Total No. of Questions :10] *[Total No. of Printed Pages :2*

Roll No.....

CE-602

B.E. VI Semester

Examination, December 2012

Water Resource and Irrigation Engineering

Time : Three Hours

Maximum Marks : 100 ***Minimum Pass Marks :35***

Note : 1. Attempt only five questions. Internal choice is given with each question.

2. Draw neat sketches where ever is required.

1) a) What are the various types of Rain Gauges? Explain the working of any one in detail. 10

b) Explain the following : 10

i) Depth area duration curve.

ii) Run off estimation.

OR

2) a) Explain the 'Hydrological Cycle' with the help of neat sketch. 10

b) Explain the following : 10

i) Synthetic unit Hydrograph

ii) Infiltration Indices.

3) a) What are the various methods of estimating the floods? Explain any one in detail. 10

b) Define the term water logging. How reclamation of waterlogged area is done? 10

OR

4) a) Write a detailed note on economics of flood control. 10

b) What is salt Efflorescence? What are the causes and effects of salt Efflorescence? 10

5) a) Discuss the various data required for the planning of multipurpose reservoir. 10

b) Describe the importance of Rain Water Harvesting in detail. 10

OR

6) a) Discuss the economic analysis of any water resource project. 10

b) Explain the role of water in environment. 10

7) a) Explain and derive relation between Duty, and Delta. 10

b) What are the various methods of surface irrigation? Explain any one in detail. 10

OR

8) a) Discuss the suitability of different types of soils found in India for agriculture purpose. 10

b) Explain the following : 10

i) Crop rotation

ii) Suitability of water for Irrigation

9) a) What are the functions of cross and Head regulators. 10

b) Describe yield test for well. 10

OR

10) a) What is canal lining? Discuss lining objectives in detail. 10

b) Explain the following : 10

i) Interference of wells

ii) Well losses.

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