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**Question Paper Code : 51253**

**B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016**

**Fifth Semester**

**Civil Engineering**

**CE 2301/10111 CE 501/CE 50 – IRRIGATION ENGINEERING**

**(Regulations 2008/2010)**

**(Common to PT CE 2301 / Irrigation Engineering for B.E. (Part-Time)**

**Sixth Semester Civil Engineering – Regulations 2009)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. What is the mode of Irrigation ?
2. Define crop ratio.
3. What is meant by Drip Irrigation ?
4. What is Tank Irrigation method ?
5. Distinguish between a masonry weir and rock fill weir.
6. List the forces which are acting on a dam.
7. What are the functions of cross – drainage works ?
8. What do you understand by river training works ?
9. State the need for optimum use of water.
10. Write the necessity of on farm development works.

**PART – B (5 × 16 = 80 Marks)**

11. (a) (i) Discuss how Independence has set an era of irrigation development. (8)  
(ii) How do you classify irrigation projects? (8)

**OR**

- (b) (i) Define consumptive use. (2)  
(ii) What are the factors which influence Consumptive use of water any crop? (8)  
(iii) Consumptive use is related to the total requirement of water for the crop. How? (6)

12. (a) Explain planning and design of drip irrigation system. (16)

**OR**

- (b) Explain types of sprinkler system in Irrigation. (16)

13. (a) (i) Discuss about the types of earth dams with neat sketches. (8)  
(ii) Discuss about the modes of failure of a gravity dam. (8)

**OR**

- (b) (i) Describe the different types of spillways with figures. (8)  
(ii) Describe about the points to be considered for hydraulic design of dams. (8)

14. (a) Explain the classification of canals with the help of line sketches.

**OR**

- (b) Explain various functions of river training works.

15. (a) Discuss in detail about various aspects on farm development works. (16)

**OR**

- (b) Describe the following :  
(i) Participatory Irrigation management (6)  
(ii) Objectives of water management (6)  
(iii) Command area Development (4)