

SYLLABUS : FULL SYLLABUS**GENERAL INSTRUCTIONS : Draw Diagrams with Pencils.**

- All questions are compulsory. **Maximum Marks are 80.**
- The question paper consists of 28 Questions.
- **Section – A** : Question 1 to 16 = 20
- **Section – B** : Question 17 to 26 = 30
- **Section – C** : Question 27 to 32 = 30

SECTION A : (1 × 10 = 10)

1. Fermentation is the process used for making
(a) curd (b) cheese (c) idlies (d) chappatis
2. Which of the following is purest form of carbon?
(a) Diamond (b) Graphite (c) Fullereness (d) Charcoal
3. The white semi-solid fraction of petroleum used for making Vaseline is
(a) asphalt (b) lubricating oil (c) paraffin wax (d) fuel oil
4. The gas required for combustion is
(a) oxygen (b) nitrogen (c) carbon dioxide (d) hydrogen
5. Which organelle is known as the store house of the cell?
(a) Mitochondria (b) Vacuole (c) Ribosomes (d) Golgi complex
6. When the embryo can be identifies with body parts, it is known as
(a) zygote (b) foetus (c) infant (d) egg
7. Once a girl starts menstruating, her body needs more
(a) iron (b) calcium (c) vitamin C (d) vitamin A
8. In liquids, the pressure
(a) increases with depth (b) decreases with depth
(c) remains same at all depths (d) sometimes increases sometimes decreases
9. Force of friction is more in
(a) marble tiles (b) wooden floor (c) playground (d) glass table
10. Loudness of sound is expressed in
(a) Hertz (b) Decibel (c) Seconds (d) None of these
(1 × 5 = 5) 5
11. Fill in the blanks.
(a) Most liquids that conduct electricity are solutions of _____, _____ and _____.
(b) The passage of an electric current through a solution causes _____ effects.
(c) If you pass current through copper sulphate solution, copper gets deposited on the plate connected to the _____ terminal of the battery.
(d) During electrolysis of water, _____ is formed at the cathode.
(e) The process of obtaining pure metal from the impure ore, is called _____.
12. What are conductors? 5
13. Apart from chemical effect, which other effect electric current produce?
14. What is LED?
15. Define dispersion of light.
16. Define the angle of incidence.

SECTION B : (3 × 10 = 30)

17. Can you store pickles in iron containers? Why?
18. Give reasons, why:
(a) Silver is used in jewellery. (b) Copper is used in electrical wiring. (c) Sodium is stored in kerosene oil.
19. What are 'Petrochemicals'? Give the uses of petrochemicals obtained from petroleum.
20. Why do we use paper or kerosene oil to start fire in wood or coal?
21. Make a sketch of the human nerve cell. What function do nerve cells perform?
22. What is the function of
(a) Scrotal sac (b) Vas deferens (c) Penis in human beings?
23. Calculate the full height of Esha 8 years old and 110 cm tall at the end of the growth period. (% of full height at this age = 77%).
24. Define Pressure. Write the relation between pressure force and area. Name the instrument used to measure atmospheric pressure.
25. Give three harmful effects of friction.
26. What are ultrasounds? How are they useful to us?

SECTION C : (5 × 6 = 30)

27. Describe the nitrogen cycle with the help of a neat and labelled diagram.
28. (a) A copper spoon had fallen into a container containing dil. HCl. What would happen to it in three days time?
(b) Give reasons for the following:
(i) Metals are used making bells.
(ii) We can't use pure gold to make jewellery.
(c) A metal ribbon burns in air with bright white light and forms a white powder.
(i) Which metal is this?
(ii) Give the equation of the reaction taking place.
(iii) The metallic oxide formed would be acidic or basic in nature?
29. (a) How have fossil fuels been formed?
(b) Why are fossil fuels non-renewable sources of energy?
(c) Why is smelling agent added to LPG?
(d) Give one reason why LPG is better fuel than coal.
(e) Give one advantage of modern chullah over traditional chullah.
30. Explain electrolysis of water by an activity.
31. Draw a labelled sketch of human eye.
32. Give the functions of the following parts of the cell:
(a) Vacuoles. (b) Centrioles. (c) Cellulose. (d) Plasma membrane.
(e) Nucleus.