



### SECTION-B

2. What is the purpose of aeration process? Discuss the various types of aerators with sketches.
3. Differentiate between Septic tank and Imhoff tank.
4. Design a circular trickling filter unit for treating 4 million liter of sewage per day having 5 day BOD of 16-0mg/l.
5. What is the function of grit chamber? What are the major design criteria governing the design of grit chamber?
6. Derive the equation for Stokes equation for settling velocity.

### SECTION-C

7. Design an Imhoff tank to treat sewage from small town with 25000 populations. The rate of sewage may be assumed as 150 lped. Make suitable assumptions wherever needed. Draw neat sketch.
8. What are inverted siphons? Where they are used? Sketch and explain.
9. Write note on :
  - a) Disinfection
  - b) Polishing
  - c) Stabilization Pond