

*Higher technological institute
10th of Ramadan city
6th of October branch
Civil Engineering department*

Subject: water and waste water treatment

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Sheet (2)

Treatment works (sedimentation)

1 – State the water treatment works for surface water and the types of sedimentation

2 – Draw a flow line of (S.S.F) and (R.S.F) water treatment plant

3 – What is the coagulation process and what is the purpose of coagulation process

4 – What is the kinds of coagulants and what is the advantages of coagulant aids

5 – state the coagulation process steps and the kinds of feeding

6 – Explain with drawing the (Jar test)

7 – What is the purpose of (Alum solution tank – Flash mixing tank – Flocculation tank – plain sedimentation tank – chemical sedimentation tank) and draw the section elevation of these tanks

8 – For a city with population 150000 capita and the average water consumption 250 L/c/d , Design (Alum solution tank – Flash mixing tank – Flocculation tank –sedimentation tank with hopper) if the working period 20 hr/d , S.S = 70 ppm