

Class : 10Register
Number**FIRST REVISION EXAMINATION - JANUARY - 2025**

Time Allowed : 3.00 Hours]

**SCIENCE
PART - I**

[Max. Marks : 75]

12x1=12

- I. Choose the correct answer.
- If the Earth shrinks to 50% of its real radius its mass remaining the same, the weight of a body on the earth will
 - Decrease by 50%
 - Increase by 50%
 - Decrease by 25%
 - Increase by 300%
 - In Myopic eye, the image of the object is formed
 - Behind the Retina
 - On the Retina
 - In front of the Retina
 - On the blind Spot
 - The Value of Boltzmann constant is
 - $1.381 \times 10^{-23} \text{ JK}^{-1}$
 - $1.381 \times 10^{23} \text{ JK}^{-1}$
 - $1.8 \times 10^{-23} \text{ JK}^{-1}$
 - $8.31 \text{ J mol}^{-1} \text{ K}^{-1}$
 - Kilowatt is the unit for
 - Resistivity
 - Conductivity
 - Electrical Energy
 - Electrical power
 - Which of the Following is a Poly atomic molecule?
 - Glucose
 - helium
 - Carbondioxide
 - Hydrogen
 - is an important metal to form amalgam
 - Ag
 - Hg
 - Mg
 - Al
 - Which of the following is the Universal Solvent?
 - Acetone
 - Benzene
 - Water
 - Alcohol
 - Which is formed during Anaerobic Respiration.
 - Carbohydrate
 - Ethyl Alcohol
 - Acetyl COA
 - Pyruvate
 - Which is called as Heart of Heart?
 - SA node
 - AV node
 - Purkinje fibre
 - Bundle of His
 - The Hormone which has positive effect on apical dominance is
 - Cytokinin
 - Auxin
 - Gibberellin
 - Ethylene
 - What is true of Gametes?
 - they are Diploid
 - They give rise to Gonads
 - They produce hormones
 - They are formed from Gonads
 - The region of the Chromosome where the Spindle fibres get attached during cell division?
 - Chromoreme
 - Centrosome
 - Centromere
 - Chromonema

PART - II

II. Answer any seven questions. Q.No. 22 is compulsory.

7x2=14

- Classify the types of force based on Their application?
- Distinguish between linear and Arial expansion?
- How many moles of Calcium Carbonate and How many moles of CO_2 are involved in the Following Reaction?

$$\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$$
- What is Binary Solution?
- Write a Dental formula of Rabbit?

CH / 10 / Sci / 1

CHENNAI DISTRICT

Kindly Send Me Your Questions & Answer Keys to us: padasalai.net@gmail.com

18. Match:
- | | | |
|---------------------|---|---------------------------|
| a) Nissl's Granules | - | Forebrain |
| b) Hypothalamus | - | Peripheral Nervous System |
| c) Cerebellum | - | Cyton |
| d) Schwann Cell | - | Hind Brain |

19. Fill in the Blanks.

- a) _____ Causes Stomatal Closure.
 b) Decreased Secretion of Thyroid hormones in the Children leads to _____
20. Write the Characteristics of Insect Pollinated flowers?
21. What do you mean by Phenotype and Genotypes?
22. A piece of Wire of Resistance $10\ \Omega$ is drawn out so that its length is increased to three times its Original length. Calculate the new Resistance

PART - III

III. Answer any seven questions. Q.No: 32 is compulsory.

7x4 = 28

23. Describe Rocket Propulsion?
24. a) Draw a ray diagram to show the image formed by a convex lens when the object is placed between F and 2F.
 b) List any two Properties of Light.
25. List the merits of LED bulb.
26. What is Rust? give the Equation for formation of Rust?
27. a) Draw and Label the Structure of Oxyosomes.
 b) Write the Reaction for Photosynthesis.
28. a) Differentiate between Systole and Diastole. Explain the Conduction of Heart Beat.
29. With a Neat labelled diagram explain the Structure of a Neuron.
30. Write the Physiological effects of Gibberellins.
31. a) What are Allosomes?
 b) Say True or False? If False correct the Statement.
 i) Down's Syndrome is the Genetic condition with 45 Chromosomes?
 ii) A typical Mendelian Dihybrid ratio of F_2 generation is 3:1
32. 16 grams of NaOH is dissolved in 100 g of Water at 25°C to form a Saturated Solution. Find the Mass percentage of Solute and Solvent?

PART-IV

IV. Answer all the questions in detail.

3x7=21

33. a) State and Prove law of conservation of Momentum. (OR)
 b) Derive the Ideal Gas equation?
34. a) i) Write four Differences between atoms and Molecules. (OR)
 ii) Write any three Postulates of Modern Atomic theory.
 b) Explain Smelting Process.
35. a) How is the Circulatory system designed in leech to compensate the heart Structure. (OR)
 b) What are the Phases of Menstrual cycle? Indicate the Changes in the Ovary and Uterus?

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