SHRI KRISHNA ACADEMY

NEET,JEE AND BOARD EXAM COACHING CENTRE
SBM SCHOOL CAMPUS,TRICHY MAIN ROAD,NAMAKKAL
CELL:9965531727-9443231727

Std : X	SCIENCE	Time : 2.30 Hrs
Sub: Science	FULL TEST-1	Marks : 75

I. Choose the correct answer : 12X1=12

1. Newton's III law is applicable
   a) for a body is at rest   b) for a body in motion
   c) both a & b   d) only for bodies with equal masses

2. Then SI unit of power is
   a) joule   b) ampere   c) watt   d) ohm

3. Henry Becquerel discovered ------ in 1896.
   a) nucleus   b) atom   c) isotopes   d) radioactivity

4. Which of the following is a triatomic molecule?
   a. Glucose   b.Helium   c. Carbon dioxide   d. Hydrogen

5. The number of periods and groups in the periodic table are____.
   a) 6,16   b) 7,17   c) 8,18   d) 7,18

6. Solution which are made of one solute and solvent are called_____
   (a)solution   (b)binary solution   (c)ternary solution   (d)tetranary solutions

7. The wall of human heart is made of
   a) Endocardium   b) Epicardium   c) Myocardium   d) All of the above

8. Which type of cancer affects lymph nodes and spleen?
   a) Carcinoma   b) Sarcoma   c) Leukemia   d) Lymphoma

9. Which is formed during anaerobic respiration
   a)Carbohydrate   b) Ethyl alcohol   c)Acetyl CoA   d) Pyruvate

10. Casparian strips are present in the _____ of the root.
    a)cortex   b) pith   c)pericycle   d) endodermis

11. The saft finely stratified sedimentary rocks refers to
    a)Shale   b)Petroleum   c) Methane   d) Coal

12. All files are stored in the _____
    a)Folder   b)box   c)Pai   d)scanner

PART-II

II. Answer any seven question(Q.NO.22 is compulsory) 7X2=14

13. Differentiate mass and weight.

14. What is refractive index?

15. What is the minimum distance needed for an echo?

16. Define combination reaction. Give one example for an exothermic combination reaction.

17. Name the simplest ketone and give its structural formula.

18. How does leech suck blood from the host?

19. What are synthetic auxins? Give examples.
20. Identify the parts A, B, C and D

21. The degenerated wing of a kiwi is an acquired character. Why is it an acquired character?
22. Calculate the resistance of a conductor through which a current of 2 A passes, when the potential difference between its ends is 30 V

PART-III

III. Answer any seven question.(Q.NO.32 is compulsory)   7X4=28

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

24. a) State the law of volume

   b) What is the role of the earth wire in domestic circuits?

25. a) An electric heater of resistance 5 Ω is connected to an electric source. If a current of 6 A flows through the heater, then find the amount of heat produced in 5 minutes.

   b) What is a longitudinal wave?

26. Calculate the number of water molecule present in one drop of water which weighs 0.18 g.

27. Metal A belongs to period 3 and group 13. A in red hot condition reacts with steam to form B. A with strong alkali forms C. Find A,B and C with reactions

28. How nerve impulses are transferred from one neuron to next neuron?

29. a)Pure-bred tall pea plants are first crossed with pure-bred dwarf pea plants The pea plants obtained in F_1 generation are then cross-bred to produce F_2 generation of pea plants.

   a.   What do the plants of F_1 generation look like?

   b   What is the ratio of tall plants to dwarf plants in F_2 generation?

   c.   Which type of plants were missing in F1 generation but reappeared in F2 generation?

   b) Who discovered Rh factor? Why was it named so?

30. Differentiate the following

   a)Monocot root and Dicot root

   b)Aerobic and Anaerobic respiration

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

   ii) Name two maize hybrids rich in amino acid lysine

32. The hydroxide ion concentration of a solution is 1×10^{-11} M. What is the pH of the solution?

PART-IV

IV. ANSWER ALL QUESTION   **3X7=21**

33. i) What is co-efficient of real expansion?

   ii) If you keep ice at 0° C and water at 0°C in either of your hands, in which hand you will feel more chillness? Why

<div align="center">(OR)</div>

a) A sound wave has a frequency of 200 Hz and a speed of $400ms^{-1}$ in a medium. Find the wavelength of the sound wave.

b) A ball of mass 1kg moving with a speed of $10ms^{-1}$ rebounds after a perfect elastic collision with the floor. Calculate the change in linear momentum of the ball.

34. a) Give the salient features of "Modern atomic theory".

<div align="center">(OR)</div>

  b) Write notes on   i) saturated solution   ii) unsaturated solution

35. a) i)Write the differences between endocrine and exocrine gland.

   ii)Define triple fusion

   iii) Enumerate the importance of forest

  b)i) List out the parasitic adaptations in leech.

    ii)Natural selection is a driving force for evolution. How?