III Year I Semester

COURSE OUTCOMES – CIVIL ENGINEERING

Concrete technology

At the end of the course, the student will be able to:

CO 1:- Identify Quality Control tests on concrete making materials

CO 2:- Understand the behavior of fresh and hardened concrete

CO 3:- Design concrete mixes as per IS and ACI codes

CO 4:- Understand the durability requirements of concrete

CO 5:- Understand the need for special concretes

Reinforced Concrete Structures Design and Drawing

At the end of the course, the student will be able to:

CO 1:- Design the Reinforced Concrete beams using limit state and working stress methods

CO 2:- Design Reinforced Concrete slabs

CO 3:- Design the Reinforced Concrete Columns and footings

CO 4:- Design structures for serviceability

CO 5:- Analyze one dimensional and two-dimensional structures using matrix methods of structural analysis

CO 6:- Analyze structures up to three degrees of indeterminacy

Engineering Geology

At the end of the course, the student will be able to:

CO 1:- Understand weathering process and mass movement

CO 2:- Distinguish geological formations

CO 3:- Identify geological structures and processes for rock mass quality

CO 4:- Identify subsurface information and groundwater potential sites through geophysical investigations

CO 5:- Apply geological principles for mitigation of natural hazards and select sites for dams and tunnels

Geotechnical Engineering

At the end of the course, the student will be able to:

CO 1:- Characterize and classify soils

CO 2:- Identify shear strength parameters for field conditions

CO 3:- Compute and analyze the consolidation settlements

CO 4:- Understand the principles of compaction and its control

Water Resources Engineering-I

At the end of the course, the student will be able to:

CO 1:- Analyze hydro-meteorological data

CO 2:- Estimate abstractions from precipitation

CO 3:- Compute yield from surface and subsurface basin

CO 4:- Develop rainfall-runoff models

CO 5:- Formulate and solve hydrologic flood routing models

Intellectual Property Rights

At the end of the course, the student will be able to:

CO 1:- Intellectual property rights

CO 2:- Trade marks

CO 3:- Laws of copy rights

CO 4:- Law of patents

CO 5:- Trade secrets

Human Values and Professional Ethics

CO 1:- Identifies the multiple ethical interests at stake in a real-world situation or practice

CO 2:- Articulate what makes a particular course of action ethically defensible

CO 3:- Assess their own ethical values and the social context of problems

CO 4:- Identifies ethical concerns in research and intellectual contexts, including academic integrity, use and .citation of sources, the objective presentation of data, and the treatment of human subjects

CO 5:- Demonstrates knowledge of ethical values in non-classroom activities, such as service learning, internships, and field work

Disaster Management

On successful completion of this course, it is expected that students should be able to

CO 1:- Acquire the knowledge disaster Management

CO2:- Understand the vulnerability of ecosystem and infrastructure due to a disaster

CO3 :- Acquire the knowledge of Disaster Management Phases

CO 4:- Understand the hazard and vulnerability profile of India

Fluid Mechanics & Hydraulic Machinery Lab

At the end of the course, the student will be able to:

CO 1:- Understand the concepts of channel flows.

CO 2:- Design the working proportions of hydraulic machines

CO 3:- Test the performance of pumps and turbines

CO 4:- Determine Manning's and Chezy's coefficients for smooth and rough channels

CO 5:- Determine Energy loss in Hydraulic jump and Calibrate standing wave flume

Engineering Geology Lab

At the end of the course, the student will be able to:

CO 1:- Determines the physical properties of the minerals

CO 2:- Identifies the megascopic and microscopic properties of the rocks and minerals

CO 3:- Works on structural geological problems

CO 4:- Works on simple strike and dip problems