

Reg. No.

Question Paper Code

11528

B.E. / B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022

Sixth Semester

Civil Engineering

CE8603 - IRRIGATION ENGINEERING

(Regulations 2017)

Duration: 3 Hours

Max. Marks: 100

PART-A (10 × 2 = 20 Marks)

Answer ALL Questions

- | | <i>Marks,
K-Level, CO</i> |
|--|-------------------------------|
| 1. Define Irrigation? What are the merits and demerits of irrigation | 2,K1,CO1 |
| 2. Outline the factors affecting evapotranspiration? | 2,K2,CO1 |
| 3. Discuss the disadvantages of sub surface irrigation | 2,K2,CO2 |
| 4. What is alignment of canals? | 2,K1,CO2 |
| 5. What is on farm development? | 2,K1,CO5 |
| 6. List the forces acting on dams | 2,K1,CO3 |
| 7. Explain barrage | 2,K2,CO3 |
| 8. Identify the different types of canal lining? | 2,K2,CO4 |
| 9. What are the functions of a canal regulator? | 2,K1,CO4 |
| 10. What is conjunctive use of water? | 2,K1,CO5 |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

- | | |
|---|-----------|
| 11. a) Explain the methods to measure the consumptive use of water. | 13,K2,CO1 |
| OR | |
| b) What is meant by Duty? List the factors affecting duty. How to improve duty? | 13,K2,CO1 |
| 12. a) What are the types of irrigation methods available? Explain about tank irrigation in detail. | 13,K2,CO2 |
| OR | |
| b) (i) Define surface irrigation. Why it is widely practiced method of irrigation? | 7,K2,CO2 |
| (ii) What are the advantages and disadvantages of the method? | 6,K2,CO2 |
| 13. a) Explain in detail about the component parts of diversion works. | 13,K2,CO3 |

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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OR

b) Develop on the features of cross drainage works.

13,K3,CO3

14. a) Explain the various considerations for alignment of a canal.

13,K2,CO4

OR

b) List the types of canal lining and explain them in detail.

13,K2,CO4

15. a) Recall the following

i) On –Farm Development Works.

5,K2,CO5

ii) Modern techniques to minimize water losses.

8,K2,CO5

OR

b) Discuss the details about PPP and its impact on the water management.

13,K2,CO5

PART - C (1 × 15 = 15 Marks)

16. a) Explain in detail about sprinkler method of irrigation and how far it is suitable in Indian conditions.

15,K2,CO6

OR

b) Summarize on irrigation scheduling.

15,K2,CO6