

FIRST REVISION TEST - 2024 <small>www.Padasalai.Net. www.Tib TnpSC.com of 2.</small>	10 - STD
SCIENCE	Marks 75 Time 3.00 Hrs.

12 x 1 = 12

I. Choose the Correct answer.

1. Magnification of a convex lens is
 a) Positive b) Negative c) either Positive or Negative d) Zero
2. SI unit of resistance is
 a) mho b) Joule c) Ohm d) Ohm meter
3. Which of the following have inert gases 2 electrons in the outermost shell
 a) He b) Ne c) Ar d) Kr
4. aprons are used to protect us from gamma radiations.
 a) Lead oxide b) Iron c) Lead d) Aluminium
5. TFM in soaps represents content in soap.
 a) mineral b) vitamin c) fatty acid d) carbohydroate
6. Cancer is derived from latin word
 a) Scorpion b) Crab c) Mosquito d) Protozoa
7. Root hairs are
 a) cortical cell b) projection of epidermal cell
 c) unicellular d) both b and c
8. is a nice variety produced by mutation breeding that grows well in saline soil.
 a) Sharbati sonora b) Atomita - 2 c) Pursa Gaurav d) Himgiri
9. According to mendel alleles have the following character.
 a) Pair of genes b) Responsible for character
 c) Production of gametes d) Recessive factors
10. The plant which propagates with the help of its leaves is
 a) onion b) Neem c) Ginger d) Bryophyllum
11. Global warming will cause
 a) raise in level of oceans b) melting of glaciers
 c) sinking of islands d) all of these
12. Where does alcohol effect immediately after drinking?
 a) Eyes b) Auditory region c) Liver d) Central nervous system

II. Answer any 7 of the following. Q.No. 22 is compulsory **7 x 2 = 14**

13. Differentiate mass and weight
14. State Boyle's law.
15. Write any two applications of Avogadro's hypothesis.
16. What is amalgam? Give examples.
17. Write the overall reaction of photosynthesis.
18. Differentiate between systole and diastole.
19. Draw and label the structure of Thyroid gland.

20. Match the following :

- a) Bio gas - Renewable energy
b) CFL bulbs - CO_2 |
c) Wind - Non-Renewable energy
d) Natural gas - energy saving

21. The degenerated wing of a kiwi is an acquired character. Why is it an acquired character?

22. A source producing a sound of frequency 500Hz. is moving towards a static listener with a velocity of 30ms^{-1} . The speed of the sound is 330ms^{-1} . What will be the frequency heard by listener?

III. Answer any 7 of the following. Q.No. 32 is compulsory

7 x 4 = 28

23. Describe rocket propulsion.

24. Explain the construction and working of a compound microscope.

25. Explain about domestic electric circuits.

26. Derive the relationship between Relative molecular mass and vapour density.

27. Write notes on various factors affecting solubility.

28. Write a short note on mesophyll.

29. Why did Mendel select pea plant for his experiments?

30. Discuss the importance of biotechnology in the field of medicine.

31. How is a cancer cell different from a normal cell?

32. An organic compound 'A' is widely used as a preservative and has the molecular formula $\text{C}_2\text{H}_4\text{O}_2$. This compound reacts with ethanol to form a sweet smelling compound 'B'.

i) Identify the compound 'A'

ii) Write the chemical equation for its reaction with ethanol to form compound 'B'.

II. Answer all Questions

3 x 7 = 21

33. a) Deduce the equation of a force using Newton's second law of motion.

(OR)

b) i) State Soddy and Fajan's displacement law.

ii) Differentiate Nuclear fission and Nuclear fusion.

iii) Cell phone towers should be placed far away from the residential area-why?

34. a) How does pH play an important role in everyday life?

(OR)

b) How is ethanol manufactured from sugarcane?

35. a) i) With a neat labelled diagram, Describe the parts of a typical angiospermic ovule.

ii) What will you do to prevent leaf fall and fruit drop in plants?

(OR)

i) What precautions can be taken for preventing heart disease?

ii) State the applications of DNA fingerprinting technique.