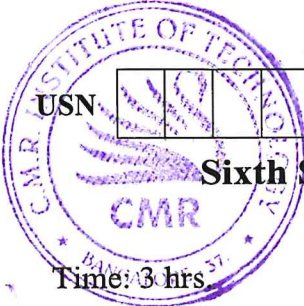


# CBCS SCHEME



15CV661

## Sixth Semester B.E. Degree Examination, Jan./Feb. 2021 Water Resources Management

Time: 3 hrs

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Define Hydrological cycle with a neat sketch and explain different process in hydrological cycle. (08 Marks)
- b. Explain Global water resources and Indian water resources. (08 Marks)

OR

- 2 a. Explain Water balance equation. Mention its importance. (08 Marks)
- b. Explain Groundwater resources. Differentiate between confined aquifer and unconfined aquifer. (08 Marks)

### Module-2

- 3 a. Describe the necessity of water resources planning and management. (08 Marks)
- b. Explain System Components. Describe the planning scale of water resource management. (08 Marks)

OR

- 4 a. Explain the water resource planning and management analysis. (08 Marks)
- b. Describe the planning and management aspects. Discuss the post planning and management issues. (08 Marks)

### Module-3

- 5 a. Define IWRM. Describe the principles of IWRM. (08 Marks)
- b. Explain the implementation of IWRM. (08 Marks)

OR

- 6 a. Describe the Legislative and Organizational framework of IWRM along with assessment. (08 Marks)
- b. Describe the types and forms of private sector involvement. (08 Marks)

### Module-4

- 7 a. Explain Legal framework of water. (08 Marks)
- b. Explain National water laws and other key issues. (08 Marks)

OR

- 8 a. Describe Irrigation Management transfer policies and activities. (08 Marks)
- b. Explain Origin of WUA's and its Byelaws. (08 Marks)

### Module-5

- 9 a. Explain Water harvesting techniques. Discuss the necessity of water harvesting. (08 Marks)
- b. Describe the design of small harvesting structure like farm ponds (layout & design). (08 Marks)

OR

- 10 a. Explain Micro catchment water harvesting. Mention advantages of micro catchments. (08 Marks)
- b. Describe the various rainwater harvesting techniques. (08 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

