



B.E/B.TECH DEGREE EXAMINATIONS: APRIL /MAY 2024

(Regulation 2018)

Seventh Semester

CIVIL ENGINEERING

U18CET7002: Irrigation and Water Resources Management

COURSE OUTCOMES

CO1: Infer the water resource requirement.

CO2: Summarize the water resource management strategies adopted.

CO3: Estimate the consumptive use of water and design of canal lining.

CO4: Understand the components of various hydraulic structure.

CO5: Classify the various irrigation methods and prepare the irrigation scheduling for various crops.

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

(Answer not more than 40 words)

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|---|-----|-------------------|
| 1. Define reservoir. | CO1 | [K ₁] |
| 2. Classify the various zones of storage in a reservoir | CO1 | [K ₂] |
| 3. List out the factors affecting the consumptive use of water. | CO2 | [K ₂] |
| 4. State the principles of Master Plan. | CO2 | [K ₂] |
| 5. What is the necessity of irrigation? | CO3 | [K ₁] |
| 6. Differentiate between kharif crops & rabi crops. | CO3 | [K ₂] |
| 7. Define contour canal. | CO4 | [K ₁] |
| 8. List out the forces acting in a gravity dam. | CO4 | [K ₁] |
| 9. Classify the various types of irrigation | CO5 | [K ₂] |
| 10. What is lift irrigation? | CO5 | [K ₁] |

Answer any FIVE Questions:-

PART B (5 x 16 = 80 Marks)

(Answer not more than 400 words)

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| 11. a) Explain the water requirements for irrigation, hydropower generation, navigation, drinking and disposal of sewage and industrial waste. | CO1 | [K ₂] |
| 12. a) Discuss the points about water allocation priorities in National Water Policy. | CO2 | [K ₂] |

13. a) Summarize the factors affecting Duty, Delta and Base period. CO3 [K₂]
14. a) Explain the term Cross drainage works with neat sketches. CO4 [K₂]
15. a) Discuss in detail about the methods of Surface and Sub-Surface irrigation CO5 [K₂]
16. a) Outline the key features and functions of diversion headworks in diverting water from its natural course. CO4 [K₂]
