

Pre. Board Examination 2024

Class - 10th (E.M.)

Subject - Science

Time: 3.00 Hrs.

MM : 100

Instructions : All question are compulsory.

- (i) Objective type Questions No. 01 is divided into 'A' 'B' and 'C' section (A) contain 05 multiple choice question Section (B) contain 05. Fill in the blanks and section (C) contains 05 make correct pair. Each question carry 1 mark total 15 marks are allotted.
- (ii) Q.No. 02 to 06 are very short answer type question Each question carry 02 marks. Maximum word limit of the answer is 30 words.
- (iii) Q.No. 07 to 10 are very short answer type question Each question carry 03 marks. Maximum word limit of the answer is 50 words.
- (iv) Q.No. 11 to 14 are short answer type question Each question carry 04 marks. Maximum word limit of the answer is 75 words.
- (v) Q.No. 15 to 16 are long answer type question Each question carry 05 marks. Maximum word limit of the answer is 100 words.
- (vi) Q.No. 17 to 18 are long answer type question Each question carry 06 marks. Maximum word limit of the answer is 150 words.
- (vii) Internal options are provided from Q.No. 11 to 18
- (viii) Draw labelled diagram. Wherever necessary.
- Q.1. (i) IUPAC name of Ethyl alcohol is -
- (a) Methanol (b) Ethanol
(c) Benzene (d) Propanol

- (ii) Formula of Bauxite ore is -
- (a) $MgCo_3$ (b) $Al_2O_3 \cdot 2H_2O$
(c) Fe_2O_3 (d) SnO_2
- (iii) Oxygenated blood is transported by -
- (a) Arteries (b) Veins
(c) Brain (d) Lymph
- (iv) Instrument used for measuring the current flowing through an electric circuit is -
- (a) Voltmeter (b) Ammeter
(c) Odometer (d) None of these
- (v) Controls the quantity of sugar in blood -
- (a) Parathyroid gland (b) Pancreas
(c) Adrenal gland (d) Pineal gland

(B) Fill in the blanks -

- (i) pH value of _____ solution is less than 7
- (ii) 1 calorie = _____ Joule
- (iii) Longest part of alimentary canal is _____
- (iv) The process of removal of less reactive metal from the solution of its salt by a more reactive metal is called _____
- (v) _____ mirror is also called diverging mirror

(C) Match the following -

- (i) Tamarind - renewable energy
(ii) Carbonate ore - first trophic level
(iii) Creta - virtual image
(iv) Convex mirro - limestone
(v) Producer - Tartaric acid

Q.2. Define specific heat with its S.I. unit ?

Q.3. What are the advantages of Mendeleev periodic table ?

- Q.4. What are trophic levels ?
Q.5. Filament of electric bulbs are made of Tungsten. Why ?
Q.6. What is called villi ?
Q.7. State the two laws of reflection.
Q.8. What is fuse ? What is the material used for fuse wire.

Q.9. Explain the following -

- (i) Ore (ii) Mineral (iii) Slag

Q.10. Explain Fleming's left hand rule ?

Q.11. State difference between food chain and food web.

OR

What can be your role to prevent the environment from loss.

Q.12. Explain the froth floatation process.

OR

Define calcination and Roasting with example.

Q.13. Draw a well labelled diagram of heart.

OR

Draw a well labelled diagram of excretory system of man.

Q.14. What do you mean by series combination of conductor. Calculate total resistance of conductor joined in this combination.

OR

Write any three precautions which should be taken while doing electrical practicals.

Q.15. Describe laboratory method of preparation of nitrogen under the following points -

- (i) Method (ii) Chemical equation
(iii) labelled diagram (iv) Use

OR

Explain laboratory method of preparation of hydrogen gas on the basis of the following point -

- i) Method ii) Chemical equation
iii) Labelled diagram iv) Use

Q.16. Difference between sexual and asexual reproduction.

OR

Difference between self pollination and cross pollination.

Q.17. What is corrosion ? Describe the factor which affect corrosion and the measures to prevent from corrosion.

OR

Explain Electrolytic Refining and Zone Refining.

Q.18. Difference between Alternating current and Direct current.

OR

State the properties of magnetic lines of force.