



C-16-C-16S-C-406

C-16-C-16S-C-406

5619

BOARD DIPLOMA EXAMINATION, (C-16-C-16S)

MARCH / APRIL - 2019

DCE - IV 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) Answer should be brief and straight to the point.

- 1 State the situations under which direct and storage irrigation is suitable.
- 2 Lists six disadvantages of irrigation.
- 3 Define the terms Catchment and intercepted catchment.
- 4 Distinguish between barrage and Weir.
- 5 State the need of drainage gallery in dam.
- 6 Distinguish between low dam and high dam.
- 7 Draw the cross section of a Canal in cutting.
- 8 What is a berm ? What are the advantages of providing berms ?
- 9 State any three objectives of watershed management.
- 10 Define watershed management and list any two objectives of it.  
(i) watershed management  
(ii) watershed management

5619]

Contd...

PART - B

10×5=50

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

- 11 What are the different methods of irrigation? Explain about boarder strip method and check basin method.
- 12 List the types of rain guages and explain Symon's rain guage with a neat sketch.
- 13 Draw the layout of a diversion headworks and state the functions of head regulator, scouring sluices and guide banks.
- 14 Why drainage arrangements are necessary in earthen dams ? Explain about the drainage arrangements provided in earthen dams.
- 15 Briefly explain the causes of failure of gravity dams and their remedies.
- 16 Explain how a breach is closed in a canal.
- 17 Explain different methods of alignment of canals and the situations in which each is suitable.
- 18 (a) What are the functions of a canal regulator ?  
(b) Draw the sketch of siphon level crossing and explain.