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BOARD DIPLOMA EXAMINATION, (C–16)

SEPTEMBER/OCTOBER - 2020

DCE—FOURTH 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 *(a)* base period, *(b)* duty and *(c)* delta.

2. Define catchment area. State the types of catchment areas.

3. List three component parts of weir.

4. Distinguish between low dam and high dam.

5. Sketch the typical crosssection of canal in cutting.

6. Define berm and state two uses of berms.

7. Define *(a)* waterlogging, *(b)* soil erosion and *(c)* land reclamation.

8. Explain basin method of irrigation with sketch.

9. Write a short note on check flooding.

10. State the need for watershed management.

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. Explain briefly the 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 waterlogging and effects of waterlogging.

18. State five objectives of watershed management.

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