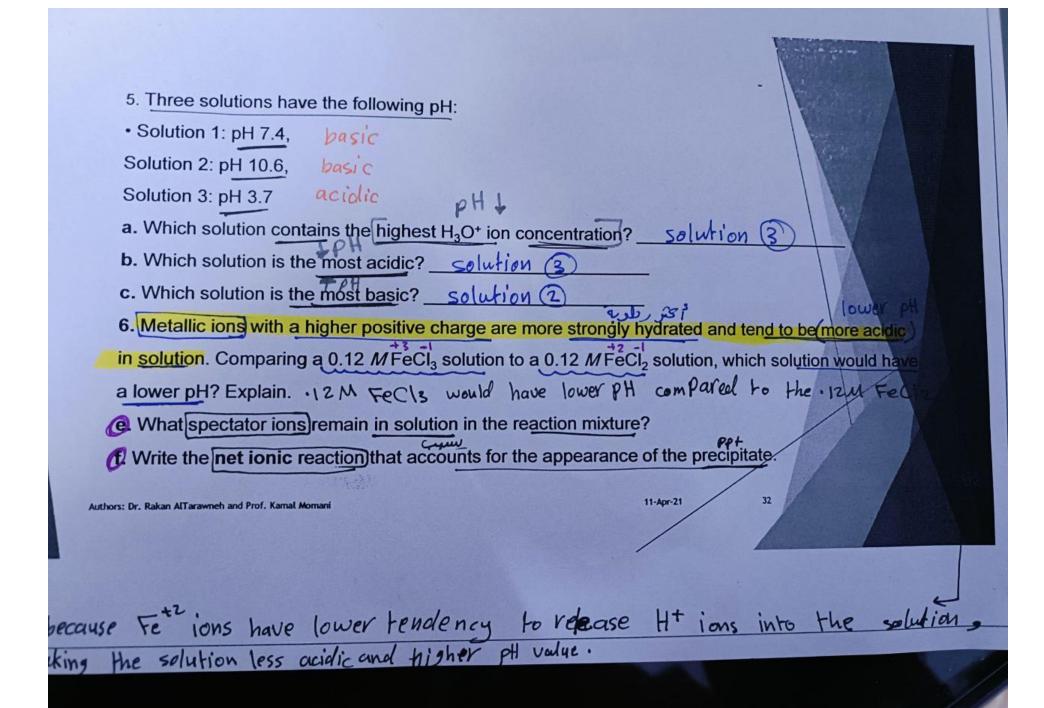
strong acid + ther formula of muriatic acid is (HCI). When it is added to swimming pool , the pH decreases , so it will be more acidic HCI + H20 -- + H30+ + CI-Is its concentration increased so pH is degreased. Prelaboratory Assignment: Acids, Bases, and Salts Hydronium on (430) 1. In an agueous solution. a. name and write the formula of the ion that makes a solution acidic. Hydrogen ion (H+) on b. name and write the formula of the ion that makes a solution basic. Hydroxyl ion (off) (2) a. Muriatic acid is used to adjust the pH of swimming pools. What is the formula of muriatic acid? Does the pH of the swimming pool increase or decrease as a result of adding muriatic acid? Explain. HZSOY\_ b. Battery acid) is a rather concentrated solution of sulfuric acid. What is the formula of sulfuric acid? H2CO4 Aqueous salt solutions often are not neutral with respect to pH. Explain. A. a. Milk of magnesia is used as a laxative and to treat upset stomachs. What is the formula of milk of magnesia? . Washing soda is often added to detergent formulations to make the wash water more basic. What is the formula of the anhydrous form of washing soda? Does it increase or decrease the pH of the wash water? Explain.

جنی أنوهره/سعب (١٩)

11-Apr-21



## \* \* (2) bast

( Nacl H20 > Nat + CI PH=7 will be acidic (OH < 7) both (cations and anions lare from strang > KF anion react solution will be neutral + H20 -> HF + 6H-> PH77 (OH = 7) NH4C1 HZO NH+ + C1-

NH++ + H2O -> NH3 +(H30+) > PH <7 des Athe reaction between cation or anion with water is called hydration reaction.

1. In an aqueous solution ( ag)

a. identify the "species" that makes a solution acidic. Hydrogen ion (H+) of Hydronium ion (H30+)

b, identify the "species" that makes a solution basic. Hydroxy ion (oH-)

the conjugate acid of aweak base as contion or both. If only anions react with water the solution will be basic (pH > 7), if o ly cations react with water the solution 2. Aqueous salt solutions often are not neutral (with respect to)pH. Explain.

a salt can dissolve i water, so it will produce neutral, basic or acidic solutions depending on whether it contains the conjugate base of aweak acid as anion or - 3. a. Milk of magnesia is used as a laxative and to treat upset stomachs. What is the

hydrated for formula of milk of magnesia?

(NazCoz. WHZO) Mg(OH)2

sedium b. Washing soda is often added to detergent formulations to make the wash water decompdrate more basic. What is the formula of the anhydrous form of washing soda? Does it increase or decrease the pH of the wash water? Explain.

\*anhydrous form of washing social is NazCO3 and it is increasing the PH of wash water because when it is dissolving in water produces strong banic solution

4. Three solutions have the following pH: No2CO3 +2H2O -> 2Na0H + H2O + CO2

· Solution 1: pH 12.1 (basic)

strong base - pHT

Solution 2: pH 6.2

الذمه من عنه الكريونيك المداد

[H30"]7 PH + Solution 3: pH 10.2 (basic)

a. Which solution contains the highest H<sub>3</sub>O<sup>+</sup> ion concentration?

solution 2

b. Which solution is the most acidic?

solution 2

Solution []

c. Which solution is the most basic?