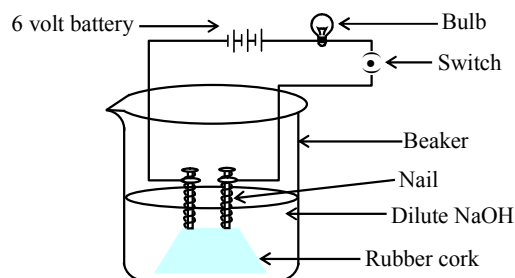


ACIDS, BASES AND SALTS
DPP NO. 04
TOPIC : PROPERTIES OF ACIDS AND BASES

1. An aqueous solution turns red litmus solution blue. Excess addition of which of the following solution would reverse the change ?
(A) Baking power (B) Lime
(C) Ammonium hydroxide solution (D) Hydrochloric acid
2. Which one of the following can be used as an acid-base indicator by a visually impaired (blind) student?
(A) Litmus (B) Turmeric (C) Vanilla essence (D) Petunia leaves
3. Which of the following is acidic in nature ?
(A) Lime juice (B) Human blood (C) Lime water (D) Antacid
4. In an attempt to demonstrate electrical conductivity through an electrolyte, the following apparatus was set up



- Which among the following statement(s) is (are) correct?
- (i) Bulb will not glow because electrolyte is not acidic.
 - (ii) Bulb will glow because NaOH is a strong base and furnishes ions for conduction.
 - (iii) Bulb will not glow because circuit is incomplete.
 - (iv) Bulb will not glow because it depends upon the type of electrolytic solution.
- (A) (i) and (iii) (B) (ii) and (iv) (C) (ii) only (D) (iv) only
5. Which of the following is not a mineral acid ?
(A) Hydrochloric acid (B) Citric acid (C) Sulphuric acid (D) Nitric acid
 6. Which among the following is not a base ?
(A) NaOH (B) KOH (C) NH_4OH (D) $\text{C}_2\text{H}_5\text{OH}$
 7. Which of the following is(are) true when HCl(g) is passed through water ?
(i) It does not ionize in the solution as it is a covalent compound.
(ii) It ionizes in the solution.
(iii) It gives both hydrogen and hydroxyl ion in the solution.
(iv) It forms hydronium ion in the solution due to the combination of hydrogen ion with water molecule.
(A) (i) only (B) (iii) only (C) (ii) and (iv) (D) (iii) and (iv)
 8. Which of the following statements is true for acids ?
(A) Bitter and change red litmus to blue. (B) Sour and change red litmus to blue.
(C) Sour and change blue litmus to red. (D) Bitter and change blue litmus to red.
 9. Which of the following are present in a dilute aqueous solution of hydrochloric acid ?
(A) $\text{H}_3\text{O}^+ + \text{Cl}^-$ (B) $\text{H}_3\text{O}^+ + \text{OH}^-$ (C) $\text{Cl}^- + \text{OH}^-$ (D) unionised HCl
 10. Which of the following statement is not correct?
(A) Acids turn blue litmus solution red.
(B) Raw onion can be used as olfactory indicator to check acid or base.
(C) Bases are sour in taste.
(D) Vanilla essence does not give odour in strongly basic solutions.
 11. Why do HCl , HNO_3 , etc., show acidic characters in aqueous solutions while solutions of compounds like alcohol and glucose do not show acidic character ?
 12. What are olfactory indicators ? Name two substances which can be used as olfactory indicators ?
 13. Why does distilled water not conduct electricity whereas rain water does ?
 14. You have been provided with three test tubes. One of these test tubes contains distilled water and the other two contains an acidic and a basic solution respectively, if you are given only blue litmus paper, how will you identify the contents of each test tube.
 15. Qazi and Priyam wants to prepare dil. H_2SO_4 . Qazi added conc. H_2SO_4 to water slowly with constant stirring and cooling where as Priyam added water to conc. H_2SO_4 . Name the student who was correct and why ?

Answers Key

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1. D 2. C 3. A 4. C 5. B 6. D 7. C
8. C 9. A 10. C