

Class : 9

Chennai district

20/12/24 AN

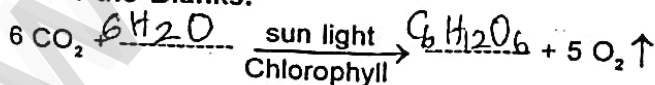
Register
Number**COMMON HALF YEARLY EXAMINATION - 2024 - 25****SCIENCE**

Time Allowed : 3.00 Hours]

[Max. Marks : 75
12x1= 12

I. Choose the correct answer.

- 1 Metric ton is equal to
a) 100 Quintals (b) 10 Quintals c) $1/10$ Quintals d) $1/100$ Quintals
 - Clouds float in atmosphere because of their low -----
(a) Density b) Pressure c) Velocity d) Mass
 - Which of the following converts electrical energy into mechanical energy?
(a) Motor b) Battery c) Generator d) Switch
 - A ray of light passes from one medium to another medium. Refraction takes place when angles of incidence is
a) 0° (b) 45° c) 90° d) 60°
 - is essential to perform separation by solvent extraction method.
(a) Separation funnel b) Filter paper c) Centrifuge machine d) Sieve
 - 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
 - Number of valence electrons in Carbon is
a) 2 (b) 4 c) 3 d) 5
 - Which of the following is a complex tissue?
a) Parenchyma b) Collenchyma (c) Xylem d) Sclerenchyma
 - Stomach of human beings mainly digests -----
a) Carbohydrates (b) Proteins c) Fat d) Sucrose
 - Which of the following is transmitted through air?
(a) Tuberculosis b) Meningitis c) Typhoid d) Cholera
 - Chlorophyll in a leaf is required for -----
(a) Photosynthesis b) Tropic Movement c) Transpiration d) Nastic movement
 - A presentation consist of many -----
a) Pages (b) Slide c) Place holders d) Messages
- II. Answer any seven (7) questions only Question no 22 is compulsory. 7x2=14
13. Differentiate Mass and Weight? Mass: Scalar, unit kg / weight: Vector, unit newton
 14. State Pascal's Law/ External Pressure on liquid is transmitted throughout liquid.
15. Match the following
- | | |
|-------------------------|-------------|
| a) Electric charge | - Ohm c |
| b) Potential difference | - ampere d |
| c) Resistance | - Coulomb a |
| d) Electric current | - Volt b |
16. Define Sublimation. Change of state from solid to gas directly
 17. Write a note on different types on Bonds Ionic, Covalent, Coordinate Hydrogen bond
 18. What are the uses of 'Plaster of Paris'. Plastering bones, make casts for statues.
 19. Fill in the Blanks.



Key prepared by Raji    राजी 

CH/9/Sci/1

20. Differentiate: Incisors and Canines. \rightarrow For cutting, 8 nos. for tearing, 4 in no.
21. Explain any two methods of Food preservation. Drying, Smoking
22. Calculate the amount of charge that would flow in 2 hours through an element of an electric bulb drawing a current 2.5 A. $I = q/t$ $t = 2 \times 60 \times 60 = 72000$ $q = It = 2.5 \times 7200 = 18000$ $7 \times 4 = 28$
- III. Answer any 7 questions: (Q.No.32 is compulsory)
23. i) Define Least count of any device. Smallest distance measured by instrument
ii) Define Velocity. Rate of change of displacement. Unit m/s
24. i) Name any two appliances which work under the Principle of heating effect of current.
ii) How are the Home Appliances connected in General, in series or Parallel. \rightarrow Parallel. Reason: each appliance can be operated independently.
25. i) What is the Speed of Light in Vacuum? 3×10^8 m/s
ii) What is meant by Magnification? Write its expression. \rightarrow height of image / height of obj; $m = \frac{v}{u}$
26. i) Match the following
- | | | | |
|---------------|---|---------------------------|---|
| a) Dalton | - | i) Hydrogen atom model | d |
| b) Chadwick | - | ii) Discovery of Nucleus | c |
| c) Rutherford | - | iii) First Atomic theory | a |
| d) Neils Bohr | - | iv) Plum Pudding model | b |
| | | v) Discovery the neutrons | b |
- ii) What are the limitations of Mendeleev's Periodic table?
27. i) Find the Oxidation number of the elements in the following compounds.
a) C in CO_2 = 4 b) Mn in MnSO_4 = 2
ii) Define Aqua Regia. Mixture of HCl & HNO_3 in ratio 3:1, dissolve Au.
28. i) True or False? (If False give the correct statement)
a) Fishes have two chambered heart. True b) What is Complex tissue? Made of more than one type of cell. Ex: Xylem, Phloem.
ii) Skin of amphibians are smooth and moist. x
29. Difference between tropic and Nastic Movement? any four?
30. Explain the Structure of Nephron. Functional unit of kidney
31. i) Match the following.
- | | | | |
|------------------|---|---|---|
| a) Swine flu | - | Human Papilloma virus | b |
| b) Genital warts | - | Human Immuno deficiency virus | c |
| c) AIDS | - | Mycobacterium | d |
| d) Tuberculosis | - | Influenza virus H ₁ N ₁ | a |
- ii) What is a Slide? \rightarrow single page of presentation
32. Write the Electronic configuration of 'K' and 'Cl'. $\text{K} (2, 8, 8, 1)$ $\text{Cl} = 17. (2, 8, 7)$
- IV. Answer all the question. 3x7=21
33. a) (i) Explain different types of Motion. (any five)
(ii) State the Laws of Flotation? (OR)
b) (i) Explain the principle, construction and working of a DC. Motor.
34. a) How is a mixture of common salt, Oil and Water separated? You can use a combination of different methods. (OR)
b) i) List down the differences between Ionic and covalent compounds.
ii) Sulphuric acid is called king of Chemicals. Why is it called so?
35. a) i) List out the differences between Mitosis and Meiosis.
ii) Why are Frogs said to be Amphibians.
(OR)
b) How are Vitamins useful to us? Tabulate the Sources, deficiency diseases and Symptoms of Fat Soluble Vitamins.