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C16-C-402

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BOARD DIPLOMA EXAMINATION, (C-16)

JUNE/JULY—2022

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. State any three differences between perennial and inundation irrigation.
2. Define (a) catchment and (b) precipitation.
3. What is head regulator? State any two functions of head regulator.
4. Define (a) FRL, (b) MWL and (c) live storage.
5. State three types of earth dams.
6. Draw a neat sketch of canal in embankment.
7. Define (a) aqueduct and (b) level crossing.
8. What is water logging? State any two ill effects of water logging.
9. Define watershed and watershed management.
10. What is meant by rain water harvesting?

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[ Contd...

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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 criterion for valuation is the content but not the length of the answer.

11. Define irrigation. Write any four advantages and disadvantages of irrigation.
12. Explain the method of measurement of rainfall using Simon's rain gauge.
13. Describe the component parts of diversion head work with a neat sketch.
14. Explain the causes of failure of earthen dams with sketches.
15. Explain construction and contraction joints with sketches.
16. What is canal lining? Explain different types of canal linings.
17. What is soil erosion? State any four causes and preventive measures of soil erosion.
18. Explain the characteristics of watershed.

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