

M.Sc.(Part-II) (Environmental Science) (NEP Pattern) - Semester-III
PMENVT 10 - Paper-X : Water Treatment and Supply

P. Pages : 1

Time : Three Hours



GUG/W/24/15981

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Illustrate the answer with suitable diagram and examples.

1. Discuss method for estimation of alkalinity and Hardness in a water sample. **16**

OR

a) Explain how rate of demand of water is estimated. **8**

b) Discuss how yield of well is estimated. **8**

2. Discuss horizontal and circular sedimentation tanks with neat sketch. **16**

OR

a) Briefly explain types of aerators. **8**

b) Explain various factors governing aeration. **8**

3. Discuss how optimum coagulant dose is determined. **16**

OR

a) Explain ozonation and ultra-purification method of disinfection. **8**

b) Explain working of pressure filter with a neat sketch. **8**

4. Discuss classification of pumps used in water distribution system. **16**

OR

a) Explain maintenance of water distribution system. **8**

b) Discuss dead end system in water distribution. **8**

5. a) Explain intake tower. **4**

b) What is screen? Explain the purpose of screen. **4**

c) Write a note on flocculation. **4**

d) Why pumping of water is necessary? **4**
