

SIR CV RAMAN COACHING CENTRE – IDSAPPADI,SALEM

X SCIENCE REVISION MODEL QUESTION PAPER – 2024

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TOTAL MARK : 75 M ,, TIME : 3 HRS

SECTION – A (12 X 1 = 12M)

Choose the correct best answer ;

1. Inertia of a body depends on

- a) weight of the object b) acceleration due to gravity of the planet
c) mass of the object d) Both a & b

2. If a substance is heated or cooled, the linear expansion occurs along the axis of

- a) X or –X b) Y or –Y c) both (a) and (b) d) (a) or (b)

3. If a sound wave travels with a frequency of 1.25×10^4 Hz at 344 m/s, the wavelength will be

- a) 27.52 m b) 275.2 m c) 0.02752 m d) 2.752 m

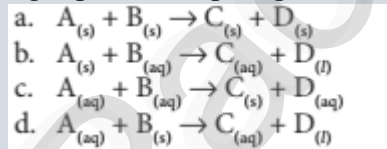
4. Which of the following have inert gases 2 electrons in the outermost shell.

- a) He b) Ne c) Ar d) Kr

5. When pressure is increased at constant temperature the solubility of gases in liquid _____

- a. No change b. increases c. decreases d. no reaction

6. Which of the following represents a precipitation reaction?



7. Kreb's cycle takes place in

- a) chloroplast b) mitochondrial matrix c) stomata d) inner mitochondrial membrane

8. Which one is referred as "Master Gland"?

- a) Pineal gland b) Pituitary gland c) Thyroid gland d) Adrenal gland

9. rDNA is a

- a) vector DNA b) Circular DNA c) Recombinant of vector DNA and desired DNA
d) satellite DNA

10. Root hairs are

- a) cortical cell b) projection of epidermal cell c) unicellular d) both b and c

11. (IBWL) is means

- a) .Indian Board for Wild Life b) indian board for word life c) In board for Wild life
d) all of the above

12. root word of hydrocarbons “ non ‘
 a) 7 b) 5 c) 3 d) 9

SECTION -, B (7 X 2 = 14 M)

ANSWER ANY SEVEN QUESTIONS COMPULSORY Q.NO ; 22

13. Define dispersion of light
 14. State Boyle's law
 15. Define electric potential
 16. Mention two cases in which there is no Doppler effect in sound?
 17. Define critical mass.
 18. Find the percentage of nitrogen in ammonia.
 19. Give an example each i) gas in liquid ii) solid in liquid iii) solid in solid iv) gas in gas
 20. When an aqueous solution of potassium chloride is added to an aqueous solution of silver nitrate, a white precipitate is formed. Give the chemical equation of this reaction.
 21. Give the name of wheat variety having higher dietary fibre and protein.
 22. How many electrons are passing per second in a circuit in which there is a current of 5 A?

SECTION -, C (7 X 4 = 28 M)

ANSWER ANY SEVEN QUESTIONS COMPULSORY Q.NO ; 32

23. State Newton's laws of motion?
 24. List any five properties of light
 25. (i) What is 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. Write notes on various factors affecting solubility
 27. What is a chemical equilibrium? What are its characteristics?
 28. Classify the following compounds based on the pattern of carbon chain and give their structural formula: (i) Propane (ii) Benzene (iii) Cyclobutane (iv) Furan
 29. Differentiate the following a) Monocot root and Dicot root b) Aerobic and Anaerobic respiration
 30. Explain the male reproductive system of rabbit with a labelled diagram
 31. What is transpiration? Give the importance of transpiration.
 32. With a neat labelled diagram describe the parts of a typical angiospermic ovule.

SECTION -, D (3 X 7 = 21 M)

ANSWER All QUESTIONS ;

- 33.a) Compare the properties of alpha, beta and gamma radiations
 (or)
 b) a) State Joule's law of heating. b) An alloy of nickel and chromium is used as the heating element. Why? c) How does a fuse wire protect electrical appliances?
 34 a) Derive the relationship between Relative molecular mass and Vapour density.
 (or)
 c) How many grams are there in the following? (i). 2 moles of hydrogen molecule, H₂ (ii). 3 moles of chlorine molecule, Cl₂ (iii). 5 moles of sulphur molecule, S₈ (iv). 4 moles of phosphorous molecule, P₄

35. a) 'A' is a cylindrical structure that begins from the lower end of medulla and extend downwards. It is enclosed in bony cage 'B' and covered by membranes 'C'. As many as 'D' pairs of nerves arise from the structure 'A'. (i) What is A? (ii) Name (a) bony cage 'B' and (b) membranes 'C' (iii) How much is D?

(or)

b) What would be expected to happen if (a.) Gibberellin is applied to rice seedlings. (b). A rotten fruit gets mixed with unripe fruits.(c.) When cytokinin is not added to culture medium.

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