ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

- **Subject :Chemistry_____Answers ofWorksheet-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)

Ans. C

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

Ans. B

3. Who had invented the pH Scale?

A. S.P.L Sorenson

B. Benjamin Franklin

C. Henry Moseley

D. Wilhelm Rontgen

Ans. A

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

Ans. D

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

Ans. D

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.

Ans. A

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.

Ans. B

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

A. 4.8

B. 5.8

C. 6.8

D. Less than 4

Ans. B

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

Ans. C

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

Ans. A

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.

Ans. A

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.

Ans. A

13. What is the pH value of pure alcohol?

A. 7

B. 7.33

C. 7.80

D. 8

Ans. B

14. Kw is the ionisation constant for water and its value is:

A. 1×10^{-7}

B. 1×10^{7}

C. 1×10^{14}

D. 1×10^{-14}

Ans. D

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.

Ans. B

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