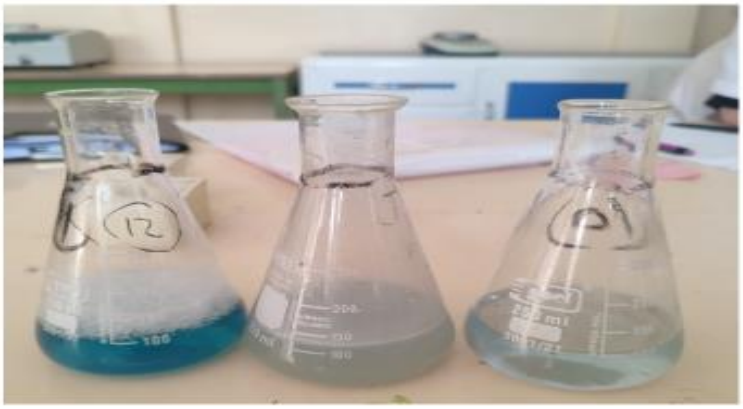
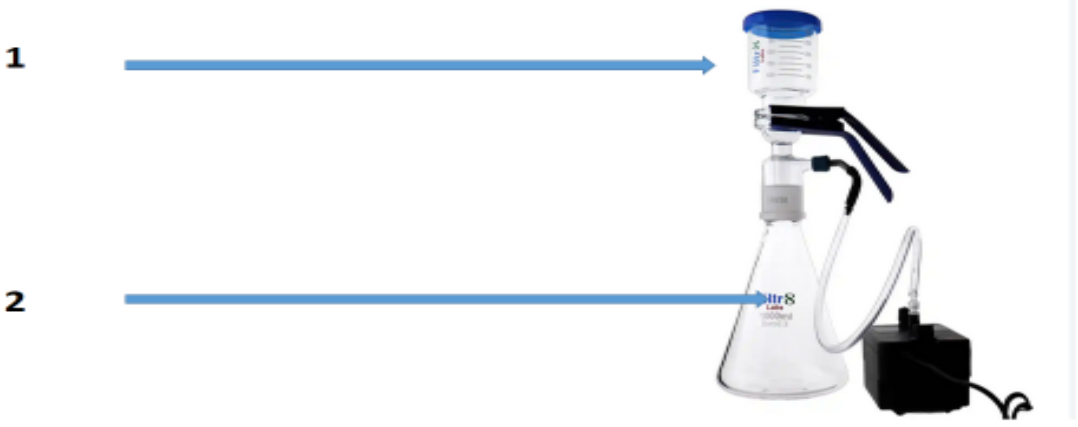
Water Pollution question bank

Q1: A/Write the name of this experiment.
B/What is the principle of this procedure.
C/ How many samples you are used, then explain your laboratory result.



Q2: A/write the name and the use of the following instrument
B/ Write the parts of pointed parts with their use.
C/ What is the differences between this test and the classical test.
(12 marks)

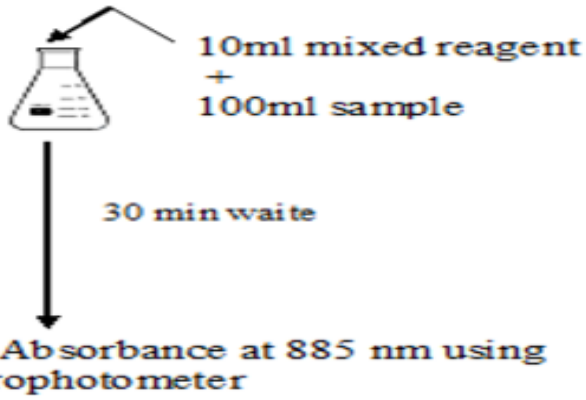
Q3: A/What is this device ? Write the name of it. **(12 marks)**
B/ For which tests the pointed parts are used.
C/ Write the equation to find the concentration of it.



Water Pollution question bank

Q4: A/The following procedure used for determination of ……..?
B/ How can you find the concentration?
C/ What are the components of mixed reagent? **(12 marks)**

Procedure:-



Q5: Choose suitable phrases for the following criteria: (14 marks)

1. The permissible limit for sulfate SO_4 in drinking water is:
   a) 200 b) 250 c) 500
2. The wave length of spectrophotometer that used for determination of phosphate in water is:
   a) 640 nm b) 275 nm c) 885 nm
3. The preferable method for determination detection of PO_4 water is:
   a) Ascorbic acid method b) Dichromate reflux method c) Winkler method
4. The phenomenon that caused by high levels of N and P compounds in water called:
   a) Self purification b) Ammonification c) Eutrophication
5. $BaCl_2$ used for determination of:
   a) NO_2 b) SO_4 c) NH_4
6. Starch indicator used for determination of:
   a) NH3 b) PO_4 c) BOD5
7. Water quality is considered "very good" water when the BOD concentration ranged between:
   a) 1-2 mg..L^{-1} b) 3--5 mg..L^{-1} c) 6-9 mg. L^{1}

Water Pollution question bank

Q6: A/ Answer (3) of the following questions: (30 marks)

1. What are the effect of SO_4 in water?
2. How can you prepare the oxidizing reagent for NH_3 determination? **by diagram**
3. What are the factors that affect the TSS of water?
4. Why we used dark bottles for the determination of BOD_5?

B/ Write the steps of determination the NO_2 concentration in water? **(8 marks)**

Q7: 1. How can you identify these samples? Compare it. (20 marks)

2. What is the name of this test?

3. Define this test.

4. Write the measurment equation of it .

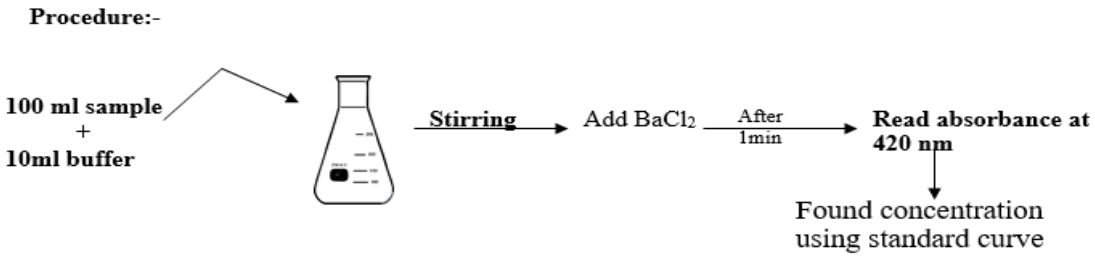
Q8: A/ The following procedure is used for determination of …….

B/ This procedure have a name, Write the name of this method.

C/What is the component of buffer solution used in this procedure?

D/ What is the reaction (principle) that happened in this procedure? (20 marks)

Water Pollution question bank



Q9: A/ Identify this figure, how can you recognize it in the lab?

B/ What is the relationship between this organism and water pollution?

C/ Write about some other similar species that are related to water pollution.

Q10: Choose suitable phrases for the following criteria:

1. The permissible limit for nitrate NO_3 in drinking water is:

a) 10 mg/l b) 30 mg/l c) 100 mg/l

2. The wave length of spectrophotometer that used for determination of Ammonia NH_3 in water is:

a) 640 nm b) 275 nm c) 885 nm

3. The preferable method for determination of PO_4 water is:

a) Dichromate reflux method b) Ascorbic acid c) Winkler method

4. The phenomenon that caused by high levels of N and P compounds in water called:

a) Self-purification b) Eutrophication c) Ammonification

5. Water quality is considered "very good" water when the BOD concentration ranged between:

a) 1-2 mg/l b) 3--5 mg/l c) 6-9 mg/l

Q11: A/ Answer (4) of the following questions:

1. What are the major sources of NO_2 in water?
2. What are the differences between BOD and COD?
3. What are the factors that affect the TSS of water?
4. What are the effects of ammonia (NH_3) in water?

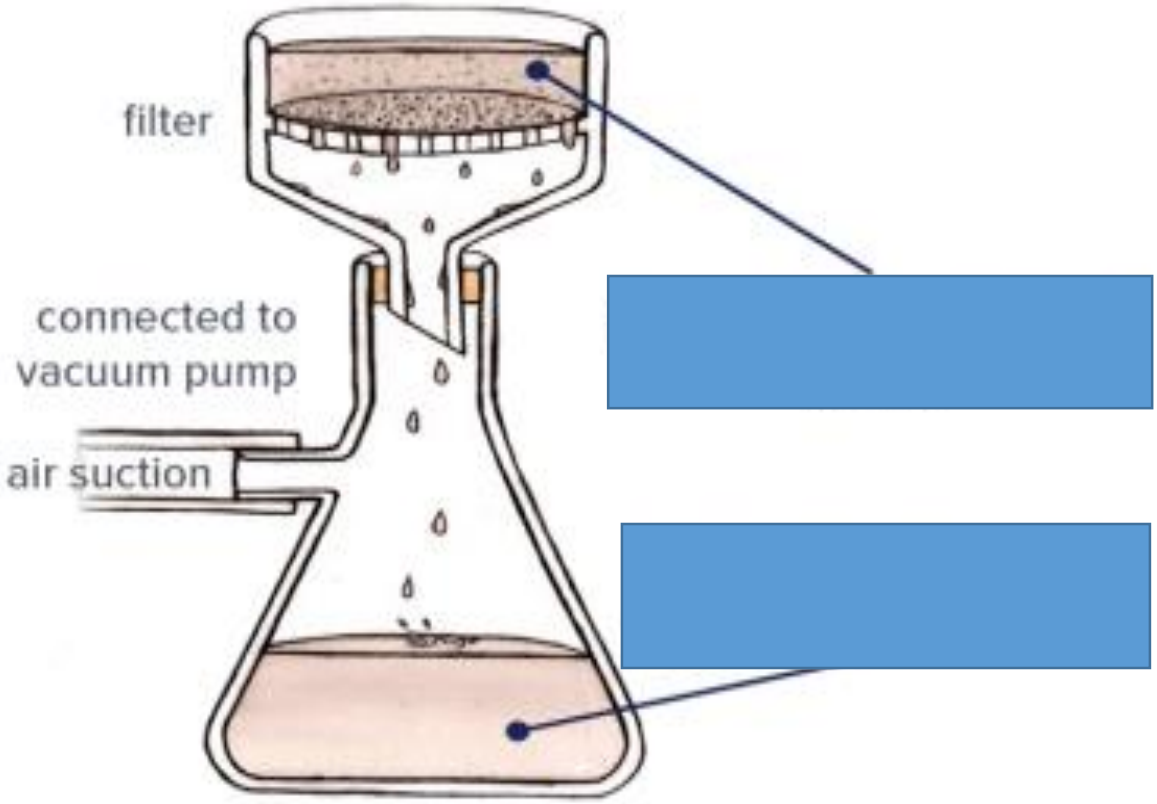
Water Pollution question bank

5. Write the steps of determination the PO_4 concentration in water**?**
6. What are the effect of SO_4 in water?

Q12: What are the factors affects the Total Suspended Solids?

Q13: A/ For which tests this instrument is used?

B/ Mention what are the pointed part?



Q14:A/ Which parameter causes the Methhaemoglobemia (blue baby syndrome)?

B/ Write the procedure to determine this parameter.

Q15: What are the standard values of these following parameter for drinking water?

1. Nitrate.
2. Sulfate
3. Ammonia
4. TSS

Water Pollution question bank

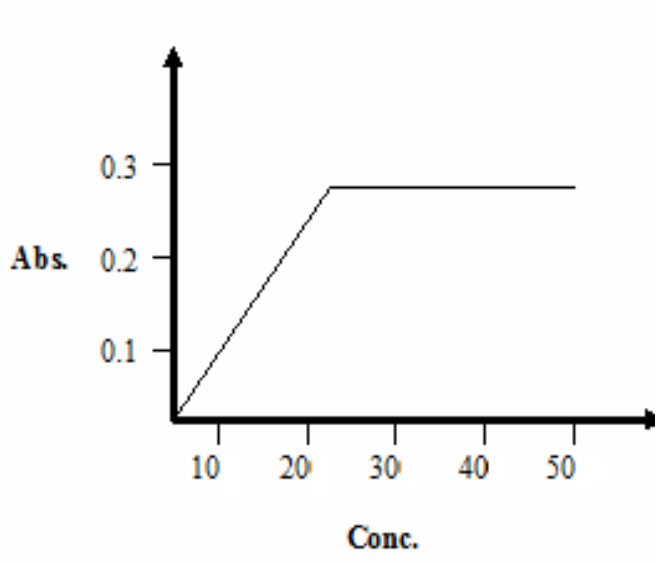
Q16: Complete these equations:

1. NO_2=
2. NH_3=
3. $SO_{4=}$
4. BOD_5=

Q17: Mach the following items with suitable complement in column A to column B

A	B
1.Nitrite determination	**a. Iodine Reagent**
2. COD	**b.BOD_5**
3.Iodine azide alakaline	**c. Mixed reagent**
4.Ammonia determination	**d. Euglena**
5. pollution Indicator	**e. Potassium dichromate**
6.Phosphate determination	**f. Sulfanilamide**

Q18: For which parameter this curve is used ? Explain it.



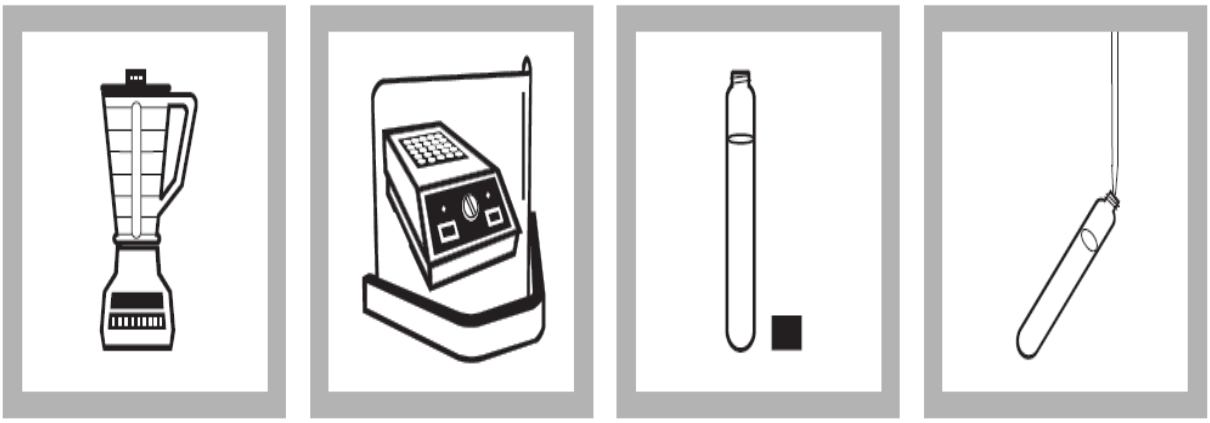
Q19: What are the effects of ammonia in in water?

Q20: What are the causes of eutrophication phenomenon in water?

Water Pollution question bank

Q21: A/ For which parameter these steps followed to be determined?

B/ Write the name of this following steps.



Q22: Mention some of the Algae that can survive in polluted water.

Q23: A/What are the oxidizing solution components?

B/ For which test is used?

Q24: What are the differences between BOD_5 and COD?

Q25: Write the uses of the following solutions:

1. **Manganese sulfate**
2. **Mixed reagent**
3. **N-(1 Naphthyl) ethylene diamine dihydrochoride**
4. **Oxidizing reagent**