

Science - 2012

Time : 3 Hours]

Class : 10th

[M. M. : 75

Instructions-(i) All questions are compulsory. (ii) There are two Sections- Section-A and Section-B. Section-A has all the questions of objective type. Write answer of these questions on first page of your answer-book. (iii) Q. Nos. 3 to 9 are very short answer type questions. Write their answer in approx.75 words each. Q.Nos. 10 to 12 are short answer type questions. Write their answers in approx. 120 words each.Q.Nos. 13 to 14 are long answer type questions. Write their answer in approx. 150 words each. (iv) Internal options are given in Q. Nos. 3 to 14 in Section-B. (v) Draw neat and clean labelled diagrams wherever required. (vi) Marks allotted to each question are mentioned against the question.

Section-A (Objective Type Questions)

- Q.1. (a) Write answers in one word/sentence each- $1 \times 5 = 5$
- The process of sending back the light rays into the same medium is called
 - Which metal is called strategic metal?
 - Write the chemical formula of Bauxite.
 - What is the pH value of pure water?
 - Write the S.I. unit electric power.
- (B) Choose the correct alternative- $1 \times 5 = 5$
- The lens used to correct long sightedness or hypermetropia-
 - Convex lens
 - Concave lens
 - Simple lens
 - Cylindrical lens
 - Potential difference measured by-
 - Ammeter
 - Voltmeter
 - Lactometer
 - Dry cell
 - Symbiotic plant is -
 - Lichens
 - Fungi
 - Sandal
 - Granita (Nepenthes)
 - Anaerobic respiration occurs in-
 - Mitochondria
 - Nucleus
 - Cytoplasm
 - Ribosome
 - The alloy of Copper and Tin is-
 - Bronze
 - Brass
 - Solder metal
 - Stainless steel
- Q.2. (A) Match the following pairs- $1 \times 5 = 5$
- | Section 'A' | Section 'B' |
|-----------------------|---------------------|
| (i) Liquid metal | (a) 'O' blood group |
| (ii) Master gland | (b) Earthworm |
| (iii) Universal donar | (c) Pure blood |
| (iv) Nephridia | (d) Mercury |
| (v) Artery | (e) Pitutary |
| | (f) Sodium |
| | (g) Thyroid |

Section-B (Very short Answer Type Questions)

- Q.3. What are Exothermic and Endothermic reactions? Give one example of each of them. 4
- (Or) Write the method of preparation, chemical name and chemical formula of plaster of Paris.
- Q.4. What is Nutrition? Why is the need of nutrition? 4
- (Or) Give the name of respiratory organ of Fish, Earthworm, Grasshopper insect and human (man).
- Q.5. Write any four differences between Artery and Vein. 4
- (Or) Draw a labelled diagram of Nerve cell (Neuron).
- Q.6. Write the Molecular Formula and IUPAC name of the following compounds-
- (i) Methyl alcohol (ii) Formaldehyde
(iii) Formic acid (iv) Acetone
- (Or) What is the Silver Mirror Test? Explain with equation.
- Q.7. Write the four main uses of Ethyl alcohol. 4
- (Or) What are Polymers? Give the name of two polymers and their uses.
- Q.8. Write main four effects of the depletion of ozone layers. 4
- (Or) Explain Biotic components of the Ecosystem.
- Q.9. Describe the following medicinal plants- 4
- (i) Haldi (ii) Bahera (iii) Bael (iv) Arjun.
- (Or) How does acid rain fall?

(Short Answer Type Questions)

- Q.10. What is Microscope? Describe the Simple microscope. 5
- (Or) Explain with the help of a labelled ray diagram the defect of myopia and how it is corrected.
- Q.11. Write any five differences between Nuclear and Nuclear Fusion. 5
- (Or) What are the benefits of using Solar Cooker?
- Q.12. Explain the structure of chromosome with diagram. 5
- (Or) What is Asexual reproduction? Describe the Asexual reproduction in Amoeba.

(Long Answer Type Questions)

- Q.13. Calculate equivalent resistance when three resistances of 2 ohms, 3 ohms and 6 ohms are connected in parallel combination. 6
- (Or) Describe D.C. generator under the following points-
- (i) Labelled Diagram
(ii) Main parts
(iii) Working.
- Q.14. Write the difference between Metal and Non-Metal under the following heads- 6
- (i) Nature (ii) State
(iii) Lustre (iv) Ductility
(v) Malleability (vi) Conductivity.
- (Or) Write the composition and its percentage (approx.) and uses of the following Alloys-
- (i) Stainless steel (ii) Duralumin (iii) German Silver