QL

9 - Std QUARTERLY EXAMINATION - 2024

SCIENCE

Time : 3.00 Hrs. MARKS : 75

PART - A

I **Choose the correct answer.** 12 X 1 = 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. Clouds float in atmosphere because of their low
   (a) density (b) pressure (c) velocity (d) mass
3. Among the following _____ is a mixture
   a) Common Salt b) Juice c) Carbon dioxide d) Pure Silver
4. When we mix a drop of ink in water we get a _____
   a) Heterogeneous Mixture b) Compound c) Homogeneous Mixture d) Suspension
5. _____ has the same properties throughout the sample
   a) Pure substance b) Mixture c) Colloid d) Suspension
6. Change in the number of neutrons in an atom changes it to
   a) an ion. b) an isotope. c) an isobar. d) another element
7. Modern periodic law states that the physical and chemical properties of elements are the periodic functions of their
   a) atomic numbers b) atomic masses c) similarities d) anomalies
8. Poikilothermic organisms are
   (a) Fish, Frog, Lizard, Man (b) Fish, Frog, Lizard, Cow
   (c) Fish, Frog, Lizard, Snake (d) Fish, Frog, Lizard, Crow
9. Excretory organ of tape worm is
   (a) flame cells (b) nephridia (c) body surface (d) solenocytes
10. Smooth muscles occur in
    a. uterus b artery c. vein d. All of the above.
11. The root of the plant is _____.
    i) positively phototropic but negatively geotropic
    ii) positively geotropic but negatively phototropic
    iii) negatively phototropic but positively hydrotropic
    iv) negatively hydrotropic but positively phototropic
    a) (i) and (ii) b) (ii) and (iii) c) (iii) and (iv) d) (i) and (iv)
12. Which one of the following is an example for wireless connections?
    a) Wi-Fi b) Electric wires c) VGA d) USB

PART – B

II **Answer any seven questions.**
(Question number 22 is compulsory) 7X 2 = 14

13. Define least count of any device
14. What is meant by uniform circular motion? Give two examples of uniform circular motion
15. Why it is easy to swim in sea water than in river water?.

16. Name the apparatus that you will use to separate the components of mixtures containing two, i. miscible liquids, ii. immiscible liquids.

17. Write down the names of the particles represented by the following symbols and explain the meaning of superscript and subscript numbers attached.
$_1H^1$, $_0n^1$, $_{-1}e^0$

18. State modern periodic law.

19. Are jellyfish and starfish similar to fishes? If no justify the answer.

20. Mention the most abundant muscular tissue found in our body.State its function.

21. What is chlorophyll?

22. Find the thickness of a five rupee coin with the screw gauge, if the pitch scale reading is 1 mm and its head scale coincidence is 68.

PART – C

III Answer any seven questions. (Question number 32 is compulsory) 7 X 4 = 28

23. How will you measure the least count of vernier caliper?

24. Distinguish distance and displacement.

25. **Match the following.**

Density	-	hpg
1 gwt	-	Pressure
Pascal's law	-	Mass Volume
Pressure exerted by a fluid	-	980 dyne

26. Define Sublimation with diogram

27. What are nucleons? How many nucleons are present in Phosphorous? Draw its structure

28. State any five features of modern periodic table.

29. Comment on the aquatic and terrestrial habits of amphibians.

30. Why should gametes be produced by meiosis during sexual reproduction?what is the importance of meiosis

31. a. What is a Slide? b. What is a Presentation?

32. a. A ball is gently dropped from a height of 20 m. If its velocity increases uniformly at the rate of 10 ms^{-2}, with what velocity will it strike the ground? After what time will it strike the ground?

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

PART-D

IV Answer all the questions. 3 X 7 =21

33. a) Derive the equations of motion by graphical method. ***(OR)***
b)-Describe the construction and working of mercury barometer
c) What is meant by atmospheric pressure?

34 a) Write the differences between elements and compounds and give an example for each. ***(OR)***
b) State the Gay Lussac's law of combining volumes. Explain with an illustration.
c) What are the limitations of Mendeleev's periodic table?

35. a) Write about the elements of Xylem. ***(OR)***
b. How will you differentiate the different types of transpiration?
c. Differentiate phototropism from photonasty