Note: i) Answer all the questions.

Time: 3.00 hrs

# **THIRD REVISION TEST - 2025**

THEND

Standard - X SCIENCE

Part - I

Marks:75

ii) Choose the most appropriate answer from the given four alternatives and write the option code and the corresponding answer. 12X1=12 1. Which is formed during anaerobic respiration? a) Carbohydrate b) Ethyl alcohol c) Acetyl CoA d) Pyruvate Heart of heart is called a) SA node b) AV node c) Purkinje Fibres d) Bundle of HIS 3. Which one is referred as 'Master Gland'? a) Pineal Gland b) Pitutitary Gland c) Thyroid Gland d) Adrenal Gland 4. The centromere is found at the Centre of the \_\_\_\_\_ chromosome. a) Telo centric b) Meta Centric c) Sub Meta Centric d) Aero centric 5. The miracle rice which saved millions of lives and celebrated its 50th Birthday is a) IR 8 b) IR 24 c) Atomita 2 d) Ponni 6. An inexhaustible resource is a) Wind power b) soil fertility c) wild life d) All the above 7. Newtons III low is applicable to a) for a body at rest b) for a body in motion d) only for bodies with equal masses c) both a and b 8. If a substance is heated or cooled, the change in mass of that substance is a) positive b) negative c) zero d) none of the above 9. Kilowatt hour is the unit of c) Electrical Energy a) resistivity b) conductivity d) Electrical Power 10. Which of the following is a triatomic molecule? a) Glucose b) Helium c) Carbon dioxide d) Hydrogen 11. Which of the following is a universal solvent? a) Acetone b) Benzene c) Water d) Alcohol 12. Rectified spirit is an aqueous solution which contains of ethanol. a) 95.5% b) 75.5% c) 55.5% d) 45.5%

#### Part - II

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

7x2 = 14

- 13. Differentiate Mass and Weight.
- 14. What is refractive index?
- 15. State Boyle's law.
- 16. Define atomicity
- 17. List out the parasitic adaptations in Leech?
- 18. Name the parts of the Hind Brain.
- 19. Write the characteristics of the insect pollinated flowers.

**(2)** 

X Science

- 20. Give the name of wheat variety having higher dietry fibre and protein.
- 21. Write a short note on editor and its main parts.
- 22. Calculate the resistance of a conductor through which a current of 2A passes, when the potential difference between its ends is 30V.

#### Part - III

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

7x4 = 28

- 23. State Newton's law of motion.
- 24. Differentiate the eye defect Myopia and Hyper metropia.
- 25. a) Name three animals which can hear ultrasonic vibrations.
  - b) What is the frequency of auditory sound?
- 26. a) What is rust? Give the equation for rustification.
  - b) State two conditions necessary for rusting of iron.
- 27. What is called homologous series? Give any three of its characteristics?
- 28. a) What is photosynthesis and where in a cell does it occur?
  - b) What is respiratory Quotient?
- 29. Enumerate the functions of Blood?
- 30. How will you prevent soil erosion?
- 31. Explain the structure of chromosomes?
- 32. A solution is prepared by disssolving
  - a) 45 gm of sugar in 180 gm of water. Calculate the mass percentage of the solute?
  - b) Calculate the P<sup>H</sup> of 0.01M of HNO<sub>3</sub>?

## Part - IV

# Note: Answer all the Question. Draw a diagram wherever necessary:

3x7=2

- 33. a) i) What is meant by electric current?
  - ii) Name and define its unit.?
  - iii) Which instrument is used to measure the electric current? How should it be connected in a circuit?

# (OR)

- b) i) Compare the properties of alpha, beta, gamma radiations?
  - ii) Give the functions of control rods in a nuclear reactor?
- 34. a) i) Write the different types of istopes of Oxygen and its percentage?
  - ii) Calculate the percentage of sulphur in H<sub>2</sub>SO<sub>4</sub>.
  - iii) In what way hyroscopic substances differ from deliquescent substances.

#### (OR)

- b) i) Explain the types of double displacement reactions with examples.
  - ii) Differentiate reversible and irreversible reactions.
  - iii) Arrive at systematically the IUPAC name of the compound CH<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>OH.
- 35. a) i) What are parthenocarpic fruits? Give an example.
  - ii) Why are thyroid hormones referred as personality hormones?
  - iii) Natural selection is the driving force for evolution. Why?

#### (OR)

- b) i) Differentiate between outbreeding and inbreeding?
  - ii) Suggest measures to overcome the problems of an alcoholic.

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