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BOARD DIPLOMA EXAMINATION, (C-16) OCTOBER/NOVEMBER—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. State different crop seasons in India.
- 2. State three methods of calculation of maximum flood discharge.
- 3. Distinguish between barrage and weir.
- 4. Define dam and list four types of dams.
- 5. State three advantages of canal lining.
- 6. State three typical cross-sections of canals.
- 7. State three types of river training works.
- 8. List three methods of irrigation.
- 9. State three advantages of drip irrigation.
- **10**. Write three advantages of rain water harvesting.

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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.
- **11.** Define duty and explain about the factors affecting duty.
- **12.** (a) What are the objectives of river gauging.
 - (b) What are the points to be remembered while selecting the site for river gauging?
- **13.** State the factors affecting selection of site for head works.
- **14.** Draw a sketch of drainage gallery and explain its functions.
- **15.** State the situations in which earth dams are suitable.
- **16.** What is super passage? Explain with a sketch.
- **17.** Explain various methods of land reclamations.
- **18.** Explain about the following:
 - (a) Soil moisture conservation
 - (b) Artificial recharge of groundwater

