

M.Sc. - II (Environmental Science) (CBCS Pattern) Semester - III
PSCENVT09-Core Paper-IX : Water Treatment and Supply

P. Pages : 1

Time : Three Hours



GUG/S/23/11260

Max. Marks : 80

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

1. What are the impurities present in water? Explain chemical tests for examination of water. 16

OR

a) Describe devices used for measurement of rainfall. 8

b) What are the types of well? Discuss yield of well. 8

2. Describe the theory of sedimentation. Explain types of sedimentation tank in detail. 16

OR

a) Give the schematic layout of water treatment plant. 8

b) What are screens? Explain types of screens. 8

3. Describe construction and operation of rapid sand filter. 16

OR

a) What is coagulation? Give the common coagulants used for coagulation. 8

b) What is disinfection of water. Explain UV radiation as a process of disinfection. 8

4. Discuss necessity of pumping. Give classification of pumps. 16

OR

a) Explain dead end system and grid iron distribution system briefly. 8

b) Describe gravity and direct pumping of water distribution system. 8

5. a) Write a note on intake towers. 4

b) Write the types of aerators. 4

c) What is flocculation? 4

d) What is ring and radial distribution system. 4
