

**3424**  
**BOARD DIPLOMA EXAMINATION, (C-09)**  
**JUNE - 2019**  
**\* DIPLOMA IN CIVIL ENGINEERING**  
**IRRIGATION ENGINEERING**  
**FOURTH SEMESTER EXAMINATION**

**Time: 3 Hours**

**Total Marks: 80**

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

*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. What are the advantages of Drip irrigation ?
2. Define Base period, Crop period and Delta ?
3. What is the purpose of providing a diversion headwork?
4. List the component parts of a weir.
5. What is a drainage gallery? Why drainage galleries are provided in gravity dams?
6. State the different types of spillways.
7. State any three situations where Earthen dams are suitable ?
8. Draw the cross section of a canal in partial embankment and partial cutting.
9. What is soil erosion?
10. What is meant by water harvesting? Why is it necessary?

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

*Note 1: Answer any five questions and each question 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. Explain the advantages and disadvantages of irrigation ?
12. Explain the construction and working of a Simon's rainguage with a sketch.
- \* 13. Draw a neat sketch of a diversion head work and label its parts.
14. Explain the points to be considered for the selection of site for a reservoir.
15. Explain the measures to be taken for maintenance of earth dams.
16. Draw the practical profile of a gravity dam and explain its features.
17. What are canal regulation works? What is the objective of providing,  
a) Head Regulator    b) Canal drop    c) Canal escape.
18. Explain about the characteristics of watershed?

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