NCERT Class X Science Class: Chapter – 1. Chemical Reactions and Equations – Part-1

Multiple Choice Questions

Question 1:

Which of the following is not a physical change?

1. Boiling of water to give water vapours
2. Melting of ice to give water
3. Dissolution of salt in water
4. Combustion of Liquefied Petroleum Gas (LPG)

Answer: D

Question 2:

The following reaction is an example of a

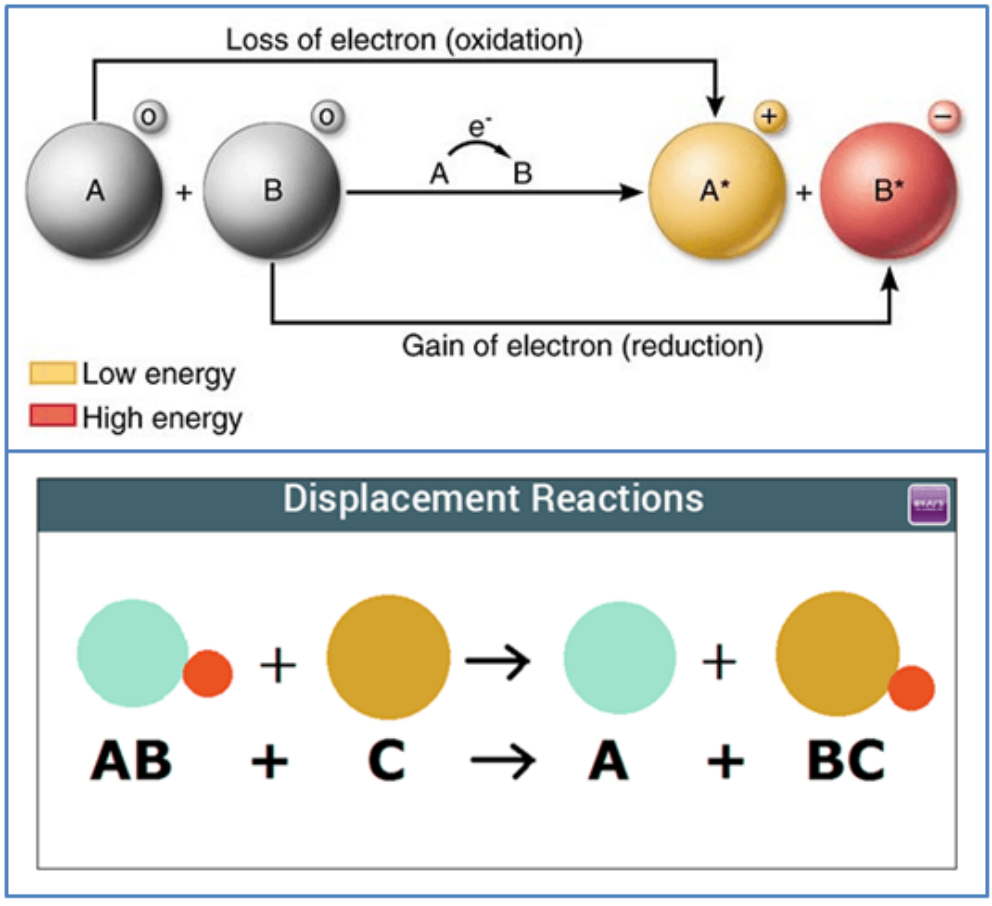
$$4NH_{3(g)} + 5O_{2(g)} \rightarrow 4NO_{(g)} + 6H_2O_{(g)}$$

1. Displacement reaction
2. Combination reaction
3. Redox reaction
4. Neutralisation reaction
5. (i) and (iv)
6. (ii) and (iii)

7. (i) and (iii)

8. (iii) and (iv)

Answer: C



Question 3:

Which of the following statements about the given reaction are correct?

$$3Fe_{(s)} + 4H_2O_{(g)} \rightarrow Fe_3O_{4(s)} + 4H_{2(g)}$$

1. Iron metal is getting oxidised
2. Water is getting reduced
3. Water is acting as reducing agent
4. Water is acting as oxidising agent
5. (i) , (ii) and (iii)
6. (iii) and (iv)
7. (i) , (ii) and (iv)
8. (ii) and (iv)

Answer: C

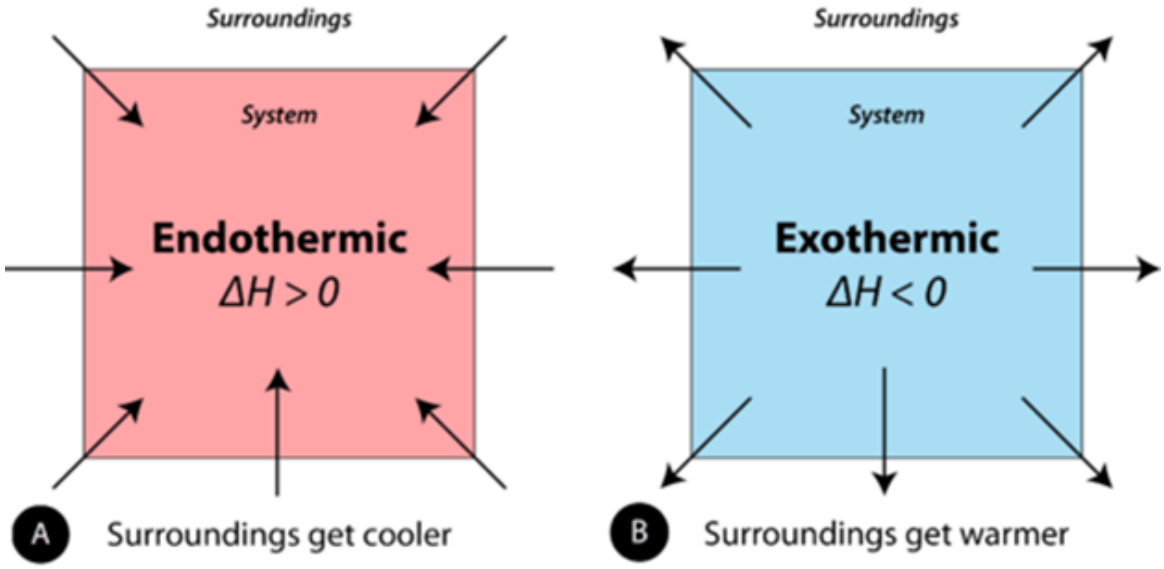
The substance which oxidizes the other substances in a chemical reaction is known as an oxidising agent. Likewise, the substance which reduces the other substance in a chemical reaction is known as reducing agent.

Question 4:

Which of the following are exothermic processes?

1. Reaction of water with quick lime
2. Dilution of an acid
3. Evaporation of water
4. Sublimation of camphor (crystals)
5. (i) and (ii)
6. (ii) and (iii)
7. (i) and (iv)
8. (iii) and (iv)

Answer: A

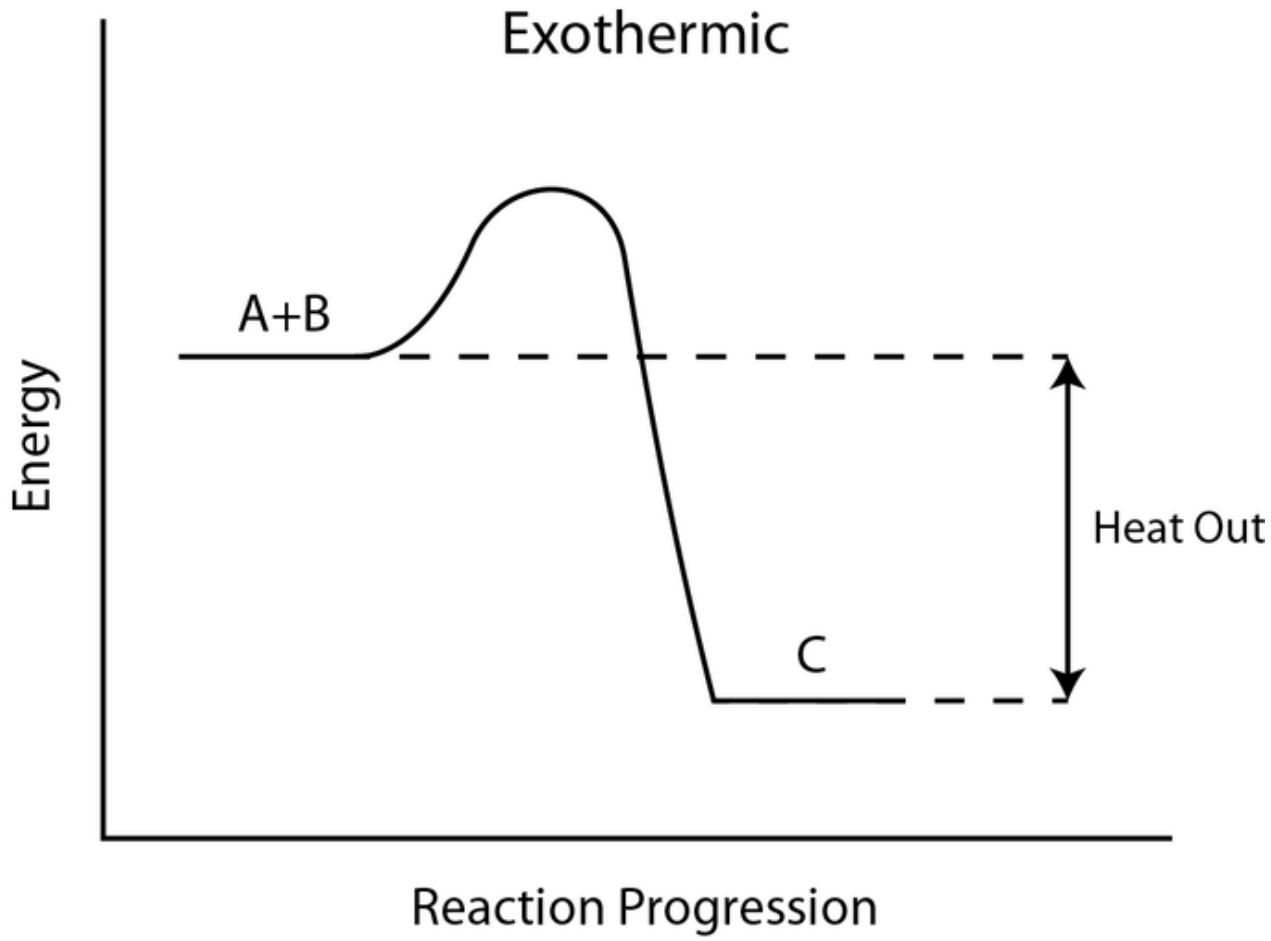


Question 5:

Three beakers labelled as A, B and C each containing $25\,mL$ of water were taken. A small amount of $NaOH$, anhydrous $CuSO_4$ and NaCl were added to the beakers A, B and C respectively. It was observed that there was an increase in the temperature of the solutions contained in beakers A and B, whereas in case of beaker C, the temperature of the solution falls. Which one of the following statement (s) is (are) correct?

1. In beakers A and B, exothermic process has occurred
2. In beakers A and B, endothermic process has occurred
3. In beaker C exothermic process has occurred
4. In beaker C endothermic process has occurred
5. (i) only
6. (ii) only
7. (i) and (iv)
8. (ii) and (iii)

Answer: C


Exothermic
A+B
C
Heat Out
Energy
Reaction Progression