MAYILADUTHURAI - Dt

C **FIRST MID - TERM TEST - 2022**

Time: 1.30 hrs. **Standard - VII** Reg.No. ☐☐☐☐☐☐

SCIENCE *Marks: 50*
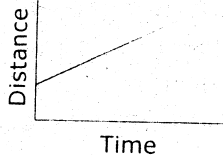
I. Choose the best Answers: **15×1=15**

1. Two spheres have mass and volume in the ratio 2 : 1 the ratio of their density is
   a) 1 : 2   b) 2 : 1   c) 4 : 1   d) 1 : 4

2. SI unit of density is
   a) Kg/m^2 b) Kg/m^3 c) kg/m d) g/m^3

3. Which of the following is a derived quantity?
   a) mass   b) time   c) area   d) length

4. Light year is the unit of
   a) distance   b) time   c) density   d) Both length and time

5. A particle is moving in a circular path of radius r. The displacement after half a circle would be
   a) zero   b) R   c) 2r   d) r/2

6. From the given v.t graph it can be inferred that an object is
   a) in uniform motion
   b) at rest
   c) in non-uniform motion
   d) moving with uniform accelerations

7. The shortest distance between two places is
   a) Displacement   b) Distance   c) Speed   d) acceleration

8. The basic unit of matter is _____.
   a) element   b) atom   c) molecule   d) electron

9. The sub-atomic particle which revolves around the nucleus is _____.
   a) atom   b) neutron   c) electron   d) Proton

10. _____ is positively charged.
    a) Proton   b) Electron   c) Molecule   d) Neutron

11. The atomic number of an atom is the _____.
    a) number of neutrons   b) number of Protons
    c) total number of Protons and neutrons d) number of atoms

12. Vegetative propagation by leaves takesplace in
    a) bryophyllum   b) fungi   c) Virus   d) bacteria

13. Reproductive part of a plant is
    a) root   b) stem   c) leaf   d) flower

14. Pollinators are
    a) wind   b) water   c) insect   d) all the above

15. Climbing roots are seen in
    a) betel   b) black pepper   c) Both of them   d) None of them

II. Answer briefly (any 10)   10×2=20

16. What are derived quantities?
17. Fill in the blanks:
    i)   Volume of irregularly shaped objects are measured using the law of _____.
    ii) One cubic metre is equal to _____ cubic centimetre.
18. Define - Astronomical unit.
19. *Use the analogy to fill in the blank:*
    i) Area : m² :: Volume : _____.   ii) Liquid : Litre : Solid : _____.
20. What is centre of gravity?
21. *Match the following:*
    i)   Displacement   -   Larger base area
    ii) Speed of ship   -   Metre
    iii) Centre of gravity of geometrical shaped objects - Knot
    iv) Stability   -   Geometric Centre
22. *Analogy:*
    i)   Velocity : Metre / Second : Acceleration : _____.
    ii) Length of scale : Metre : Speed of Aeroplane : _____.
23. *State true or False. If false, give the correct statement.*
    i)   An atom is electrically neutral.
    ii) The nucleus is surrounded by protons.
24. Define : Atom.
25. Name the sub-atomic particles.
26. *Analogy:*
    i) Sun : Planets : Nucleus : _____.
    ii) K : Potassium : : C : _____.
27. *Fill in the blanks:*
    i)   The male reproductive part of a flower is _____.
    ii) After fertilization the ovule becomes _____.
28. What are the agents of pollination?
29. Give example for Corm and Tuber?
30. What is Cross Pollination?

III. Answer in detail (any 3):   3×5=15

31. How will you determine the density of a stone using a measuring jar?
32. Explain the types of stability with suitable examples.
33. Draw the structure of an atom and explain the position of the sub-atomic particles.
34. What are nucleons? Why are they called so? Write the properties of the nucleons.
35. Explain the underground stems.
36. What will happen if Pollen grain of rose gets deposited on stigma of lily flower? Will pollen germination takes place? Why?