

4/4 B.Tech. SEVENTH SEMESTER

CE7T1 DESIGN AND DRAWING OF HYDRAULIC STRUCTURES Credits: 4

Lecture: 4 periods/week

Internal assessment: 30 marks

Tutorial: 1 period /week

Semester end examination: 70 marks

Objectives:

- To know the importance, location, components and types of irrigation structures
- To design various irrigation structures
- To get experience in drawing of irrigation structures.

Learning outcomes:

At the end of course the student will have:

- Exposure to the design and drawing of various irrigation structures.
- Ability to meet the requirements of irrigation design engineers in large and small consulting firms, and at all levels of government and Private sectors

LIST OF STRUCTURES:

1. Sloping glacis weir.
2. Tank sluice with tower head
3. Type III Syphon aqueduct.
4. Surplus weir.
5. Trapezoidal notch fall.
6. Canal regulator.

Final Examination pattern: Any two questions of the above six designs may be asked out of which the candidate has to answer one question. The duration of examination will be three hours.

Learning resources

Text books:

1. Design of minor irrigation and canal structures, (3rd edition) by Satyanarayana Murthy C., Wiley eastern Ltd, 1990.
2. Irrigation engineering and Hydraulic structures, (1st edition) by Garg S.K., Standard Book House, 2006.