**Salahaddin University/ Science Colle Exam= practical soil pollution question bank**

**Environmental health and science Department, 4thstage**

**Q1/ Fill the blanks with the correct words.**

1. **---------------results in nitrogen loss from soil and produces some forms of intermediate gaseous nitrogen.**
2. **The method for deter mination of available phosphorus in soil is------------- .**
3. **------------is amount of exchangeable cation in the soil.**
4. **The conversion of ammonium to the nitrite by ---------- bacteria and nitrite to nitrate by --------------- bacteria.**

**Q2/ write the limestone cycle?**

**Q3/ write the following:-**

1. **Why we used EDTA in cation exchange capacity test?**
2. **Why we read absorbance in two wavelength 220nm and 275nm in determination available nitrogen in soil?**
3. **Where is come 0.05 in Equation for calculation CaCo3% ?**

**Q4/ 1- How you can prepare 3M of NaOH in 500ml of distilled water if**

**Molecular weight of Na=23**

 **O=16**

 **H= 1**

 **2- How you can prepare serous dilution (25N, 50N ,75N) from 100ppm of**

 **stander solution KH2PO4 in 100ml D.W. ,each dilution continue to 25ml.**

**Q5/ Fill the following blanks with the correct words: (20) Marks**

1. **The factors affecting electrical conductivity of soil …………………, ………………, ………………., ………………….., ………………………and …………………………. .**
2. **The reagents which used for determination of cation exchange capacity in soil are ……………….., …………………… and ………………………… . .**
3. **The soil bacteria which is pathogenic for plant is …………. and for human is …………. .**
4. **Soil color is one property that can be used to describe ………………… and soil …………………. .**

**5- The methods that used for determination of soil organic matter in laboratories are ………………… and ………………… .**

**6- Physical classification of soil water are …………….., ………………….. and …………while biological classification are …………. and ………………… .**

**Q6/A- Write the equation of. (10) Marks**

1. **Leaching of basic cations?**
2. **Nitrification?**
3. **Write the lime stone cycle? (20) Marks**

 **Q7/ Write the following. (25)Marks**

1. **The objectives of soil sampling? (20 )Marks**
2. **Source of acidity in soil? (5) Marks**

**Q8/ (25 marks)**

1. **1- Why we used different mesh size of sieve in soil texture? (5) Marks**

**2-Why some time we use core for soil sampling collecting? (5) Marks**

1. **If we have ( 1gm) of oven dried soil placed in muffle furnace in 4400C for 24 hr. the weight of burned soil become (0.97 gm) calculate the following ? (15) Marks**
2. **Mass of organic matter? (5) Marks**
3. **Organic matter %?(10) Marks**

**Good luck**

 **Assist. Lecturer Sakar A. Saheed**