Course Outcome

DEPARTMENT OF CIVIL ENGINEERING

2023-24

SEM-I

Class: SE CIVIL

BSH 201 Engineering Mathematics –III

CED202 Strength of Materials

CED202.1 Explain stresses, strains and Hooke's law.

CED202.2 Draw Shear Force, Bending Moment, Bending stress and Shear stress distribution diagram.

CED202.3 Analyse isotropic structural members subjected to axial forces and temperature variations.

CED202.4 Explain the concept of principal stresses, strains and Euler's theory and Rankin's Theory.

CED203 Fluid Mechanics-I

CED203.1 Explain the properties of fluids, fluid statics, fluid dynamics and viscous flow.

CED203. 2 Solve Bernoulli's equation, continuity equation and turbulence.

CED203.3 Explain Pressure through various Pressure measuring devices

CED203.4 Explain flow profiles around submerged bodies.

CED204 Surveying-I

CED204.1 Explain the Types of surveying.

CED204.2 Explain the concept of levelling, contouring and Trigonometric Levelling

CED204.3 Explain Computation of Areas and Volumes by different methods.

CED204.4 Explain tachometric surveying.

CED205 Concrete Technology

CED205.1 Explain properties of ingredients of concrete.

CED205.2 Explain the properties of fresh and hardened concrete and perform different test on concrete.

CED205.3 Design the concrete mix using IS code method.

CED205.4 Explain special concrete with use and concept of Deterioration and repairs.

Everest Educational Society's Group of Institutions
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Course Outcome

Class: TE CIVIL

CED301 Theory of Structure – II

CED301.1 Explain basic concepts of plastic Analysis of structure

CED302. 2 Analyse indeterminate beams, frames and trusses.

CED302. 3 Apply Column Analogy method, Moment Distribution method and Kani's method.

CED302.4 Analyse two hinged arches.

CED302 Design of Structure - I (Steel)

CED302.1 Explain the different IS codes relates to steel structure.

CED302.2 Explain the design concepts of tension, compression and flexure member of steel structure.

CED302.3 Design the welded plate girder and roof trusses.

CED303 Building Planning and Design

CED303.1 Explain the principles of architectural composition and procedure of building permission.

CED303.2 Explain the general building concepts and building services.

CED303.3 Design residential & public building.

CED303.4 Draw perspective view of buildings.

CED304 Engineering Geology

CED304.1 Explain physical nature of earth system and minerals.

CED304.2 Explain classification of rocks and concepts of structural geology.

CED304.4 Describe geological techniques and ground water investigation.

CED304.5 Explain requirements of good quality building stones.

CED304.6 Suggest the best site for dams, reservoirs and tunnel.

CED305 Highway Engineering -I

CED305.1 Explain about highway planning and geometric design.

CED305.2 Describe the design of flexible and rigid pavement.

CED305.3 Describe specification of highway construction material.

CED305.4 Explain concept of traffic engineering.

Course Outcome

Class: BE CIVIL

CED401 Environmental Engineering – II

CED401.1 Explain concept of Water Demand and components of Water Treatment Units.

CED401.2 Explain Waste Water Collection System.

CED401.3 Describe Solid Waste Management

CED402 Water Resources Engineering – II

CED402.1 Explain the construction of reservoir and dam.

CED402.2 Explain the construction features of spillways and canal.

CED402.3 Explain the working of cross drainage works.

CED403 Design of Structures – III

CED403.1 Design the combined footings.

CED403.2 Design the flat slab by direct design and Equivalent frame method.

CED403.3 Explain the terminologies about prestressed concrete.

CED403.4 Design the Cantilever and Counterfort retaining wall.

CED403.5 Design the underground water tank.

CED404 Foundation Engineering

CED404.1 Explain the site investigation for foundation

CED404.2 Apply Terzaghi's theory and bearing capacity equations.

CED404.3 Design the combined footing

CED404.4 Determine group capacity of the pile foundation.

CED404.5 Explain foundation technique in water bodies.

Course Outcome

SEM-II

Class: SE CIVIL

BSH251 Engineering Mathematics-IV

CED253 Building Construction and Drawing

CED253.1 Explain basic concepts of Building Construction

CED253.2 Sketch plan, elevation and section of load bearing and framed structures.

CED253.3 Sketch plan, elevation and section of public and industrial structures.

CED253.4 ketch detailed working drawing.

CED254 Fluid Mechanics-II

CED254.1 Summarize the concept of Fluid mechanics I.

CED254.2 Explain Pumps and Turbine.

CED254.3 Explain types of flow through open channel.

CED254.4 Explain Boundary Layer Theory and Forces on Immersed Bodies in Flowing Fluids.

CED255 Surveying-II

CED255.1 Explain the terminologies of curves.

CED255.2 Design horizontal and vertical curve.

CED255.3 Explain advance methods of geodetic surveying.

CED255.4 Explain adjustments in a traverse.

CED255.5 Explain survey with the help of modern advanced surveying techniques.

CED256 Theory of Structure- I

CED256.1 Explain application of structures in buildings.

CED256.2 Explain determinant and indeterminate structure.

CED256.3 Explain methods of analysis of structure

Course Outcome

Class: TE CIVIL

CED306 Design of Structure-II (RCC)

CED306.1 Demonstrate basic fundamental concept in reinforced concrete design based on WSM

CED306.2 Design beams, slabs and columns according to IS and other codes.

CED306.3 Design beam for shear and torsion.

CED306.4 Design staircase.

CED307 Professional Practice

CED307.1 Explain basic concept of estimation.

CED307.2 Generate Detail Estimate of building.

CED307.3 Write specification and Rate analysis.

CED307.4 Explain concept of contract and tenders

CED307.5 Illustrate Government procedure of execution.

CED308 Geotechnical Engineering

CED308.1 Categorize the type of soil.

CED308.2 Perform proctor density test.

CED308.3 Use Boussinesq's equation and Newmark's chart.

CED308.4 Evaluate the shear strength of soil by direct, unconfined, tri-axial and vane shear tests.

CED308.5 Explain Rankin's, Coulomb's earth pressure theories and Swedish, friction circle methods of stability of slope.

CED309 Water Resource Engineering

CED309.1 Explain the terminologies related with hydrology.

CED309.2 Draw flood hydrograph and Estimate the peak flow.

CED309.3 Explain the concept of Ground water hydrology.

CED309.4 Explain Irrigation and Water applications to the crops.

CED309.5 Illustrate the Water shed management and Water Logging.

CED310 Elective - I

CED310.1 Explain properties of concrete.

CED310.2 Explain the advance features of concrete.

CED310.3 Illustrate the fracture mechanism of concrete.

CED310.4 Explain the non-destructive test on concrete.

Course Outcome

Class: BE CIVIL

CED451 Structural Mechanics

CED451.1 Explain the Laws and compatibility equations in structural analysis.

CED451.2 Analyse thin plate theory and Bending of circular plates.

CED451.3 Explain concept of Membrane theory of thin cylindrical shells

CED451.4 Explain Finite Element Method

CED451.5 Analyse Stiffness Matrix method

CED452 Construction Management

CED452.1 Explain an entry level professional constructor's role as a member of a multi-disciplinary team in the construction industry.

CED452.2 Explain the fundamental education that will lead to a leadership role in the construction industry.

CED452.3 Demonstrate responsibility for safety planning & productivity in Construction management settings.

CED452.4 Explain Material Management System

CED453 Professional Practice

CED453.1 Explain the basics of estimation.

CED453.2 Generate Detail Estimate of building.

CED453.3 Write specification and Rate analysis.

CED453.4 Explain concept of contract and tenders

CED453.5 Illustrate Government procedure of execution.

CED491 Elective – II

CED491.1 Design the Raft and pile foundation.

CED491.2 Analyse semi-circular rectangular beam.

CED491.3 Analyse deck slab and bridge girder.

CED491.4 Explain the concept of folded plates.

CED491.5 Design and detailing of deep beams as per IS 456:2000.