

EXERCISE # 1

(A). Answer the following in not more than 20 words.

Q.1 Define a physical change

Q.2 Define a chemical change

Q.3 Classify the following into physical and chemical changes

- (a) The cooking of food
- (b) The evaporation of a liquid
- (c) The digestion of food
- (d) burning
- (e) The condensation of water vapour

Q.4 What are the following called ?

- (a) A reaction in which two or more reactants add up to form a product
- (b) A reaction in which one substance breaks down into two or more simpler substances
- (c) A reaction in which one element displaces another from a compound and takes its place in the compound
- (d) A reaction in which an acid reacts with a base to form a salt and water

(B). Answer the following in not more than 40 words.

Q.1 How would you decide whether a change is physical or chemical ? Mention two characteristics of each kind of change.

Q.2 Discuss why the dissolving of salt in water is a physical change

Q.3 Discuss an example of physical and chemical changes happening together.

(C). Answer the following in not more than 100 words.

Q.1 Giving one example of each kind, show that a change in energy takes place when a physical or a chemical change occurs.

Q.2 Describe an activity to find the conditions required for rusting.

EXERCISE # 2

(A). Choose the correct option.

Q.1 Which of the following is not a reversible change ?

- (a) The changing of water into steam
- (b) The melting of iron
- (c) The burning of kerosene
- (d) The freezing of water

Q.2 Which of the following is a reversible change ?

- (a) The burning of wax
- (b) The melting of wax
- (c) The curdling of milk
- (d) The cooking of food

Q.3 During which of the following changes are new substances formed ?

- (a) Melting (b) Sublimation
- (c) Evaporation (d) Rusting

Q.4 Rusting takes place in

- (a) air-free moisture
- (b) moisture-free air
- (c) moist air
- (d) None of these

Q.5 In which of the following processes is light absorbed ?

- (a) Sublimation (b) Burning
- (c) Rusting (d) Photosynthesis

Q.6 Match the columns A and B

- | A | B |
|-----------------------------|---|
| (a) Neutralisation reaction | (i) Burning of carbon |
| (b) Displacement reaction | (ii) Formation of carbon dioxide when baking soda is heated |
| (c) Decomposition reaction | (iii) Deposition of copper when an iron nail is placed in a solution of copper (II) sulphate |
| (d) Combination reaction | (iv) Formation of sodium chloride and water when hydrochloric acid reacts with sodium hydroxide |