



C14-C-504

4621

BOARD DIPLOMA EXAMINATION, (C-14)

SEPTEMBER/OCTOBER - 2020

DCE—FIFTH SEMESTER EXAMINATION

IRRIGATION ENGINEERING

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=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. Define irrigation and briefly explain the necessity of irrigation.
2. State different types of rain gauges.
3. What are the three main functions of head regulator?
4. Define dam and list the different types of dams.
5. Write classification of canals based on functions.
6. Define balanced depth of cutting.
7. State the advantages of irrigation by furrow method.
8. List any three advantages of sprinkler irrigation.
9. What is water-shed management?
10. Write any three advantages of rain water harvesting.

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PART—B

10×5=50

- Instructions** : (1) Answer *any five* questions.
(2) Each question carries **ten** marks.
(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11.** (a) Give the relationship between duty, delta and base period. 6
(b) Find duty of water if a crop requires total depth of 92 cm of water for a base period of 120 days. 4
- 12.** Define catchment area and also three types of catchments based on characteristics.
- 13.** Write the points to be considered for selection of site for construction of head works.
- 14.** Describe with neat sketch component parts of a weir.
- 15.** Explain the points to be considered to selection of site for a dam.
- 16.** What are the causes of failure of gravity dams? Explain them briefly.
- 17.** Describe an inlet and outlet with a sketch.
- 18.** Explain the various measures adopted for preventing soil erosion.

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