

DEPARTMENT OF CIVIL ENGINEERING

SECOND YEAR

SEMESTER - I		
Course Name & Code	Course Outcomes	Bloom's Level
Course: Concrete Technology ,Material Testing And Evaluation (Cv211-19)	Understand Properties And Role Of Ingredients Likes Cement, Aggregate Etc. To Produce Better Quality Concrete.	B12 Understand
	Understand And Apply Fundamental Knowledge In The Fresh And Hardened Properties Of Concrete	B12 Understand
	Understand Various Methods For Testing Of Plastic And Hardened Concrete	B12 Understand
	Understand The Durability Requirements Of Concrete.	B12 Understand
	Design A Concrete Mix Which Fulfills The Required Properties For Fresh And Hardened Concrete.	B16 Create
	To Evaluate Properties Of Construction Materials Viz. Steel, Bricks, Timber, Tiles Etc. In Laboratory For The Quality Assurance	B15 Evaluate
Course: Surveying And Geomatics (Cv212-19)	Explain Construction, Temporary Adjustment And Applications Of Modern Surveying Equipments	B12 Understand
	Explain The Use Of The Surveying Instruments Namely Levels, Theodolite, Edm, Total Station For Surveying Measurements Such As Horizontal/ Vertical/Inclined Distance, Horizontal/ Vertical Angles, Bearings, Reduced Levels, And Coordinates	B12 Understand
	Create Plans, Maps And Reports For Surveying Projects Of Civil Engineering Works	B12 Understand
	Use The Modern Surveying Techniques Namely Remote Sensing, Global Positioning System And Geographic Information System For Civil Engineering Applications	B12 Understand
	Demonstrate The Attributes Of Leadership, Working In The Team And Professional Ethics While Performing The Surveying Projects	B13 Apply

	Describe Construction, Temporary Adjustment And Applications Of Modern Surveying Equipments	B12 Understand
Course: Building Construction And Drawing (Cv213-19)	Elucidate Functional Requirements Of Buildings And Types Of Foundation And Its Suitability.	B12 Understand
	Draw Neat Drawings Of Different Building Components Such As Doors, Windows, Stairsetc With The Suitable Scale Using Cadd Software.	B13 Apply
	Design Different Types Of Staircases Commonly Used In Residential And Public Buildings.	B13 Apply
	Draw Neat Perspective View Drawings Of An Object And Given Small Residential Building.	B13 Apply
	Select Appropriate Ventilation Systems And Building Finishes.	B12 Understand
	Identify Various Types Of Bonds Such As English, Flemish, Stretcher And Header Bond.	B12 Understand
Course: Introduction To Fluid Mechanics (Cv214-19)	Identify And Obtain Values Of Fluid Properties And Relationship Between Them.	B11 Remember
	Compute Force Of Buoyancy On A Partially Or Fully Submerged Body And Analyze The Stability Of A Floating Body.	B13 Apply
	Understand Fluid Kinematics And Apply Fundamental Principles Of Fluid Mechanics For The Solution Of Practical Civil Engineering Problems	B12 Understand
	Explain Fluid Dynamics And Make Use Of Principles Of Continuity, Momentum, And Energy As Applied To Fluid Motions.	B13 Apply
	Understand Characteristic Of Turbulent Flow And Flow Through Pipes	B12 Understand
	Demonstrate An Insight Into Boundary Layer Analysis.	B12 Understand
Course: Engineering Geology (Cv215-19)	Describe Issues Concerning The Geological Formations And Geological Structure Of A Region	B12 Understand
	Describe The Characteristics Of The Most Important Geological Formations And Problems That May Arise In The Various Civil Engineering Projects In Such Formations.	B12 Understand

	Interpret And Explain The Geological Structures In The Geological Maps And Cross Sections.	B12 Understand
	Assess And Appropriately Adjust The Results Of Geological Study In Order To Ascertain Secure Construction And Operation Of A Civil Engineering Projects Like Dams, Reservoirs Hilly Roads And Railway Tracks.	B15 Evaluate
	Receive, Analyze And Evaluate Data And Appropriately And Solve Technical As Well As Ground Water Related Problems.	B14 Analyze
	Identify The Rocks And Minerals In Field.	B11 Remember
Course: Introduction To Solid Mechanics (Cv216-19)	Discuss The Knowledge Of Structural Mechanics To Depict The Behavior Of Structures.	B12 Understand
	Calculate Principal Planes And Find Principal Stresses.	B13 Apply
	Apply The Knowledge Of Principal Stresses For Bending, Torsion, Thrust And Failure Analysis Problems	B13 Apply
	Construct Shear Force Diagrams And Bending Moment Diagrams Of Statically Determinate Beams.	B13 Apply
	Calculate Bending And Shear Stresses In Beams.	B13 Apply
	Analyze The Behavior Of Structure Under Moving Load Using Influence Line Diagrams.	B14 Analyze
Course: Energy Science And Engineering (Cv217-19)	List And Generally Explain The Main Sources Of Energy And Their Primary Applications Nationally And Internationally. Have Basic Understanding Of The Energy Sources And Scientific Concepts/Principles Behind Them.	B12 Understand
	List And Describe The Primary Renewable Energy Resources And Technologies. Describe The Challenges And Problems Associated With The Use Of Various Energy Sources, Including Fossil Fuels, With Regard To Future Supply And The Impact On The Environment.	B12 Understand
	Understand Effect Of Using These Sources On The Environment And Climate.	B12 Understand

	To Classify Or Quantify Energy Demands And Make Comparisons Among Energy Uses, Resources, And Technologies. Collect And Organize Information On Renewable Energy Technologies As A Basis For Further Analysis And Evaluation.	B14 Analyze
	Understand The Engineering Involved In Projects Utilizing These Sources.	B12 Understand
Course: Lab Practice (Cv218-19)	To Develop And Draw Architectural Floor Plan Of A Small Residential Building Using Cadd Software Tool	B16 Create
	To Develop And Draw The Geometric Constructions, Multi-View, Sectional View, Dimensioning And Detail Drawings Of Typical 2-D Engineered Objects.	B16 Create
	To Develop And Draw Views Like Elevation, Section, Furniture Plan For A Small Residential Building	B16 Create
	To Develop And Draw Detailed Formatted And Dimensioned Civil Engineering Drawings.	B16 Create

SEMESTER-II

Course Name & Code	Course Outcomes	Bloom's Level
Course: Water Supply Engineering (Cv221-19)	Calculate Forecasted Population, Water Demand And Experiment Water Quality Parameter As Per Drinking Water Quality Standards	B13 Apply
	Design Primary Water Treatment Unit Operations And Unit Processes On The Basis Of Raw Water Quality And Water Demand	B13 Apply
	Design Rapid Sand Filter And Understand Secondary Water Treatment Units For A Rural/Urban Area Based On Population Forecast	B13 Apply
	Explain The Appropriate Transmission System For Conveyance Of Water	B12 Understand
	Describe The Complete Water Distribution System For A City As Well As For The Rural Area.	B12 Understand
	Understand Different Aspects Of O & M Of Water Distribution Systems.	B12 Understand
	Course: Building Planning And Design (Cv222-19)	Apply The Principal Of Building Planning And Design Of Residential And Public Building With Special Reference To Aesthetics,Acoustics And Fire Fighting
Utilize Knowledge For Planning For Residential And Public Building According To By Laws Of Municipal Bodies		B12 Understand
Draw Permission Drawings Of Residential And Public Building		B13 Apply
Design Rain Water Harvesting System For Building		B13 Apply
Explain Fire Resistant Structure And Characteristics Of Fire Resistant Material		B12 Understand
Define Acoustics And Sound Frequency,Intensity,Absorption Of Sound Variation Material		B12 Understand
Course: Hydraulic Engineering (Cv223-19)	Apply Their Knowledge Of Fluid Mechanics In Solving Problems In Open Channels	B12 Understand

	Understand The Phenomenon Of Uniform, Gradually And Rapidly Varied Flows In Steady State Conditions And Find The Hydraulic Parameters Of Channels.	B12 Understand
	Understand The Basic Concepts Related To Notches, Weir And Spi Nderstand The Basic Concepts Related To Notches, Weir And Spi Nderstand The Basic Concepts Related To Notches, Weir And Spi Nderstand The Basic Concepts Related To Notches, Weir And Spinderstan	B12 Understand
	Explain The Working Of Pelton, Francis And Kaplan Turbines Along With Their Performance Parameters.	B13 Apply
	Suggest The Type Of Pumps Required For Specific Purpose.	B12 Understand
	Understand The Fundamentals Of Dimensional Analysis And Application Of Buckingham Theorem Along With Different Model Laws	B12 Understand
Course: Open Elective I Ict For Development (Cv224-19)	Apply The Basic Knowledge Of Ict	B11 Remember
	Explain The E-Services	B12 Understand
	Prepare & Check The Report By Using Different Tools	B13 Apply
	Explain The Netiquettes	B12 Understand
	Design Websites & Create Blogs Using Wordpress	B15 Evaluate
Course: Structural Analysis (Cv225-19)	Employ The Knowledge Of Structural Mechanics To Describe The Behavior Of Structures.	B13 Apply
	Analyze Determinate And Indeterminate Structural Members Subjected To Different Types Of Loadings.	B14 Analyze
	Discretize Simple Structures; Identify Static And Kinematic Degrees Of Freedom	B13 Apply
	Analyze Beams, Trusses And Frames For Joint Displacements, And Forces In Members, By Force Method And Displacement Method.	B14 Analyze
	Select And Use Appropriate Application Software For Structural Analysis.	B14 Analyze

Course: Engineering Mathematics Iii (Cv226-19)	Solve Higher Order Linear Differential Equation With Constant Coefficient.	B13 Apply
	Solve Partial Differential Equation Of First Order.	B13 Apply
	Express A Function In Terms Of Sine And Cosine Components So As To Model Simple Periodic Functions.	B13 Apply
	Apply Laplace And Inverse Laplace Transforms For Solving Linear Differential Equations.	B13 Apply
	Find The Relation Between Two Variables For The Given Data Using Regression.	B12 Understand
	Sketch And Explain Various Probability Distribution Functions.	B12 Understand
Course: Computer Programming And Numerical Methods (Cv227-19)	To Recall Basic Concepts Of C Language.	B11 Remember
	To Apply The Knowledge Of C Language To Solve Civil Engineering Problems.	B13 Apply
	To Explain A Through Understanding Of Principles Of Numerical Methods To Solve Civil Engineering Problems	B12 Understand
	To Solve Numerical Integration Using Computer Program In C Language.	B13 Apply
	To Solve Ordinary Differential Equations Using Computer Program In C Language.	B13 Apply
	To Explain Computer Program For Civil Engineering Based Problems Using Statistical Analysis.	B12 Understand

THIRD YEAR

SEMESTER - I		
Course Name & Code	Course Outcomes	Bloom's Level
Course: Design Of Steel Structures (Cv311-20)	Apply "Limit State"™ Design Approach For Designing Various Elements Of Steel Structures For Strength And Serviceability.	B13 Apply
	Design Various Steel Structure Elements Viz. Bolted And Welded Connections As Per Procedures Defined By Indian Standard Code Of Practice : Is 800: 2007	B13 Apply
	Design A Tension Members ,Compression Members /Column As Per Procedures Defined By Indian Standard Code Of Practice : Is 800: 2007	B13 Apply
	Analyze Beams And Portal Frames By Plastic Analysis Approach.	B14 Analyze
	Design A Roof Truss And Its Elements And Choose Appropriate Is Code.	B13 Apply
	Design A Beam, Column Base As Per Procedures Defined By Indian Standard Code Of Practice : Is 800: 2007	B13 Apply
Geotechnical Engineering-I (Cv 312)	Determine Various Index Properties And Strength Properties Of Soil In The Laboratory To Characterize And Classify The Soil	B13:Applying
	Estimate The Permeability And Seepage Through Soil Mass By Applying Basic Hydraulic Flow Principles	B13:Applying
	Draw Stress Contours Of Soil Mass By Applying The Stress Distribution Theory	B14:Analyzing
	Determine Shear Strength Parameters Of Soil Under Various Drainage Conditions	B13:Applying
	Assess Compaction And Consolidation Settlement Of Soil For Given Loading Conditions	B15:Evaluating
	Determine Earth Pressure For Earth Retaining Structure	B13:Applying
Course: Waste Water Engineering And Air Pollution (Cv313-20)	Explain The Characterization Of Municipal Waste, As Well As Sewage Collection & Conveyance Systems	B12 Understand
	Evaluate And Design Waste Water Collection System And Wastewater Treatment Units.	B16 Create

	Apply The Low Cost Treatment Technologies To Treat The Sewage	B13 Apply
	Apply The Knowledge For Disposal Of Treated/Untreated Waste Water	B13 Apply
	Select Appropriate Methods Of Solid Waste Disposal And Management Of Hazardous Waste	B14 Analyze
	Summarize Air Pollution Impacts And Plan For Control It	B12 Understand
Highway And Tunnel Engg.- I(Cv314)	Explain Various Modes Of Transportation & Highway Development Plans	B12:Understanding
	Design Geometric Components Of Highway And Highway Pavements As Per IRC Standards	B15:Evaluating
	Test Various Highway Materials Using Modern Equipments And Instruments As Per IRC Standards	B13:Applying
	Describe The Different Steps In Highway Construction, Maintenance And Select Appropriate Drainage System.	B12:Understanding
	Analyze Economy Of Highway Projects	B14:Analyzing
	Explain Tunneling Methods In Various Types Of Soil	B12:Understanding
Hydrology And Water Resources Engineering(Cv315)	Estimate Runoff, Based On Rainfall Data And Watershed Characteristics.	B13:Applying
	Calculate A Stream Flow And Estimate Design Flood For A Civil Engineering Project.	B13:Applying
	Calculate Yield Of Open Well And Tube Well For Various Types Of Aquifers Using Knowledge Of Ground Water Hydrology	B13:Applying
	Elaborate National And State Water Policies	B12:Understanding
	Select Appropriate Water Application Technique Of Irrigation, Depending Upon Type Of Crop, Soil Moisture And Water Availability.	B12:Understanding
	Select Suitable Soil & Water Conservation Techniques For Particular Watershed.	B13:Applying
Self Learning (Cv316)	Explain The Sociological,Perspective,Broadly Defined;Use Sociological Theory To Explain Social Problems And Issues :Make Theoretical Informed Recommendation To Address Current Social Problem:And Demonstrate The Utility Of The Sociological Perspect	B12:Understanding

	Demonstrate The Ability To Interpret,Locate,Evaluate,Generate ,And Use Socioologically Relevant Data To Test Hypothesis And Draw Evidence Based Conclusion	B13:Applying
	Integrate Sociological Theory,Research,And Data In Order To Assess Various Explanation Of Social Phenomena And To Assess Social Policy	B14:Analyzing
Planning And Design Ofpublic Buildings (Cv317)	Modeling Of Public Building According To Requirements	B13 Apply
	Design And Drawing Of Public Building With Standard Norms By Laws	B16 Create
	Modeling Municipal Drawing For Public Building For Obtaining Building Permission From Authority	B13 Apply
	Modeling Drawing Of Public Building With Water Supply And Drainage Connection	B13 Apply
	Understanding The Application Of Autocad Software In Civil Engineering	B12 Understand
	Modeling The Building Drawings By Using Suitable Computer Aided Drawing And Design Software	B13 Apply
Mini Project (Cv318)	Identify And Formulate Civil Engineering Problems To Meet Desired Need Within Realistic Constraints	B16 Create
	Design The Solution Using Modern Design Tools And Techniques With The Understanding Of The Impact Of Engineering Solutions In A Global, Economic, Environmental, And Societal Context	B16 Create
	Develop An Ability To Work On Multidisciplinary Environment To Evaluate The Economic And Financial Performance Of An Engineering Activity	B15:Evaluating
	Build Models, Prototypes And Conduct Various Experiments To Develop Diverse Set Of Design Solutions With Appropriate Consideration For Safety	B16 Create
	Break Down A Complex Problem Into Parts And Analyze The Relationships Between The Different Parts Of Complex Problem	B14:Analyzing
	Â Show An Ability To Communicate Effectively In Team And Present Results As A Team, With Smooth Integration, Substantiated Conclusions And Documentation Of Project Work	B13:Applying

SEMESTER - II		
Course Name & Code	Course Outcomes	Bloom's Level
Foundation Engineering (Cv321)	Investigate Different Properties Of Soil By Obtaining The Data From Soil Exploration	B13:Applying
	Evaluate Bearing Capacity Of Soil By Various Analytical And Field Tests Such As Plate Load Test, Standard Penetration Test	B15 Evaluate
	Apply Suitable Ground Techniques For Construction Of Footing In Difficult Soil	B13:Applying
	Perform Geotechnical Design Of Shallow Foundation Such As Isolated Footing, Combine Footing And Raft Foundation	B14:Analyzing
	Perform Geotechnical Design Of Deep Foundations Such As Pile Foundations And Caisson Foundations	B14:Analyzing
	Apply The Knowledge Of Various Slope Stability Theories For The Design Of Embankment	B13:Applying
Hydraulic Structures And Water Power Engineering (Cv322)	Plan And Design The Dams And Reservoirs Depending Upon The Water Resources Potential	B13:Applying
	Analyze And Design Gravity Dams And Earth Dams (Simple Designs)	B14:Analyzing
	Elaborate The Design Principles Of Arch Dams.And Weirs On Permeable Foundations	B14:Analyzing
	Carry Out Hydraulic Design Of Spillways And Canal Structures	B16:Creating
	Select Appropriate Method Of River Training Depending Upon River Characteristics	B12:Understanding
	Estimate Water Power Potential At A Site.	B14:Analyzing
Professional Elective Course I (Cv323)-Solid And Hazardous Waste Management	Classify Solid Waste	B13:Applying
	Understand Basic Principle Of Solid Waste Management	B12 Understand
	Suggest Waste Reduction And Resource Recovery Methods	B13:Applying

	Explain Various Waste Disposal Methods	B13:Applying
	Examine Legal, Political And Administrative Considerations In Design And Operation Of Solid And Hazardous Waste Management.	B14:Analyzing
	Identify Legal Framework Related To Swm And Hazardous Waste Manegment	B12 Understand
Dcs I(Cv324)	Apply "Limit State"™ Design Approach For Designing Various Elements Of Concrete Structures For Strength And Serviceability	B13 Apply
	Design Various Types Of Slabs Viz. One Way Slabs, One Way Continuous Slabs, Two Way Slabs, Cantilever Slabs As Per Is Code	B15 Evaluate
	Design Of Singly & Doubly Reinforced Sections For Flexure, Shear & Bond As Per Is Codes	B15 Evaluate
	Design Of T-Beams, L-Beams & Continuous Beams As Per Is Code	B15 Evaluate
	Design Of Beams For Combined Shear, Bending & Torsion As Per Is Code	B15 Evaluate
	Design Of Rectangular & Circular Columns With Helical Reinforcement As Per Is Code	B15 Evaluate
Principles Of Management And Quantitative Techniques (Cv325)	Demonstrate Leadership Quality As Member Of A Team, For Effective Management Of Construction Projects.	B13:Applying
	Apply The Various Optimization Techniques For Decision Making In Construction Industry.	B13:Applying
	Describe The Inventory Of A Project Or Industry.	B12:Understanding
	Assess And Assure About Quality Of Materials And Workmanship, In Civil Engineering Projects.	B15:Evaluating
	Describe Resources Library And Market Rates, Perform Rate Analysis .Prepare A Wbs (Work Breakdown Structure) And Prepare An Estimate Etc. Using The Erp System.	B12:Understanding
	Calculate Revenue To Date For The Project, Evaluate The Performance Of A Firm Based On Financial Statements And Manage Working Capital Of A Construction	B13:Applying

	Company.	
(Self Learning Technical Course) (Cv326)	1. Plan The Rural Roads And Develop Rural Road Network.	B12:Understanding
	2. Design Different Elements Of Road Geometrics Of Rural Roads.	B13:Applying
	3. Apply The Knowledge Of Using Locally Available Materials For Construction And Maintenance Of Low Cost Rural Roads.	B13:Applying
	4. Design The Rural Road Pavement As Per IRC Standards.	B13:Applying
	5. Carry Out Construction And Maintenance Of Rural Roads.	B12:Understanding
Project On Steel Structures (Cv327)	Design The Various Components Of Industrial Shed With Roof Truss Or Portal Frame Or Gable Frame	B15:Evaluating
	Prepare Drawings Of Industrial Shed With Roof Truss Including Gusset Plates, Bearing Plates And Foundation Details	B15:Evaluating
	Design The Various Components Of Building Frame/Foot Bridge/Welded Plate Girder	B15:Evaluating
	Prepare Drawings Of Building Frame/Foot Bridge/Welded Plate Girder In Details Of The Sections With Bolted And Welded System	B15:Evaluating
	Analyze Any One Of The Structure Using Any Standard Civil Engineering Software	B14:Analyzing
	Analysis And Design Report Generation As Per The Requirements Of Civil Engineering Industry	B14:Analyzing
Assessment Of Field Training Report (Cv328)	Demonstrate The Use, Interpretation And Application Of An Appropriate International Engineering Standard In A Specific Situations.	B13:Applying
	Analyze A Given Engineering Problem, Identify An Appropriate Problem Solving Methodology, Implement The Methodology And Propose A Meaningful Solution.	B15:Evaluating

	Conclude A Project Within A Given Time Frame.	B15:Evaluating
	Apply Prior Acquired Knowledge In Problem Solving	B13:Applying
	Apply Factual Approach To Decision Making.	B12:Understanding
	Recomming Solution To Resolve Problems.	B15:Evaluating

FINAL YEAR

SEMESTER - I		
Course Code And Name	Co	Bl
Course: Design Of Concrete Structures-I (Cv411-19)	Apply "Limit State"™ Design Approach For Designing Various Elements Of Concrete Structures For Strength And Serviceability	B13 Apply
	Design Various Types Of Slabs Viz. One Way Slabs, One Way Continuous Slabs, Two Way Slabs, Cantilever Slabs As Per Is Code	B15 Evaluate
	Design Of Singly & Doubly Reinforced Sections For Flexure, Shear & Bond As Per Is Codes	B15 Evaluate
	Design Of T-Beams, L-Beams & Continuous Beams As Per Is Code	B15 Evaluate
	Design Of Beams For Combined Shear, Bending & Torsion As Per Is Code	B15 Evaluate
	Design Of Rectangular & Circular Columns With Helical Reinforcement As Per Is Code	B15 Evaluate
Course: Quantity Surveying & Valuation (Cv412-19)	Select Specifications For Different Items Of Work In A Building.	B14 Analyze
	Evaluate Quantity Of Various Civil Engineering Works And Rate Of Items Of Work Based On Material And Workmanship	B15 Evaluate
	Classify Types Of Contracts And Tenders For Civil Projects.	B14 Analyze
	Illustrate Professional Ethics In Civil Engineering Sector	B14 Analyze
	Interpret Concept Of Value, Price And Cost Used In Civil Engineering Sector.	B12 Understand
	Evaluate Value Of Land And Buildings Using Different Methods Of Valuation	B15 Evaluate
Course: Earthquake Engg. (Cv413-19)	To Explain Concept Of Siesmology	B12 Understand
	To Demonstrate The Knowledge Of Dynamic Analysis	B13 Apply
	Corelate The Knowledge Of Dynamics For Earthquake Enginerring	B14 Analyze
	Calculate Siesmic Load For Multystory Building	B15 Evaluate
	Evaluation Of Siesmic Forces	B14 Analyze

	Adopt Concept Of Earthquake Resistance Low Cost Building Concept For High Rise Building	B13 Apply
Course: Engineering Management- Ii (Cv414-19)	Plan The Project And Prepare Bar Chart And Network To Optimize The Project Duration And Cost	B14 Analyze
	Update The Network And Re Evaluate The Resources.	B15 Evaluate
	Demonstrate The Decision Making Abilities Based On Economics In Projects And To Appraise Alternative Projects	B13 Apply
	Analyze Life Cycle Cost And Value Of The Project.	B14 Analyze
	Use Appropriate Project Management Application Software For Planning, Tracking And Reporting Progress Of Civil Engineering Projects	B15 Evaluate
Course: Elective - Ii (Cv415-19)	Examine The Sources Of Air Pollution And Their Effect On Human, Plants And Material	B13 Apply
	Analyze The Effect Of Various Meteorological Parameter And Stability Conditions On Air Pollutant Dispersion.	B13 Apply
	Select Appropriate Methods For Air Sampling And Analysis	B13 Apply
	Analyze The Effects Of Photo-Chemical Smog, Odor And Indoor Air Pollution	B14 Analyze
	Design Control Equipment Of Air Pollution	B15 Evaluate
	Apply Emission Standards And Legislation For Air Pollution Control	B13 Apply
Course: Seminar (Cv416-19)	Collect Information, Understand And Describe It	B11 Remember
	Write Technical Documents And Give Oral Presentations Related To The Work Completed	B14 Analyze
	Show The Ability To Communicate Effectively As An Individual	B13 Apply
	Use The Techniques, Skills, And Modern Tools And Modern Softwares	B13 Apply
	Develop Ability To Utilize Various Technical Resources	B14 Analyze
	Understand Professional And Ethical Responsibility	B14 Analyze

Course: Project Work (Cv417-19a)	Identify And Formulate Civil Engineering Problems To Meet Desired Need Within Realistic Constraints	B16 Create
	Design The Solution Using Modern Design Tools And Techniques With The Understanding Of The Impact Of Engineering Solutions In A Global, Economic, Environmental, And Societal Context	B16 Create
	Develop An Ability To Work On Multidisciplinary Environment To Evaluate The Economic And Financial Performance Of An Engineering Activity	B15 Evaluate
	Build Models, Prototypes And Conduct Various Experiments To Develop Diverse Set Of Design Solutions With Appropriate Consideration For Safety	B16 Create
	Break Down A Complex Problem Into Parts And Analyze The Relationships Between The Different Parts Of Complex Problem	B14 Analyze
	Show An Ability To Communicate Effectively In Team And Present Results As A Team, With Smooth Integration, Substantiated Conclusions And Documentation Of Project Work	B13 Apply
Course: Assessment Of Report On Field Training-Ii (Cv418-19)	Demonstrate The Use, Interpretation And Application Of An Appropriate International Engineering Standard In A Specific Situations.	B13 Apply
	Analyze A Given Engineering Problem, Identify An Appropriate Problem Solving Methodology ,Implement The Methodology And Propose A Meaningful Solution.	B15 Evaluate
	Conclude A Project Within A Given Time Frame.	B15 Evaluate
	Apply Prior Acquired Knowledge In Problem Solving	B13 Apply
	Apply Factual Approach To Decision Making.	B12 Understand
	Recomming Solution To Resolve Problems.	B15 Evaluate

SEMESTER- II

Course Code And Name	Co	BI
Course: Project Work (Cv417-19)	Identify And Formulate Civil Engineering Problems To Meet Desired Need Within Realistic Constraints	B16 Create
	Design The Solution Using Modern Design Tools And Techniques With The Understanding Of The Impact Of Engineering Solutions In A Global, Economic, Environmental, And Societal Context	B16 Create
	Develop An Ability To Work On Multidisciplinary Environment To Evaluate The Economic And Financial Performance Of An Engineering Activity	B15 Evaluate
	Build Models, Prototypes And Conduct Various Experiments To Develop Diverse Set Of Design Solutions With Appropriate Consideration For Safety	B16 Create
	Break Down A Complex Problem Into Parts And Analyze The Relationships Between The Different Parts Of Complex Problem	B14 Analyze
	Show An Ability To Communicate Effectively In Team And Present Results As A Team, With Smooth Integration, Substantiated Conclusions And Documentation Of Project Work	B13 Apply
Course: Design Of Concrete Structures-Ii (Cv421-19)	Identify The Various Design Philosophies	B12 Understand
	Design The Various Reinforced Cement Concrete Structural Components Such As Staircases & Footing By Limit State Method	B15 Evaluate
	Understand The Basic Concepts And Systems Of Prestressing	B12 Understand
	Analyze The Losses Of Prestress Members.	B14 Analyze
	Analyze And Design The End Block	B15 Evaluate
	Design Of Counterfort Retainning Walls & Rcc Water Tanks By Approximate Indian Standard Method	B15 Evaluate
Course: Construction Practices And Town Planning (Cv422-19cptp)	Plan Layout Of Small Town	B14 Analyze
	Select And Identify Inputs For Town Planning	B14 Analyze
	Explain Various Laws Related To City And	B12 Understand

	Rural Development	
	Classify Construction Equipment As Per Requirement Of Building Structure	B14 Analyze
	Calculate Output Of Construction Machines	B13 Apply
	Explain Appropriate Safety Measures	B12 Understand
Course: Transportation Engineering-Ii (Cv423-19)	Show Geometric Design For The Railway Tracks.	B13 Apply
	Evaluate Engineering Properties Of The Materials, To Calculate The Material Quantities Required For Construction.	B13 Apply
	Show Simple Turnout At Points And Crossings And Describe The Geometric Design And Working Principles Of Railway Interlocking System	B13 Apply
	Show Airport Layout, Design Facilities Required For Runway, Taxiway And Impart	B13 Apply
	Explain Knowledge About Visual Aids.	B12 Understand
	Describe Components Of Docks And Harbor And Their Working Principles	B12 Understand
Course: Elective - Iii Solid And Hazardous & Waste Management (Cv424-19)	Understand The Functional Outline For Solid And Hazardous Waste Management	B12 Understand
	Classify Common Types Of Solid Waste	B14 Analyze
	Select And Adopt The Appropriate Waste Disposal Method For The Prevailing Situation	B15 Evaluate
	Predict Consequences And Ill Effects Of Improper Solid Waste And Hazardous Waste Management	B13 Apply
	Implement Legal, Political And Administrative Considerations In Design And Operation Of Solid And Hazardous Waste Management	B13 Apply
Course: Elective - Iii - Traffic Engg. & Control (Cv424-19eleliib)	Undertake Various Traffic Studies And Analysis Of Traffic Data Including Parking Studies And Calculation Of Parking Demand.	B14 Analyze
	Paraphrase Relation Between Flow, Density, Speed, Concept Of Level Of Service For Urban And Rural Area.	B12 Understand
	Define Traffic Regulations On Vehicle, Driver And Speed. Also Able To Understand	B11 Remember

	Various Traffic Control Devices Like Different Signs, Markings, Signals And Lighting.	
	Demonstrate Intelligent Transport System (Its) And Their Application In Traffic Engineering.	B13 Apply
	Demonstrate The Use Of Various Instruments Used In Traffic Studies And Their Applications.	B13 Apply
	Demonstrate The Use Of Traffic Volume Measurement Instrument.	B13 Apply
Course: Project On R. C. C. Structures (Cv425-19)	To Study Is Recommendations & Limit State Theory In Design Of Structures	B11 Remember
	Analysis And Design Of Rcc Building	B15 Evaluate
	Prepare Detailed Drawing Of Rcc Sections	B12 Understand
	Analysis And Design Of Combined Footing	B14 Analyze
	Analysis And Design Of Pile Foundation For Structure With Pile Cap	B15 Evaluate
	Analysis And Design Of Water Tank By Working Stress Method Using Is:3370	B15 Evaluate