

**6425**  
**BOARD DIPLOMA EXAMINATION**  
**MARCH/APRIL - 2019**  
**DIPLOMA IN CIVIL ENGINEERING**  
**IRRIGATION ENGINEERING**  
**FOURTH SEMESTER EXAMINATION**

**Time: 3 Hours**

**Total Marks: 80**

**PART - A (3m x 10 = 30m)**

*Note 1: Answer all questions and each question carries 3 marks*

*2: Answers should be brief and straight to the point and shall not exceed 5 simple sentences*

1. Distinguish between perennial and in undation irrigation.
2. State any three uses of Rainfall records
3. Define Flood banks
4. State any three situations that are suitable for construction of Earthen Dams
5. Define Regime channel
6. Sketch typical cross section of Canal in partial cutting and Embankment
7. List different stages of flow of Rivers
8. State any three advantages of Sprinkler Irrigation
9. State any three duties of Water User Association
10. Write any three advantages of Artificial recharge of Ground water

**PART - B (10m x 5 = 50m)**

*Note 1: Answer any five questions and each carries 10 marks*

*2: The answers should be comprehensive and the criteria for valuation is the content but not the length of the answer*

11. a) Write about principal crops in India.  
 b) Define crop period, Base period, Duty, Delta and derive the relation between them.
12. With a sketch, explain the working of Float type automatic Rain gauge
13. Sketch the layout of Diversion head work and explain its component parts
14. Explain the working of Siphon spillway with a sketch
15. Explain Construction and contraction joints with sketches

16. Explain Siphon Aqueduct with a sketch and mention its merits.
17. Explain any five ill effects of Water Logging
18. Explain methods of Rain water harvesting

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A.A.N.M&V.V.R.S.R POLYTECHNIC, GUDLAVALLERU, KRISHNA, AP

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