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BOARD DIPLOMA EXAMINATION, (C-14)

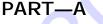## JUNE—2019

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. Give the period for Kharif season and Rabi season and list two food crops that grow in each season.

2. Define :   *(a)*   Run-off,   *(b)*   Maximum flood discharge.

3. List any six component parts of diversion head work.

4. Distinguish between Low dam and high dam.

5. List the functions of canal regulator.

6. List any three types of guide banks with sketches.

7. List any six advantages of drip irrigation.

8. List any six duties of water user association.(WUA)

9. List any three rain water harvesting structures.

10. State the necessity of water shed 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. *(a)* State the relation between duty, delta and base period.

(b) Explain the factors that effect the Duty.

12. Explain with a sketch to compute the rainfall over a particular catchment area by Theissen's polygon method.

13. Describe the component parts of a diversion head work with a neat sketch.

14. *(a)* Give the comparision between Barrage and weir.

(b) State any five factors for selecting suitable site for diversion works.

15. Explain any five causes of failures of earthen dams and their preventive measures.

16. Explain with neat sketch the construction joints and contraction joints in gravity dams.

17. Define canal lining. Give any four advantages and four disadvantages of canal lining.

18. *(a)* Explain any five ill effects of water logging.

(b) Explain different stages of flow of river.

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