Register Number :

COMMON ANNUAL EXAMINATION - 2024

STD: 9 **SCIENCE** Marks : 75 Time : 2.30 hrs

PART-I

Answer all the question:- **12x1=12**

1. Clouds float in atmosphere because of their low _____
   a) density b) pressure c) velocity d) mass
2. Electrophanting is an example for _____
   a) heating effect b) chemical effect c) flowing effect d) magnetic effect
3. The sound waves travel faster _____
   a) in liquids b) in gass c) in solids d) in vaccum
4. ceres is a _____ a) meteor b) star c) planet d) astroid
5. Elements in the modern periodic table are arranged in ___ groups and ____ periods. a) 7,18 b) 18,7 c) 17,8 d) 8,17
6. Number of valence electrons in carbon is ____ a) 2 b) 4 c) 3 d) 5
7. A phenomenon is which an element exists in different modification in same physical state is called
   a) Isomerism b) Allotrophy c) catenation .d) Crystallinity
8. One Nanometre is _____
   a) 10^{-7} metre b) 10^{-8} metre c) 10^{-6} metre d) 10^{-11} metre
9. Transpiration takes place through____
   a) fruit b) seed c) flower d) stomata
10. The structural and functional unit of the kidney is _____
    a) villi b) liver c) nephron d) ureter
11. Which of the following is transmitted through air?
    a) Tuberculosis b) Meningitis c) Typhoid d) Cholera
12. The symbiotic association of fungi and vassular plants is
    a) Lichen b) Rhizobium c) Mycorhizae d) Azotobacter

PART-II

Answer any 7 of the following : Q.No.22 compulsory. **7x2=14**

13. Differentiate mass and weight.
14. What is specific heat capacity?
15. i) The SI unit of magnetic field induction is _____
    ii) A device for producing electric current is _____
16. What is mean by supersonic speed?
17. Define sublimation?
18. What are the uses of plaster of paris?
19. What is nematocyst?

20. Match it:

Skin	:	a) Urine
Lungs	:	b) Sweat
Intestine	:	c) Carbon dioxide
Kidneys	:	d) Undigested food

21. What is an adulterant?

22. Calculate the amount of charge that would flow in 2 hours through an element of an electric bulb drawing a current of 2.5 A.

PART-III

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

23. Explain different types of motion?
24. What are the changes of state in water ? Explain.
25. Explain Tyndal effect and Brownian movement with suitable diagram.
26. a) Give example for liquid metal.
    b) What are metalloids?
27. a) Write all possible isomers of C_2H_6O
    b) Why are one-time use and throw away plastic harmful?
28. List of four characteristic features of fishes?
29. How will you differentiate the different types of transpiration?
30. Describe the alimentary canal of man?
31. List the medicinal importance of honey?
32. a) Write the need of standard unit
    b) How will you measure the least count of vernier caliper?

PART-IV

Answer all the questions. Draw diagrams wherever necessary. **3x7=21**

33. Explain the construction and working of hydrometer with diagram?

(or)

Explain the principle, construction and working of a DC motor?

34. a) Explain the postulates of Bohr's atomic model.
    b) What are Isotopes? (or)
    a) Define aquaregia.
    b) Sulphuric acid is called king of chemicals. Why is it called so?
    c) Write any two uses of bases.
35. Write about elements of xylem. (or)
    a) What are the uses of recycled water?
    b) What is IUCN?
    c) How does a bad adapt itself to its habitat?

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