

Code: 9A01604

B.Tech III Year II Semester (R09) Supplementary Examinations December/January 2014/2015

WATER RESOURCES ENGINEERING – II

(Civil Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 What is an earth dam? What is a rockfill dam? Also discuss the various advantages and disadvantages of earth and rockfill dams.
- 2 What is a gravity dam? List and briefly explain the various forces acting on a gravity dam. Also list the various modes of failure of a gravity dam.
- 3 What is a rolled-fill earth dam? Also explain the different types of rolled-fill earth dams.
- 4 What are spillway gates? List the various types and explain each in brief.
- 5 What are the methods of controlling entry of silt at the head works of a canal?
- 6 What is cistern element in fall? Give various expressions for its dimensions.
- 7 A submerged pipe outlet has the following data
FSL of distributary = 100.0 M
FSL of water course = 99.90 M
Length of the pipe = 9.00 M
Diameter of the pipe = 20 cm
Coefficient of friction = 0.005.
Find the discharge through the outlet.
- 8 Differentiate between Aqueduct and Siphon aqueduct.
