

RS-2

SECOND REVISION TEST - 2025**10** - Std**SCIENCE**

--	--	--	--	--

Time : 3.00 Hrs

Salem (D.T)

Marks : 75

PART - I**Note: (i) Answer All the questions.**

12 X 1 = 12

(ii) Choose the most appropriate answer from the given four alternatives and write option code and the corresponding answer.

- One kilogram force equals to.
 - 9.8 dyne
 - 9.8×10^4 N
 - 98×10^4 dyne
 - 980 dyne
- If a substance is heated or cooled, the linear expansion occurs along the axis of
 - X or -X
 - Y or -Y
 - both (a) and (b)
 - (a) or (b)
- In which of the following, no change in mass number of the daughter nuclei takes place
 - α decay
 - β decay
 - σ decay
 - neutron decay
 - (i) is correct
 - (ii) and (iii) are correct
 - (i) & (iv) are correct
 - (ii) & (iv) are correct.
- When pressure is increased at constant temperature the solubility of gases in liquid _____.
 - No change
 - increases
 - decreases
 - no reaction
- The chemical equation $\text{Na}_2\text{SO}_4(\text{aq}) + \text{BaCl}_2(\text{aq}) \rightarrow \text{BaSO}_4(\text{s}) + 2\text{NaCl}(\text{aq})$ represents which of the following types of reaction?
 - Neutralisation
 - Combustion
 - Precipitation
 - Single displacement
- The IUPAC name of an organic compound is 3-Methyl butan-1-ol. What type of compound it is?
 - Aldehyde
 - Carboxylic acid
 - Ketone
 - Alcohol
- Oxygen is produced at what point during photosynthesis ?
 - When ATP is converted to ADP
 - When CO_2 is fixed
 - When H_2O is splitted
 - All of these
- Which is the correct sequence of blood flow
 - ventricle \rightarrow atrium \rightarrow vein \rightarrow arteries
 - atrium \rightarrow ventricle \rightarrow veins \rightarrow arteries
 - atrium \rightarrow ventricle \rightarrow arteries \rightarrow vein
 - ventricles \rightarrow vein \rightarrow atrium \rightarrow arteries
- Which nervous band connects the two cerebral hemispheres of brain?
 - thalamus
 - hypothalamus
 - corpus callosum
 - pons
- The large elongated cells that provide nutrition to developing sperms are
 - Primary germ cells
 - Sertoli cells
 - Leydig cells
 - Spermatogonia
- Where does alcohol effect immediately after drinking?
 - Eyes
 - Auditory region
 - Liver
 - Central nervous system
- All files are stored in the _____.
 - Folder
 - box
 - Paint
 - scanner

PART - II**Note: Answer any seven questions. Question No.22 is compulsory.**

- What is power of accommodation of eye? 7 X 2 = 14
- Fill in the blanks**
 - The ratio of the potential difference to the current is known as _____.
 - The power of an electric device is a product of _____ and _____.
- True or False: (If false give the correct statement)**
 - Noble gases are Diatomic.
 - Molar mass of CO_2 is 42g.

16. A is a silvery white metal. A combines with O_2 to form B at $800^\circ C$, the alloy of A is used in making the aircraft. Find A and B.
17. What is aqueous and non-aqueous solution? Give an example.
18. How does leech suck blood from the host?



19. Identify the parts A, B, C and D in the given figure.

20. Differentiate between out breeding and inbreeding.

21. **Analogy type questions.** Identify the first words and their relationship and suggest a suitable word for the fourth blank.

(i) Communicable: AIDS: Non communicable: _____

(ii) Chemotherapy: Chemicals: Radiation therapy: _____

22. Calculate the velocity of a moving body of mass 5 kg whose linear momentum is 2.5 kg m s^{-1} .

PART - III

Note: Answer any seven questions. Question No.32 is compulsory.

23. Distinguish between ideal gas and real gas. $7 \times 4 = 28$
24. (i) State Ohm's law.
(ii) Why is tungsten metal used in bulbs, but not in fuse wires?
25. (i) Give the function of control rods in a nuclear reactor.
(ii) Mr. Ramu is working as an X - ray technician in a hospital. But, he does not wear the lead aprons. What suggestion will you give to Mr. Ramu?
26. Consolidate the major differences between atoms and molecules.
27. Explain the mechanism of cleansing action of soap.
28. Why should the light dependent reaction occur before the light independent reaction?
29. (i) Write the characteristics of insect pollinated flowers.
(ii) Why is the teeth of rabbit called heterodont?
30. Explain the structure of a chromosome.
31. (i) What are psychotropic drugs ?
(ii) How does insulin deficiency occur?
32. (i) Calculate % of S in H_2SO_4
(ii) A solution has a pOH of 11.76. What is the pH of this solution?

PART - IV

Note: Answer all the questions. Draw diagrams wherever necessary.

33. (a) (i) State Newton's laws of motion? $3 \times 7 = 21$
(ii) Distinguish between the resistivity and conductivity of a conductor. (OR)
(b) (i) What is an echo?
(ii) State two conditions necessary for hearing an echo.
(iii) What are the medical applications of echo?
34. (a) (i) What is chemical equilibrium? What are its characteristics?
(ii) Define combination reaction. Give one example for an exothermic combination reaction. (OR) (b) (i) How is ethanol manufactured from sugarcane?
(ii) A hot saturated solution of copper sulphate forms crystals as it cools. Why?
35. (a) (i) Why are leucocytes classified as granulocytes and agranulocytes? Name each cell and mention its functions.
(ii) The degenerated wing of a kiwi is an acquired character. Why is it an acquired character? (OR) (b) (i) With a neat labelled diagram describe the parts of a typical angiospermic ovule. (ii) How is a cancer cell different from a normal cell?