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BOARD DIPLOMA EXAMINATION, (C-16)

MAY/JUNE—2023

DCE - FOURTH SEMESTER EXAMINATION

IRRIGATION ENGINEERING

Time: 3 Hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

- **Instructions**: (1) Answer **all** questions.
 - (2) Each question carries **three** marks.
 - (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- 1. List any six factors affecting the duty of water.
- 2. State any three uses of rain fall records.
- 3. Write the difference between weir and barrage.
- 4. List the situations where earthen dam is preferred.
- 5. Classify canals based on alignment.
- State the need for canal lining. 6.
- **7.** List any three objectives of river training works.
- 8. Write any three functions of water user associations.
- 9. Write the advantages and disadvantages of drip irrigation.
- State any three objectives of watershed management. 10.

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- **Instructions:** (1) Answer *any* **five** questions.
 - (2) Each question carries **ten** marks.
 - (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- State the advantages and disadvantages of irrigation. 11.
- **12.** Briefly describe Simon's rain gauge with sketch.
- 13. Explain the component parts of diversion head works with a sketch.
- List the factors to be considered in the site selection for a dam. 14.
- **15.** List the common types of spillways and explain about any two of them.
- 16. Explain the typical cross sections of canals with the help of sketches.
- **17**. Define soil erosion. Write the causes and ill effects of soil erosion.
- 18. Explain the methods of rain water harvesting.

