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C16-C-406

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**BOARD DIPLOMA EXAMINATION, (C-16)
OCTOBER/NOVEMBER-2018
DCE - FOURTH SEMESTER EXAMINATION**

IRRIGATION ENGINEERING

Time : 3 Hours]

[Total Marks: 80

PART-A

3X10=30

Instructions :

1. Answer **All** questions.
2. Each question carries **Three** marks.
3. Answer should be brief and straight to the point and shall not exceed five simple sentences.

1. Distinguish between perennial and inundation irrigation.
2. What is the necessity of irrigation?
3. What are the uses of rainfall records?
4. Distinguish between a weir and a barrage.
5. Define saturation gradient and phreatic line.
6. List out the situations suitable for the construction of Earth Dams.
7. State the methods of canal alignment and the situations in which each is suitable.
8. What is cross drainage work structures? Give example.
9. Explain briefly about the need for watershed development in India.
10. State any three objectives of water shed management.

PART-B

10X5=50

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

11. What is meant by sprinkler irrigation? What are the advantages and disadvantages of sprinkler irrigation?
12. Sketch and explain the measurement of precipitation with a symon's rain gauge.
13. Explain the factors suitable for selection of a site for diversion head works.
14. Describe the working of a siphon spillway with a neat sketch.
15. Explain the causes of failures of gravity dams and preventive measures
16. Explain the drainage arrangements in earth dam with neat sketches.
17. What is meant by canal lining? What are the advantages and disadvantages of lining of canal?
18. Mention the different types of cross drainage works. Explain an aqueduct with sketch
