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## **COMMON ANNUAL EXAMINATION - 2024**

## Std - IX

SCIENCE Marks:75 Time: 3.00 Hours Part - I  $12 \times 1 = 12$ Choose the correct answer: Clouds float in atmosphere because of their low ....... a) density d) mass b) pressure c) velocity 2. Electroplating is an example for ....... b) chemical effect c) flowing effect d) magnetic effect a) heating effect A device in which the loss of heat due to conduction, connection and radiation d) thermos flask a) solar cell b) solar cooker c) thermometer 4. Ceres is a ...... a) meteror b) star d) Asteroid c) planet Elements in the modern periodic table are arranged in ....... groups and ...... periods. a) 7, 18 b) 18, 7 d) 8, 17 c) 17, 8 6. The hydrated salt of copper sulphate has ..... colour. b) white c) blue d) green 7. Carbon forms large number of organic compounds due to ....... b) isomerism a) allotropy c) tetra valency d) catenation 8. One nanometer is ........ a) 10-7 metre c) 10-6 metre b) 10<sup>-8</sup> metre d) 10<sup>-9</sup> metre 9. Transpiration takes place through ....\* a) fruit b) seed c) flower d) stomata 10. The structural and functions unit of the kidney is ...... b) liver c) nephron d) ureter 11. ...... is the method of growing plants without soil. b) hydroponics / a) horticulture c) pomology d) none of these 12. The atmospheric carbon-di-oxide enters into the plants through the process of ....... b) assimilation a) photosynthesis c) respiration d) decomposition Part - II Answer any 7 questions. (Question Number 22 compulsory)  $7 \times 2 = 14$ 13. Why it is easy to swim in river water than in sea water? 14. Match the following 1. Light bulb 2. Fixed resistor 3. Coil of wire

- 15. What is a satellite? What are the two types of satellites?
- 16. Define sublimation?

4. Earth connector

- 17. What are the uses of "Plaster of Paris"?
- 18. Differentiate graphite and diamond.

19. Fill in the blanks:

20. Expand the following

i) ORS ii) WHO iii) HIV iv) BCG

21. State whether true or false. If false correct the statement.

a) Nitrogen is a greenhouse gas

b) Bats are the only mammals that can fly.

22. Find the oxidation number of the elements in the following compounds. C in CO<sub>2</sub>

Part - III

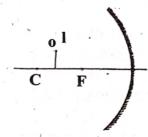
## Answer any 7 questions (Question Number 32 compulsory):

 $7 \times 4 = 28$ 

23. Differentiate mass and weight.

24. i) Concave mirrors are used by dentists to examine teeth. Why?

ii) Complete the diagram to show how a concave mirror forms the image of the object.



25. i) What is meant by supersonic speed?

ii) Why do people prefer wearing white clothes during summer?

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

27. i) Write all possible isomers of C2H6O

ii) Why are one-time use and throwaway plastics harmful?

28. i) What is radio carbon dating?

ii) Sudha met with a fire accident. What kind of drug(s), she must take?

29. List five characteristics features of fishes.

30. i) Why your doctor advises you to drink plenty of water?

ii) Differentiate: Kwashiorkar from Marasmus

31. List the medicinal importance of honey.

32. i) Find the mass of an object weighing 98N.

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

Part - IV

## Answer all the questions. Draw diagrams wherever necessary.

 $3 \times 7 = 21$ 

 Explain the construction and working of a hydrometer with diagram. (OR
Explain how does SONAR work.)

34. i) Explain the postulates of Bohr's atomic model.

ii) What are isotopes?

(OR)

i) Write any five uses of salts.

ii) Sulphuric acid is called "King of chemicals". Why is it called so?

35. Explain the structure of kidney and the steps involved in the formation of urine. (OR) Define mushroom culture. Explain the mushroom cultivation methods.