



## ST. LAWRENCE HIGH SCHOOL



A JESUIT CHRISTIAN MINORITY INSTITUTION

- **Subject :ChemistryWorksheet-4 Class IX**
- **Date 14.05.2020**

- **Chapter: Acid, Bases and salts**

- **Answer the following questions (MCQ) : (1×15)**

### 1. Which of the following statement is correct regarding pH Scale?

- (i) It is the negative logarithm of  $H^+$  ion concentration of a given solution.
- (ii) It is the positive logarithm of  $H^+$  ion concentration of a given solution.
- (iii) It is a 14 point scale.
- (iv) pH is an example of an extrinsic property.

#### Correct Options are:

- A. (i) and (iii)
- B. (ii) and (iii)
- C. (i), (iii) and (iv)
- D. Only (ii)

### 2. What is the neutral value of pH scale?

- A. Less than 5
- B. Equal to 7
- C. Less than 8
- D. Less than 10

### 3. Who had invented the pH Scale?

- A. S.P.L Sorenson
- B. Benjamin Franklin
- C. Henry Moseley
- D. Wilhelm Rontgen

**4. In which of the following field pH scale is important for measurements?**

- A. Medicine
- B. Forestry
- C. Food Science
- D. All of the above

**5. What is the pH value of very strong acid solution?**

- A. Less than 7
- B. Less than 5
- C. Less than 2
- D. Less than zero

**6. Why we measure the pH of sea water?**

- A. It helps in corrosion research.
- B. It helps in agricultural activity.
- C. It helps in fermentation.
- D. It helps in sterilization.

**7. Which statement is correct regarding Buffer Solution?**

- A. It is a solution whose pH change when small amount of an acid or base is added in it.
- B. It is a solution whose pH does not change when small amount of an acid or base is added in it.
- C. It does not use pH value as constant in wide variety of chemical applications.
- D. The solution of methanoic acid is an example of effective buffer solution.

**8. What is the pH value of saliva after meal?**

- A. 4.8
- B. 5.8
- C. 6.8
- D. Less than 4

**9. What is the pH value of pure water?**

- A. Less than 7
- B. Greater than 7
- C. Equal to 7
- D. Greater than 14

**10. How we will come to know that a given solution is acidic?**

- A. If its pH value is less than 7
- B. If its pH value is greater than 7
- C. If its pH value is less than 5
- D. If its pH value is 5

**11. What will be the litmus test if the solution is basic?**

- A. Red litmus will turn to blue
- B. Blue litmus will turn to red
- C. No change in colour
- D. It will change into orange pink.

**12. What is the pH value of toothpaste?**

- A. It ranges from 3 to 10 depending upon the additives added in it.
- B. It ranges from 5 to 12 depending upon the additives added in it.
- C. It ranges from 7 to 14 depending upon the additives added in it.
- D. It ranges from 6 to 8 depending upon the additives added in it.

**13. What is the pH value of pure alcohol?**

- A. 7
- B. 7.33
- C. 7.80
- D. 8

**14.  $K_w$  is the ionisation constant for water and its value is:**

- A.  $1 \times 10^{-7}$
- B.  $1 \times 10^7$
- C.  $1 \times 10^{14}$
- D.  $1 \times 10^{-14}$

**15. An acidic solution has:**

- A. Less concentration of hydrogen ions than hydroxide ions.
- B. More concentration of hydroxide ions than hydrogen ions.
- C. More concentration of hydroxyl ions.
- D. Equal concentration of hydroxide and hydrogen ions.

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