

Name: .....

Center:.....

### Chapter three quiz

#### Choose the correct answer

1- On dissolving 7.1g of  $\text{Na}_2\text{SO}_4$  (its molar mass= 142 g/mol) in water, 0.5 L of ..... concentration solution is produced.

( $2.5 \times 10^{-2}\text{M}$  –  $1 \times 10^{-1}\text{M}$  –  $1 \times 10\text{M}$  –  $1 \times 10^2\text{M}$ )

2- Volcanic rock which is formed from lava erupted from a volcano, what is the type of the volcanic rock in light of your education?

(solution gas in solid – colloid gas in solid – solution solid in solid – colloid solid in gas)

3- Which of the following substances scatter the light that passes in it?

(aqueous solution of copper sulphate – milk – water – ethanol)

4- What is the conjugate base for  $\text{H}_2\text{PO}_3^-$  ?

( $\text{H}_2\text{PO}_3^{-3}$  /  $\text{H}_3\text{PO}_3$  /  $\text{HPO}_3^{-2}$  /  $\text{H}_3\text{PO}_2^+$ )

5- According to Bronsted-Lowry theory, the mixture of water with nitric acid  $\text{HNO}_3$  has to contain .....

( $\text{OH}^+$  /  $\text{NO}_3$  /  $\text{NO}_3^-$  /  $\text{NO}_2^-$ )

6- 0.1 solution of ..... has higher ability to conduct electricity.

( $\text{H}_2\text{S}$  /  $\text{H}_2\text{SO}_4$  /  $\text{H}_3\text{PO}_4$  /  $\text{H}_2\text{CO}_3$ )

7- Which of the following indicators is colored yellow when it is added to a solution whose PH value is 10?

(methyl orange – bromothymol blue – phenolphthaleine – litmus)

8- Which of the following compounds is not a salt?

(sodium formate – sodium hydroxide – sodium carbonate – sodium acetate)

9- When 25ml of 0.1M acid are titrated by 0.1M base, which of this acids and bases produce a solution which has higher PH at the end of the neutralization?

( $\text{CH}_3\text{COOH}$ ,  $\text{NaOH}$  /  $\text{HNO}_3$ ,  $\text{NaOH}$  /  $\text{HNO}_3$ ,  $\text{NH}_3$  /  $\text{CH}_3\text{COOH}$ ,  $\text{NH}_3$ )

10- A crystal of sodium chloride is formed of .....

( $\text{NaCl}$  molecules –  $\text{Cl}$ ,  $\text{Na}$  atoms –  $\text{Cl}^+$ ,  $\text{Na}^-$  ions –  $\text{Cl}^-$ ,  $\text{Na}^+$  ions)