K. MOHANACHANDIRAN. M.Sc, B.Ed.,
PG ASST (PHYSICS)
RAMANIYAM SANKARA M.H.S.SCHOOL,
CHENGALPATTU DISTRICT
QUESTION PAPER

FIRST REVISION TEST - 2025

Standard - X
SCIENCE

Marks:75

Time: 3.00 hrs

Note : The Question Paper contains four parts.

Part - I

12X1=12

I. Answer all the Questions:

1. The eye defect Presbyopia can be corrected by
   a) Convex Lens   b) Cancave Lens   c) Convex mirror   **d) Bifocal Lenses**

2. Which of the following is correct
   a) Rate of change of charge is Electrical power
   b) Rate of change of charge is current.
   c) Rate of change of energy is current.
   d) Rate of change of current is charge

3. Proton - proton chain reaction is an example of _____
   a) Nuclear fission   b) α-decay   c) Nuclear fusion   d) β-decay

4. Which of the following has the smallest mass?
   a) 6.023×10^{23} atoms of He   **b) 1 atom of He**
   c) 2g of He   d) 1 mole atom of He

5. Deliguence is due to _____
   a) strong affinity to water   b) Less affinity to water
   c) strong hatred to water   d) Inertness to water

6. $C_2H_5OH + 3O_2$ _____ $2CO_2 + 3H_2O$ is a
   a) Reduction of ethonal   **b) Combustion of ethanol**
   c) Oxidation of ethanoic acid   d) Oxidation of ethanal

7. The pharyngeal ganglion is leech is a part of
   a) Excretory system   **b) Nervous system**
   c) Reproductive system   d) Respiratory system

8. Nerve cells do not possess.
   a) neurilemma   **b) Sarcolemma**   c) axon   d) dendrites

9. Which one of the following is an IUCD?
   a) Copper - T   b) Oral pills   c) Diaphragam   d) Tubectomy

10. Paleontologists deal with
    a) Embryological evidences   **b) fossil evidence**
    c) Vestigial organ evidences   d) All the above

11. Polyphagia is a condition seen in _____
    a) obesity   **b) Diabetes mellitus**   c) AIDS   d) Diabetes insipidus

12. Which is used to edit programs?
    a) Inkscape   **b) Script editor**   c) stage   d) sprite

Part - II

7x2=14

II. Note: Answer any seven Questions. (Question 22 is compulsory)

13. State the principle of moments.
14. Distinguish between ideal gas and real gas.
15. Why does an empty vessel produce more sound than a filled one?
16. Give any three uses of aluminium?

17. **True or false** (If false give the correct statement)
    Silver metal can displace hydrogen gas from nitric acid.
18. Draw and label the structure of Oxysomes.
19. What is the role of parathormone?
20. Distinguish between somatic gene Therapy and germ line gene theraphy?
21. What are the agents of soil erosion?
22. Calculation of molecular mass $H_2SO_4 = 2(H) + 1(S) + 4(O) = 2(1) + 1(32) + 4(16)$
                                    $= 2 + 32 + 64 = 98g.$ 7x4=28

Part III

III. Note: Answer seven Questions. (Question 32 is compulsory)

23. a) What is power of accomodation of eye?
    b) **Fill in the blanks**
       i) To produce a displacement _____ is required.
       ii) The temperature and heat are _____ quantities.
24. Differentiate the eye defects: Myopia and Hypermetropia.
25. a) What are the medical application of echo?
    b) What is steller energy?
26. Give the salient features of "Modern Atomic theory".
27. a) Define volume percentage?
    b) What is called homologous series?
28. Enumerate the function of Blood?
29. a) **Match the following:**
       1) Nissil's granules   -   forebrain
       2) Hypothalamus   -   Peripheral Nervous System
       3) Cerebellum   -   Cyton
       4) Schwann cell   -   Hind brain
    b) Define triple fusion.
30. How do you differentiate homologous organs from analogous organs?
31. a) Expand the following abbreviations.
       i) NIDDM   ii) BARC
    b) What is bolting? How can it be induced artificially?
32. Calculate the current and the resistance of a 100w, 200v electric bulb in an Electric
    circuit. $I = P/V = 100W/200V = 0.5A.$
    $R = V/I = 200V/0.5A = 400$ ohm

Part IV

IV. Note: Answer all the Question. Draw diagram wherever necessary: 3x7=21

33. i) a) Describe the rocket propulsion.   b) Define one calorie?   (OR)
    ii) a) Explain the process of controlled and uncontrolled chain reaction?
        b) Name three animals, which can hear ultrasonic vibration.
34. i) a) How does PH play an important role in everyday life?
        b) How is ethanonic acid prepared from ethanol give the chemical equation. (OR)
    ii) a) What happens when $MgSO_4.7H_2O$ is heated? Write the appropriate equation.
        b) Calculate the number of moles in 27g of Al. Mole = (Given Mass / Atomic Mass)
                                    $= 27g/27 = 1$ mole.
35. i) a) How does Locomotion takes place in Leech?
        b) Where does photo synthesis occur?
        c) Write the name of a synthetic auxin.   (OR)
    ii) a) Discuss the importance of biotechnology in the field of medicine (any four points)
        b) What are okazaki fragments?
        c) Blood cancer is called _____

*** / ***