

Time: 3 hours]

6425

BOARD DIPLOMA EXAMINATION, (C-16) OCTOBER—2020 DCE—FOURTH SEMESTER EXAMINATION

IRRIGATION ENGINEERING

PART—A

 $3 \times 10 = 30$

[Total Marks: 80

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 three methods of expressing duty.
- 2. State different methods of estimating average rainfall over a catchment.
- **3**. State three functions of head regulator.
- 4. List three types of spillways.
- **5**. Draw a neat sketch of canal in cutting and label the parts.
- **6**. State six types of canal linings.
- 7. State different methods of land reclamation.
- **8**. List any three advantages of sprinkler irrigation.
- **9**. State the duties of water-user associations.
- **10**. What is water harvesting? Why it is necessary?

/6425 1 [Contd....

Instructions: (1) Answer any five questions.

- (2) Each question carries ten marks.
- (3) Answers should be comprehensive and the criteria for valuation are the content but not the length of the answer.
- **11**. Explain briefly different types of irrigation.
- **12**. What is run-off? Explain the factors affecting run-off from a catchment.
- 13. Describe with a neat sketch, the component parts of weir.
- 14. What are the causes of failure of gravity dam? Explain briefly.
- **15**. Draw the elementary and practical profile of gravity dam and label the parts.
- **16**. Explain the different methods of alignment of canal with sketches.
- 17. State the causes of water logging and effects of water logging.
- 18. State five objectives of watershed management.

* * *