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RS-1

FIRST REVISION TEST - 2025

10 - Std **SCIENCE**

Time : 3.00 Hours 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.

1. Impulse is equals to
   a) rate of change of momentum b) rate of force and time
   c) change of momentum d) rate of change of mass
2. If VB, VG, VR be the velocity of blue, green and red light respectively in a glass prism, then which of the following statement gives the correct relation?
   a) VB = VG = VR b) VB > VG >VR c) VB < VG < VR d) VB < VG > VR
3. Kilowatt hour is the unit of
   a) resistivity b) conductivity c) electrical energy d) electrical power
4. A 25% alcohol solution means
   a) 25 ml alcohol in 100 ml of water b) 25 ml alcohol in 25 ml of water
   c) 25 ml alcohol in 75 ml of water d) 75 ml alcohol in 25 ml of water
5. $H_{2(g)} + Cl_{29(g)} \rightarrow 2HCl_{(g)}$
   (a) Decomposition Reaction (b) Combination Reaction
   (c) Single Displacement Reaction (d) Double Displacement Reaction
6. $C_2H_5OH + 3O_2 \rightarrow 2CO_2 + 3H_2O$ is a:
   (a) Reduction of ethanol (b) Combustion of ethanol
   (c) Oxidation of ethanoic acid (d) Oxidation of ethanol
7. The segments of leech are known as
   a) Metameres (somites) b) Proglottids c) Strobila d) All the above
8. Vomiting centre is located in
   (a) medulla oblongata (b) stomach (c) cerebrum (d) hypothalamus
9. Male gametes in angiosperms are formed by the division of _____ .
   a) Generative cell b) Vegetative cell c) Microspore mother cell d) Microspore
10. In a hexaploid wheat (2n = 6 x = 42) the haploid (n) and the basic(x) number o chromosomes respectively are
    a) n = 7 and x = 21 b) n = 21 and x = 21
    c) n = 7 and x = 7 d) n = 21 and x = 7
11. Metastasis is associated with
    a) Malignant tumour b) Benign tumour
    c) Both (a) and (b) d) Crown gall tumour
12. Which is used to edit programs?
    a) Inkscape b) script editor c) stage d) sprite

PART – II

Note: Answer **any seven** questions. Question No.**22 is compulsory.** 7 X 2 = 14

13. Define the unit of current.
14. Match the following.

Column I		Column II	
(a)	Co - 60	(i)	Age of fossil
(b)	I - 131	(ii)	Function of Heart
(c)	Na -11	(iii)	Leukemia
(d)	C - 14	(iv)	Thyroid disease

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5. 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.
6. Name the simplest ketone and give its structural formula.
7. What are heart sounds? How are they produced?
8. Name the parts of the hindbrain.
9. Identify the parts A, B, C and D.

0. Fill in the blanks.
(i) The characters developed by the animals during their life time, in response to the environmental changes are called .....
(ii) The forelimb of bat and human are examples of ..... organs.
1. Name three improved characteristics of wheat that helped India to achieve high productivity.
2. A solution is prepared by dissolving 45 g of sugar in 180 g of water. Calculate the mass percentage of solute.

PART – III

Note: Answer **any seven** questions. Question No.**32 is compulsory.** 7 X 4 = 28

3. What are the types of inertia? Give an example for each type.
4. (i) Explain why the ceilings of concert halls are curved.
(ii) Mention two cases in which there is no Doppler effect in sound?
5. (i) What is stellar energy?
(ii) Give any two uses of radio isotopes in the field of agriculture?
6. How does pH play an important role in everyday life?
7. (i) Give an example each
1. gas in liquid; 2. solid in liquid; 3. solid in solid; 4. gas in gas.
(ii) The aquatic animals live more in a cold region. Why?
8. (i) Differentiate - Aerobic and Anaerobic respiration (Any 3 only)
(ii) Write the name of the confirmatory test for AIDS.
9. Enumerate the importance of forest.
0. Write the physiological effects of gibberellins.
1. (i) What do you understand by the term phenotype and genotype?
(ii) What are allosomes?
2. An electric iron consumes energy at the rate of 420 W when heating is at the maximum rate and 180 W when heating is at the minimum rate. The applied voltage is 220 V. What is the current in each case?

PART - IV

Note: Answer all the questions. Draw diagrams wherever necessary. 3X7=21

3. (a) (i) Why a spanner with a long handle is preferred to tighten screws in heavy vehicles? (ii) Describe rocket propulsion. (iii) Write the expansion for LED. ***(OR)***
(b) i) List any five properties of light? ii) State Snell's law.
4. (a) (i) Give the salient features of "Modern atomic theory".
(ii) Find the percentage of nitrogen in ammonia. ***(OR)***
(b) (i) Differentiate soaps and detergents.
(ii) What are the metals used in the Duralumin alloy?
5. (a) (i) Classify neurons based on its structure.
(ii) Write the dental formula of rabbit. ***(OR)***
(b) (i) What are the effects of hybrid vigour in animals.
(ii) Why is euploidy considered to be advantageous to both plants and animals?

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