AY : 2019-20	Year:II –II Sem	
On successful completion of this course the students will be able:		
S.NO	Course Outcomes	Taxonomy
SPECIFIC LEARNING OUTCOMES -Probability and Statistics(15A54401)		
C221.1	To Explain the basic concepts of probability, random variables and solve real time problems using Baye's theorem.	Understand
C221.2	To Apply probability distributions like Binomial, Poisson and Normal distributions to solve statistical problems	Apply
C221.3	To Analyse the problems of large samples using the techniques of testing of hypothesis.	Analyse
C221.4	To Apply the techniques of testing of significance for the small samples.	Apply
C221.5	To Evaluate the control charts for describing the quality of a manufactured product.	Evaluate
C221.6	To Apply the knowledge of queuing theory to find mean arrival and service rate.	Apply
SPECIFIC LEARNING OUTCOMES -MEFA(15A52301)		
C221.1	To Explain the role and responsibilities of a managerial economist in modern business scenario.	Understand
C221.2	To Predict the demand of a product by using demand forecasting methods	Apply
C221.3	To Calculate the Break-Even Point (BEP) with the help of production and cost analysis.	Apply
C221.4	To Explain about competitive market structures and business economic environment.	Understand
C221.5	To Prepare the financial statements and analyze financial position of the firm.	Create
C221.6	To Discuss the sources of capital and allocation of funds for business undertaking.	Understand
SPECIFIC LEARNING OUTCOMES -Strength of Materials – II(15A01401)		
C221.1	To Apply the principle of virtual work	Apply
C221.2	To Determine deflection of a beam for various loading conditions	Apply
C221.3	To Apply unit load method to find the deflection of truss	Apply
C221.4	To Determine different stresses developed in thick cylinders	Apply
C221.5	To Understand the behaviour of column for combined bending and axial loading	Understand
C221.6	To Analyse the unsymmetrical bending in the curved pane	Analyse
SPECIFIC LEARNING OUTCOMES -Surveying– II(15A01402)		
C222.1	To Explain the Use and operation of Theodolite in the field.	Understand
C222.2	To Apply the knowledge of Theodolite in different operations in civil engineering projects.	Apply
C222.3	To Apply the knowledge and principles for the purpose of Tacheometric survey in finding out the constants.	Apply
C222.4	To Formulate the setting out of curve by Linear and Angular methods.	Create
C222.5	To Identify the Use of total station in the field of Civil Engineering Land Survey.	Remember
C222.6	To Differentiate the basic principles of GPS and GIS in civil engineering.	Understand
SPECIFIC LEARNING OUTCOMES -Structural Analysis – I(15A01403)		
C223.1	To Apply the knowledge of energy theorems in structural analysis concepts.	Apply
C223.2	To Analyse the various indeterminate structures such as fixed beams	Analyse
C223.3	To Analyse concept of deflection, bending moment and shear force diagram in beams	Analyse

C223.4	To Analyse slope and deflection of various members with sinking supports also.	Analyse
C223.5	To Calculate the moment distribution method for continuous beams	Apply
C223.6	To Analyse the single storey portal frame without side sway	Analyse

SPECIFIC LEARNING OUTCOMES -Hydraulics & Hydraulic Machinery(15A01404)

C224.1	To Understand the fluid flow phenomena observed in Civil Engineering systems such as flow in a pipe, flow measurement through orifices, mouth pieces, notches and weirs	Understand
C224.2	To Analyse fluid flows in open channel hydraulics and devices such as weirs and flumes	Analyse
C224.3	To Design open channels for most economical sections like rectangular, trapezoidal and circular sections	Create
C224.4	To Calculate forces and work done by a jet on fixed or moving plate and curved plates	Apply
C224.5	To Apply the working principles of Impulse and Reaction turbines	Apply
C224.6	To Apply the working principles of the Reciprocating pump	Apply

SPECIFIC LEARNING OUTCOMES -Fluid Mechanics & Hydraulic Machinery Laboratory(15A01405)

C225.1	To Determine the fluid flow principles in orifice and Venturimeter	Apply
C225.2	To Calculate Coefficient of discharge for a small orifice by a constant head method	Analyze
C225.3	To Analyse the Calibration of contracted Rectangular Notch and /or Triangular Notch	Analyze
C225.4	To Determine Coefficient of loss of head in a sudden contraction and friction factor	Analyze
C225.5	To Understand the Study of Hydraulic jump at various points	Remember
C225.6	To Determine the Efficiency test on Centrifugal Pump.	Apply

SPECIFIC LEARNING OUTCOMES -Surveying Laboratory – II (15A01406)

C226.1	To Evaluate horizontal and vertical distances in hilly terrain	Evaluate
C226.2	To Apply survey technique to align highways curves	Apply
C226.3	To Apply survey technique to align railway curves.	Apply
C226.4	To Explain the procedure of triangulation	Understand
C226.5	To Explain the methods involve in photographic survey.	Understand
C226.6	To Choose advances in surveying techniques over conventional method in the field of civil engineering.	Analyse

SPECIFIC LEARNING OUTCOMES -Comprehensive Online Examination-I (15A01407)

C227.1	To Explain the basic concepts of probability, random variables and solve real time problems using Baye's theorem.	Understand
C227.2	To Predict the demand of a product by using demand forecasting methods	Apply
C227.3	To Apply unit load method to find the deflection of truss	Apply
C227.4	To Apply the knowledge of energy theorms in structural analysis concepts.	Apply
C227.5	To Design open channels for most economical sections like rectangular, trapezoidal and circular sections	Create
C227.6	To Formulate the setting out of curve by linear and angular methods.	Create

AY : 2019-20	Year :III –II Sem	
On successful completion of this course the students will be able:		
SNO	**Course Outcomes**	**Taxonomy**
SPECIFIC LEARNING OUTCOMES -Concrete Technology(15A01601)		
C321.1	To Identify and describe different constituent of concrete	Remember
C321.2	To Examine and able to test strength and quality of plastic and set concrete.	Apply
C321.3	To Understand the application of admixture and its effect on properties of concrete.	Understand
C321.4	To Design various mix proportions of concrete according to availability of ingredients and design needs.	Create
C321.5	To Evaluate the effect of the environment on service life performance, properties and failure modes of structural concrete and demonstrate techniques of measuring the Non Destructive Testing of concrete structure	Evaluate
C321.6	To Design concrete mix which fulfils the required properties for fresh and hardened concrete	Create
SPECIFIC LEARNING OUTCOMES -Design and Drawing of Steel Structures(15A01602)		
C 322.1	To Design bolted and welded connections	Create
C 322.2	To Design tension members and Compression members using Specifications	Create
C 322.3	To Design Slab Base and Gusset Base under axial loads using IS Specifications	Create
C 322.4	To Design beams, Purlins & Built Up Beams	Create
C 322.5	To Assess loads and design of Stiffened Seated Connections	Evaluate
C 322.6	To Design structural Components of Plate Girder and Gantry Girder	Create
SPECIFIC LEARNING OUTCOMES -Geotechnical Engineering – II(15A01603)		
C323.1	To Understand about the importance of foundation and their necessity of designing.	Understand
C323.2	To Illustrate various procedures and tests for calculating bearing capacity of soil in various soils.	Analyse
C323.3	To Interpret the knowledge about behaviour of various foundations on soil.	Understand
C323.4	To Explain about the failure of slopes in different zones of soils.	Understand
C323.5	To Understand the stability criteria of various structures.	Understand
C323.6	To Design Shallow and Deep foundations.	Create
SPECIFIC LEARNING OUTCOMES -Transportation Engineering - I(15A01604)		
C324.1	To Predict out surveys involved in planning and highway alignment	Apply
C324.2	To Design cross section elements, sight distance, horizontal and vertical alignment	Create
C324.3	To Understand traffic studies, traffic regulations and control, and intersection design	Understand
C324.4	To Determine the characteristics of pavement materials	Apply
C324.5	To Design flexible and rigid pavements as per IRC	Create
C324.6	To Design the traffic island	Create
SPECIFIC LEARNING OUTCOMES -Water Resources Engineering – I(15A01605)		
C325.1	To Analyse the concepts of Engineering Hydrology and its applications	Analyse
C325.2	To Design Runoff estimation, estimation of design discharge and flood routing.	Create
C325.3	To Design the irrigation structures.	Create

C325.4	To Understand the basic types of irrigation, irrigation standards and crop water assessment.	Understand
C325.5	To Predict the different aspects for the design of hydraulic structures	Apply
C325.6	To Illustrate the basic design required for diversion heads and canal outlets.	Apply

SPECIFIC LEARNING OUTCOMES - REMOTE SENSING AND GIS(15A01606)

C326.1	To Understand the Photogrammetric techniques, concepts, components of Photogrammetry	Understand
C326.2	To Understand the basic concepts and principles of various components of remote sensing.	Understand
C326.3	To Determine the process of data acquisition of satellite images and their characteristics	Apply
C326.4	To Examine an image visually and digitally with digital image processing techniques.	Apply
C326.5	To Discuss an exposure about GIS and its practical applications in Civil Engineering	Understand
C326.6	To Analyse the energy interactions in the atmosphere and earth surface features	Analyse

SPECIFIC LEARNING OUTCOMES -Concrete Technology Laboratory(15A01609)

C 329.1	To Determine the Consistency and Fineness of Cement	Apply
C 329.2	To Determine the Setting time of cement, Specific gravity and Soundness of Cement.	Apply
C 329.3	To Determine the Compressive strength of Cement and Concrete	Apply
C 329.4	To Determine the Workability of Cement Concrete by Compaction Factor, Slump Cone and Vee – Bee Consistometer.	Apply
C 329.5	To Determine the Specific gravity of Coarse aggregate and Fine aggregate	Apply
C 329.6	To Determine the bulking of sand and also to Understand the Non-Destructive Testing procedures on Concrete	Apply

SPECIFIC LEARNING OUTCOMES -Transportation Engineering Laboratory(15A01610)

C 320.1	To Identify Engineering Properties of Aggregates	Remember
C 329.2	To Identify the Grade & Properties of Bitumen.	Remember
C 329.3	To Predict out the Peak Hour Traffic & Peak Time for a given location on the road.	Apply
C 329.4	To Calculate Design Speed, Maximum Speed & Minimum Speed limits of a location through spot speed	Apply
C 329.5	To Measure the Quality Control tests on Pavements and Pavement Materials	Evaluate
C 329.6	To Examine various Specific Tests required for Field Application and draw necessary inferences.	Apply

SPECIFIC LEARNING OUTCOMES -Advanced English Language Communication Skills (AELCS) Laboratory(15A52602)

C 3202.1	To State the importance of phonetics, accent, rhythm intonation and stress and practice them in day to day conversation.	Remember
C 3202.2	To Understand the influence of mother tongue on English language and neutralize it to improve fluency in spoken English	Understand
C 3202.3	To Summarize multimedia content by watching videos on screen to acquire proficiency in written communication skills.	Understand
C 3202.4	To Evaluate and exhibit acceptable etiquette essential in social and professional settings	Evaluate

C 3202.5	To Develop communication skills by practicing project reports, film and book reviews.	Create
C 3202.6	To Develop the usage of language effectively to face interviews, group discussions, public speaking	Create
SPECIFIC LEARNING OUTCOMES -Comprehensive Online Examination-II (15A01611)		
C 3211.1	To Identify and describe different constituent of concrete	Remember
C 3211.2	To Design bolted and welded connections of various structures	Create
C 3211.3	To Understand about the importance of foundation and their necessity of designing.	Understand
C 3211.4	To Analyse the concepts of Engineering Hydrology and its applications	Analyse
C 3211.5	To Predict out surveys involved in planning and highway alignment	Apply
C 3211.6	To Describe the causes of disasters and their control measures	Understand

AY : 2019-20	Year :IV –II Sem	
On successful completion of this course the students will be able:		
SNO	Course Outcomes	Taxonomy
SPECIFIC LEARNING OUTCOMES -Advanced Structural Engineering(15A01802)		
C422.1	To Design flat slabs	Create
C422.2	To Design bunkers and analysis of silos	Create
C422.3	To Design reinforced concrete chimneys	Create
C422.4	To Design underground and elevated water tanks	Create
C422.5	To Design cantilever retaining walls	Create
C422.6	To Design counter fort retaining walls	Create
SPECIFIC LEARNING OUTCOMES -Prestressed Concrete(15A01803)		
C423.1	To Analyse the various principle of post tensioning and pre tensioning of concrete	Analyse
C423.2	To Apply various methods and systems of prestressing of concrete	Apply
C423.3	To Predict the losses in pre tensioning and post tensioning of concrete	Apply
C423.4	To Analyse various sections to withstand shear	Analyse
C423.5	To Design various sections of pretensioning of concrete for deflection	Create
C423.6	To Design various sections of pretensioning of concrete for flexure	Create
SPECIFIC LEARNING OUTCOMES -Comprehensive Viva Voce(15A01805)		
C425.1	To Prepare comprehensively to answer questions from all the courses of two semesters.	Create
C425.2	To Prepare Oral Presentation skills by answering questions in precise and concise manner	Create
C425.3	To Develop confidence and inter-personal skills.	Create
C425.4	To Explain the answer very clearly all the courses of two semesters	Understand
C425.5	To Discuss the clear explanation about the course structure	Understand
C425.6	To List out the Personal development skills so that to enhance knowledge	Remember
SPECIFIC LEARNING OUTCOMES -Technical Seminar (15A01806)		
C426.1	To Develop comprehensive report based on literature survey/Topics related to different subjects in the semester	Create
C426.2	To Identify the applicability of modern software tools and technology.	Remember
C426.3	To Translate the presentation based on the preparation	Understand
C426.4	To Tell the Answer for queries which is posed by the listeners	Remember
C426.5	To Asses himself for to improve presentation skills	Evaluate
C426.6	To Evaluate the skills which is required for the topic	Evaluate
SPECIFIC LEARNING OUTCOMES -Project Work (15A01807)		
C427.1	To Prepare abstract for given project by identifying the requirements and prospective solution	Create
C427.2	To Develop latest information related to the project from various sources to analyse the project	Create
C427.3	To Choose the materials for the project as per specifications	Evaluate
C427.4	To Choose efficient test for developing the project	Evaluate

C427.5	To Illustrate effective team work after efficient testing, elaborate the completed task and compile the project	Analyze
C427.6	To Prepare a good report of the project as per the guidelines and present to the panel of experts	Create
SPECIFIC LEARNING OUTCOMES -Survey Camp(15A01808)		
C428.1	To Calculate preliminary surveying in the field of civil engineering applications such as Structural, Highway Engineering and Geotechnical Engineering	Apply
C428.2	To Outline accurate measurements, field plotting and adjustment of traverse	Analyse
C428.3	To Identify various conventional instruments involved in surveying with respect to utility and precision	Remember
C428.4	To Explain the Use and operation of Theodolite in the field.	Understand
C428.5	To Apply the knowledge of Theodolite in different operations in civil engineering projects.	Apply
C428.6	To Apply the knowledge and principles for the purpose of Tacheometric survey in finding out the constants.	Apply