to show how the image is formed using a concave mirror, when the position of object is i) at C ii) between C and F iii) between F and P of the mirror
       ii) Mention the position and nature of image in each case.
34. a) i) Discuss in brief about the properties of Ionic compounds
       ii) Write the electronic configuration of K and Cl
    [OR]
    b) i) Give the tests to identify Acids and Bases
       ii) Find the oxidation number of Mn in $KMnO_4$
35. a) i) Explain the different types of transpiration?
       ii) Differentiate between flat worms and round worms.
    [OR]
    b) i) Differentiate : Macronutrients from Micronutrients
       ii) Describe the alimentary canal of man.

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