ACIDS, BASES AND SALTS PYQs (2014-2024)

In the reaction between hydrogen sulphate ion and water

$$HSO_4^- + H_2O \rightarrow H_3O^+ + SO_4^{2-}$$

the water acts as

(a) an acid

(b) a base

(c) a salt

(d) an inert medium

11. Stinging hair of nettle leaves inject fluid in the human body causing burning pain. The fluid is

(a) Methanoic acid

(b) Tartaric acid

(c) Hydrochloric acid

(d) Sulphuric acid

12. Milk of Magnesia is used when people suffer from indigestion of food. It is a

(a) Strong base

(b) Mild base

(c) Strong acid

(d) Mild acid

109. What is the chemical composition of a soda-acid type fire extinguisher?

(a) Solution of sodium hydrogen carbonate and sulfuric acid

(b) Solution of sodium carbonate and sulfuric acid

(c) Solution of carbon dioxide and sulfuric acid

(d) Solution of sodium chloride and sulfuric acid

111. Which one of the following is the correct order of pH for the given substances?

(a) Coffee < Lemon juice < Milk of magnesia < Blood

(b) Milk of magnesia < Blood < Coffee < Lemon juice

(c) Lemon juice < Blood < Coffee < Milk of magnesia

(d) Lemon juice < Coffee < Blood < Milk of magnesia

118. Which one of the following acids is also known as Vitamin C ?

(a) Methanoic acid

(b) Ascorbic acid

(c) Lactic acid

(d) Tartaric acid

6. Match List–I with List–II and select the correct answer using the code given below the Lists :

List–I (Compound)	*List–II (Use)*
A. Boric acid	1. Antiseptic
B. Citric acid	2. Food preservative
C. Magnesium hydroxide	3. Antacid
D. Acetic acid	4. Pickle

Code :

	A	B	C	D
(a)	1	2	3	4
(b)	1	3	2	4
(c)	4	3	2	1
(d)	4	2	3	1

37. Vinegar is

(a) 5–8% solution of acetic acid in water

(b) 5–8% solution of carbonic acid in water

(c) 5–8% solution of ethanol in water

(d) 10–15% solution of propionic acid in water