

Question Bank (II scheme)

Name of Course: Water Resources Engineering

Subject code: 22501

Semester : Fifth

Programme: Civil

Unit test II

CHAPTER 4 Minor and Micro Irrigation(Mark 10)

(2 Marks)

1. State any four essential requirements of site for construction of bandhara.
2. State advantage and disadvantages of Bandhara irrigation scheme.
3. State considerations for site selection for bandhara.
4. Compare solid and open bandhara
5. Draw a layout of bandhara irrigation scheme showing all different components
6. Explain how percolation tank is differ from irrigation tank.

(4 Marks)

- 7 What is percolation tank? Why it is necessary? Describe construction of percolation tank.
- 8 What is Kolhapur Type weir(K.T.)?Draw a neat sketch of it.
- 9 Explain importance of drip irrigation and draw layout and show component parts.
- 10 Compare between drip irrigation and sprinkler irrigation on any four points.
- 11 Draw layout of lift irrigation scheme and enlist the various valves provided in lift irrigation.
- 12 Discus sprinkler irrigation system with respect to merits demerits . Skech layout of it.

CHAPTER 5 Diversion Head Work (Mark 08)

(2 Marks)

13 What is Diversion Head work.

14 What is the function of pick up weir? Under what situation it is constructed.

15 State component and function of fish ladder with the help of neat sketch.

16 State four differences between Diversion Head Work and Storage Head Work.

17 State function of silt Excluder.

(4 Marks)

18. Define weir and state factors affecting selection of site for a weir.

19. Draw layout of diversion Head Work and Explain its component parts.

20 State different types of weir. Draw labeled sketch of any one type of weir.

21 Differentiate between weir and barrage.

22 Draw layout of typical barrage and show all component parts of it .

CHAPTER 6 Canals (Mark 10)

(2 Marks)

23. State points to be considered while fixing alignment of canal.
24. What do you mean by canal lining ? State two purposes , advantages, disadvantages of canal lining.
25. Compare between contour canal and ridge canal.
26. Compare between aqueduct and super passage.
27. What are causes and remedial measures of water logging?

(4 Marks)

28. Draw the cross section of canal in embankment and partial cutting and partial embankment.
29. What is the necessity of C.D. works? What are the different types of C.D. works? Explain one with neat sketch.
30. Suggest the suitable type of CD work and Draw sketch under each situation.
 - A) Canal bed level and nalla bed level are same
 - B) Canal bed level is above HFL of Nalla
 - C) Nalla bed level is above FSL of canal.
 - D) HFL of nalla is in between FSL of canal and bed level of canal.
31. Define balancing depth? Calculate balancing depth for a section of a canal having following data:
 $b = 10\text{m}$, $FSD = 1.5$, Bank width = 2m ,Side slope 1:1 in cutting and 1.5:1 in filling free board 0.5m.