



Class 10th

Chemical Reactions and Equations

32 Marks

Q1) Complete the following reactions to give a balanced chemical equation (1x18=18)

- a) Barium Chloride with Aluminium Sulphate
- b) Sodium Hydroxide (Sol.) with Hydrochloric Acid.
- c) Carbon Monoxide with Hydrogen. (Mention the catalyst)
- d) Photosynthesis
- e) Iron with steam {H₂O (g)}
- f) Quick lime in water.
- g) Slaked lime with carbon dioxide.
- h) Heating Limestone.
- i) Burning of natural gas
- j) Process of Respiration
- k) Heating ferrous sulphate.
- l) Heating lead nitrate.
- m) Silver Chloride in sunlight.
- n) Lead with copper chloride.
- o) Zinc with copper sulphate.
- p) Copper oxide with Hydrogen gas. (Heat)
- q) Zinc oxide with carbon.
- r) Manganese oxide with Hydrochloric Acid.

Mammoth Brains
Where the best brains meet.

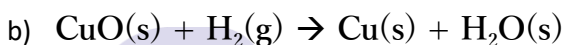
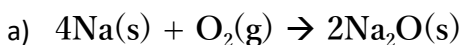
Q2) Give reasons for the following.

(2 x 4 = 8)

- 1) Why does the color of copper sulphate change when an iron nail is dipped in it?
- 2) Chemical equations must always be balanced.
- 3) During electrolysis of water, the amount of gas collected in one of the test tubes is double of the amount collected in the other.
- 4) Magnesium ribbon is cleansed before burning in air.

Q3) Identify the substances that are oxidized and the substances that are reduced in the following reactions;

(2 x 3 = 6)



Also mention the oxidizing and reducing agents in each reaction.

