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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

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- 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.
