Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CE) (2011 Onwards) (Sem.–7,8)

IRRIGATION ENGINEERING-II

Subject Code : BTCE-803

M.Code : 71861

Time : 3 Hrs. Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.
4. Assume any data suitabely.

SECTION-A

Q1 Answer briefly :

a. Explain the Term Exit Gradient.

b. What is Diversion Headwork?

c. Distinguish between Weir and Barrage.

d. What is a Drainage Gallery?

e. List the various types of Canal Outlets.

f. In what situations Barrages are preferred?

g. How Aqueduct site is selected?

h. List the various types of Falls.

i. Why Energy Dissipation devices are provided below spillways?

j. What do you understand by Modular Outlet?

SECTION-B

2. Explain the salient features of Cross Regulators.

3. Explain the working of a Syphon Aqueduct.

4. Discuss the factors affecting Seepage losses in irrigation channels.

5. Give the classification of various cross drainage works.

6. Explain the salient features of Lane Weighted Creep Theory.

SECTION-C

7. Compute the discharge over an Ogee spillway with the coefficient of discharge C = 2.5 at a head of 4m. The effective length of the spillway is 100m. Neglect the velocity of approach. How will you reclaim a water-logged and salt affected area and make it suitable for agriculture purpose.

8. Discuss the stepwise procedure for the design of Non-Modular Outlet.

9. Explain the stepwise procedure for the design of Inglis Type Fall.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.