Shiksha Mandal's Bajaj Institute of Technology, Wardha

Mapping of COs with POs and PSOs (Department of Civil Engineering)

2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	tcomes (F	POs)					i i	PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Understand The Concept Of Laplace Transform And Inverse Laplace Transform Of Elementary Functions And Apply It To Solve The Linear Differential Equations With Constant Coefficients Having Their Applications In Mechanical, Electrical, Chemical, Communication Etc. Systems.	3	2											2		
	Mathematics - III	2	Apply The Concept Of Fourier Transform To Solve The Boundary Value Problems, Problems In Signal Processing And Communication System.	2	1											1		
		3	Apply Partial Differential Equations To Solve Heat Equation, Wave Equation And Laplace Equation Etc.	3	2											3		
		4	Analyze Conformal Mapping, Transformation And Perform Contour Integration Of Complex Function In The Study Of Electromagnetics And Signal Processing.	3	2											1		
																<u> </u>		
2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	tcomes (F	POs)					'	PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	PERFORM THE STRESS-STRAIN ANALYSIS.	2			2	2	1	1	1					1	2	1
	MECHANICS OF SOLIDS	2	DRAW FORCE DISTRIBUTION DIAGRAMS FOR MEMBERS AND DETERMINATE BEAMS	1		1	1									1	2	1
	(BTCVC302)	3	FIND DEFLECTIONS IN DETERMINANT BEAMS	3	2		3	3	2	2	2					1	1	1
		4	VISUALIZE FORCE DEFORMATION BEHAVIOR OF BODIES.	3	2		3	3	2	2	2					1	1	1
																µ		
	Course (Cuthing)							Prov	aram Qui	comes (l	POe)	1			I	لـــــــــــــــــــــــــــــــــــــ	PSOe	
	Course/Subject		Course Outcomes (COs)		r		r	1105	gram Out	icomes (i	03)	1			1	<u> </u>	1003	
	with course code		()	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	CALIBRATE THE VARIOUS FLOW MEASURING DEVICES.	3	2	3	1	1	2	1	-	-	-	-	2	1	2	3
	HYDRAULICS L	2	DETERMINE THE PROPERTIES OF FLUID AND PRESSURE AND THEIR MEASUREMENT.	3	2	3	1	1	2	-	-	-	-	-	1	2	2	3
	(BTCVC303)	3	UNDERSTAND FUNDAMENTALS OF PIPE FLOW, LOSSES IN PIPE AND ANALYSIS OF PIPE NETWORK.	3	2	3	1	-	1	1	-	-	-	-	1	2	1	2
		4	VISUALIZE FLUID FLOW PHENOMENA OBSERVED IN CIVIL ENGINEERING SYSTEMS	2	-	-	2	-	-	-	-	-	1	-	-	3	1	2
					-		-				-							
2018 10 2010 20 2020 21	Course/Subject							Proc	aram Qui	comes (<u> </u>	PSO:	
2018-19, 2019-20, 2020-21	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Perform Measurements In Linear/Angular Methods.	3	1	2	1	1							1	2	$ \rightarrow$	2
	Surveying I	2	Perform Plane Table Surveying In General Terrain.	2	1	1	1									1	$ \neg $	1
	BTCVC304	3	Know The Basics Of Leveling And Theodolite Survey In Elevation And Angular Measurements.	3	2	1	2	1							1	2		2
2018-19, 2019-20, 2020-21	Course/Subject		Course Outcomes (COs)		r		r	Proį	gram Out	icomes (i	PUS)	1			1	<u> </u>	PSUS	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Understand Types Of Masonry Structures.	3	2		2		1	3		3				1		3
	Building	2	Understand Composition Of Concrete And Effect Of Various Parameters Affecting Strength.				3			2				2		2		2
	50101001011	3	Comprehend Components Of Building And There Purposes.			2		2		3	1	2					2	
		4	Comprenend The Precast And Pre-Engineered Building Construction Techniques.	1			2		2		2					<u> </u>		
																l		
	1																	

2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
	 with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	With Course coue	_	Reservice The Different Land Forms Which Are Formed By Various Coolegical Agents		-		-									<u> </u>	-	•
		1	Identify The Origin. Texture And Structure Of Various Rocks And Physical Properties Of		3		3			2			1					
	Fasiansian	2	Mineral.	2		1	2	2				3						
	Geology	3	Emphasize Distinct Geological Structures Which Have Influence On The Civil Engineering		2	1		2		1		2						
			Understand How The Various Geological Conditions Affect The Design Parameters Of															
		4	Structures.	2				1					1					
2018-19, 2019-20, 2020-21	Course/Subject		Courses Outcomes (COs)					Prog	gram Out	comes (F	POs)					ļ	PSOs	
	with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Acquire Interpersonal Communication Skills									2	3					1
	Coft Chillo	2	Develop The Ability To Work Independently.									2						
	Development	3	Develop The Qualities Like Self-Discipline, Self-Criticism And Self-Management								2	2			1			1
	Development	4	Have The Qualities Of Time Management And Discipline									1						1
		5	Present Themselves As An Inspiration For Others												1			
2018-19, 2019-20, 2020-21	Course/Subject			-				Prog	gram Out	comes (F	POs)					J	PSOs	
	with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Analyze The Properties Of Fluids And Their Verification.	3	2	2	1								3	2	1	1
	Hydraulics	2	Predict Empirical Behavior Of Fluids	3	2	3	1								3	2	1	1
	Laboratory	3	Apply Principles Of Hydraulics While Working In Field.	3	2	3	1								3	2	1	1
2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	comes (F	POs)			-	_	ļ	PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Use The Theodolite Along With Chain/Tape, Compass On The Field.	2	1	1	1									1		1
	Suproving	2	Apply Geometric And Trigonometric Principles Of Basic Surveying Calculations.	3	2	3	1									2		2
	Laboratory I	3	Dias A Quarter Tables Assume Managements Field Dealing And Adjustment Of Frees	1	1	2										2		1
	BTCVL308	4	Apply Eight Dready and Accurate Measurements, Field Booking, And Adjustment Of Errors.	2	2	2						2				(
		4	Apply Field Flocedules in Basic Types Of Surveys, As Fait Of A Surveying Team.	2	2	2	2					2				1		1
		J	Employ Drawing rechinques in the Development of A ropographic wap.	2		2	2									<u>_</u>		
2018-10 2010-20 2020-21	Course/Subject							Proc	aram Out	comes (F	POs)					I	PSOs	
2010-13, 2013-20, 2020-21	oour scroubjeet		Course Outcomes (COs)							_						, <u> </u>		
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Construction -	1	Draw Plan, Elevation And Section Of Various Structures.			1	1		2	2	2					2		1
	Drawings	2	Apply The Principles Of Planning And By Laws Used For Building Planning.	2	2				3							2	2	1
	Laboratory	3	Prepare Detailed Working Drawing For Doors And Windows.			3		2		3		1				2	1	1
																لــــــــــــــــــــــــــــــــــــــ		
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2018-19, 2019-20, 2020-21	Course/Subject		Course Outcomes (COs)		1		r –	Piot	gram Out	comes (r	-0s)	-	-		-	,	P305	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Calculate The Linear Measurement On Surface.			2			3	2								
	Engineering	2	Find Out Engineering Properties Of Various Geological Materials.	2					3		1							
	Geology Lab	3	Draw Subsurface Lithologs.			2		1		3		1						
		4	Identify Minerals And Rocks By Studying Physical Properties.	3	2		1		2		1							
																	800-	
2018-19, 2019-20, 2020-21	Course/Subject		Course Outcomes (COs)					Prog	ji ani Out	comes (F	-Us)	_				ļ	F305	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Design Open Channel Sections In A Most Economical Way.	3	3	2	1									3	3	3
	Hudroulioo "		Know About The Non-Uniform Flows In Open Channel And The Characteristics Of Hydraulic														-	-
	Hydraulics II	2	Jump.	3	3		2								2	3	2	3
		3	Understand Application Of Momentum Principle Of Impact Of Jets On Plane.	3	3	3	1								3	2	3	3
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																I		
	1		1	1												, !		

		0.11.1							Dee								<u> </u>	DEOs	
2018-19, 2019-20, 2020-21		Course/Subject		0 (00-)		-			Pro	gram Out	comes (I	PUS)	-			-	L	PSUS	-
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
							-					-	-						-
			1	Understand Basics Different Types Of Curves On Roads And Their Preliminary Survey.	2	1	2		2								2		1
		Supraving II	2	Perform Setting Of Curves, Buildings, Culverts And Tunnels.	3	2	2										1		1
		Surveying - II		Comprehend Different Geodetic Methods Of Survey Such As Triangulation, Trigonometric	0	0		0	0										
		BICVC402	3	Leveling.	2	2	1	2	2								3		1
			4	Comprehend Modern Advanced Surveying Techniques.	3	2	1	2	2								1	1	1
					-													<u> </u>	<u> </u>
		-					-										<u> </u>	┼───	+
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2018-19, 2019-20, 2020-21		Course/Subject		0 (00-)		-			Pro	gram Out	comes (I	PUS)	-			-	L	PSUS	-
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
										-		-							-
			1	Describe The Concept Of Structural Analysis, Degree Of Indeterminacy	1					2	3						2	2	2
		Structural	2	Calculate Slopes And Deflection At Various Locations For Different Types Of Beams		2		2			3						2	2	2
		Mechanics-I	•	Identify Determinate And Indeterminate Trusses And Calculate Forces In The Members Of	0	0	0	0	0	0	0						•		
			3	Trusses	2	2	3	2	2	2	2						2	2	2
																		1	1
																		1	1
		-					-										<u> </u>	+	+
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2018-19, 2019-20, 2020-21		Course/Subject		0 (00-)		-			PIO	gram Out	comes (r	PUS)	-			-	L	P305	-
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
																	L		
		Product Docian	1	Create Simple Design Of Components Or A System As Whole.	1	1	2		2								2	2	
		Fibuuci Design	2	Create Design Documents For Knowledge Sharing.	1	1	1		2				2	2			2	1	
		Engineering	3	Manage Own Work To Meet Design Requirements.							1		2		3		1	1	1
		BTID405	4	Work Effectively In A Team.	1				1			1	3		2		1	1	1
												· ·	Ŭ		-		<u> </u>	<u> </u>	
																	<u> </u>	<u> </u>	
																	<u> </u>		1
2018-19, 2019-20, 2020-21		Course/Subject							Pro	gram Out	comes (I	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		with course code				-	, , , , , , , , , , , , , , , , , , ,		,	•		•	,	10				-	•
			4	Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of	2	2											2		
				Linear Equations, Non-Linear Equations And Ordinary Differential Equations.	3	2											3		
		Numerical	2	Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical	0	2		2									2		
		Methods in		And/Or Tabulated Data.	2	2		2									2		
		Engineering																1	
		5 5	3	Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems.	2	2		3									1		
			4	Familiar With Programming Languages Like Fortran / C / C++.	1				1									2	1
		-																<u>+</u> -	+
		-					-										<u> </u>	┼───	+
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2018-19, 2019-20, 2020-21		Course/Subject		0		-			PIO	grain Out	comes (r	PUS)					<u> </u>	P305	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
										-		-							-
	IV/	Planning for	1	To Understand And Evaluate The Concept Of Sustainable Development.	1					3	3			1	1	2	1	1	
	IV	Sustainable	2	Recognize Impact On Environmental And Poverty Sustainable Development	2					2	3			1	1	2	1	1	
		DevelopmentBTC	3	Comprehend Strategies And Challenges Of Sustainable Development.	1					2	3			1	2	2	1	1	1
		VE404B	5	Familiar With Governance And Policies Of Sustainable Development At Societal Level.	1	1	1		2	3	3	2		2	2	2	1	1	1
																	<u> </u>	1	1
2018-10 2010-20 2020-24		Course/Subject		1					Pro	aram Out	comes (POs)					<u> </u>	PSOs	
2010-13, 2013-20, 2020-21		Sour Serousject		Course Outcomes (COs)		1	1			,		,		1	1	1	└──	1003	T T
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			-	Demonstrate The Nuences Of Management Europians	4								4	4	2			<u> </u>	+
		Engineerina	1	And an The Francesco of Management Functions.	1								1	1	3		<u> 2</u>		───
		Management	2	Analyze The Framework Of A Business Organization.									2		2		2	2	<u> </u>
		BTCVC406	3	Adopt An Empirical Approach Toward Business Situations.									1		3		2	2	1
		01010400	4	Apply Various Management Techniques.									2		3		3	2	1
																		1	1
																	<u> </u>	1	1
2018-10 2010-20 2020-24		Course/Subject		•					Pro	aram Qut	comes (POs)					<u> </u>	PSOs	
2010-13, 2013-20, 2020-21		oou serousject		Course Outcomes (COs)						,		,					 		1
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
				Understand The Ulister Of User Pickte		-											──	—	+
		1	1	Understand The History Of Human Rights						1							└──	—	
		1	2	Learn 10 Respect Utners Caste, Religion, Region And Culture.													L	<u> </u>	<u> </u>
		Basic Human	3	Be Aware Of Their Rights As Indian Citizen															
		Dasic ruman	4	Understand The Importance Of Groups And Communities In The Society									3					1	1
		rugnis	_			1	1								1	1		1	1
		1	5	Realize The Philosophical And Cultural Basis And Historical Perspectives Of Humanrights.								2		2			1	1	1
		1	6	Make Them Aware Of Their Responsibilities Towards The Nation		1	1								1	1	()	1	1
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2018-19, 2019-20, 2020-21	Course/Subject		Course Outcomes (COs)		r	r		Pio	gram Out	comes (i	PUS)	-	-		-		P305	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Understand Various Properties Of Fluids And Measurement Techniques	3	2	2	1								3	2	1	1
	Hydraulics	2	Carry Out Calibrations Of Various Flow Measuring Devices	3	2	3	1								3	2	1	1
	Laboratory II	3	Understand Mechanism Of Hydraulic Jump, Various Jets And Pumps	3	2	3	1								3	2	1	1
		4				-											-	
																	-	
																	-	
2018-19 2019-20 2020-21	Course/Subject							Proc	aram Out	comes (I	POs)						PSOs	
2010 10,2010 20,2020 21			Course Outcomes (COs)					_										
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Surveying	1	Determine Contour Level Of Field.	2	2	2	3	1								2	2	1
	Laboratory II	2	Determine The Tachometric Constants And Grade Of A Line.	1	1	1	1									1	1	1
	BTCVL408	3	Use Sub Tense Bar For Distance Measurement.	1			1									1		
																	\square	
2018-19, 2019-20, 2020-21	Course/Subject				•			Prog	gram Out	comes (l	POs)						PSOs	
			Course Outcomes (COs)			_		-	•	-		•	40		40			_
	with course code			1	z	3	4	5	0	1	8	9	10	11	12	1	Z	3
		1	Evaluate Young Modulus, Torsional Strength, Hardness And Tensile Strength Of Given	2	1	1	2	2	2	1			1		1	2	1	1
			Specimens.	2			2	2	2							2		<u> </u>
	Mechanics of	2	Determine The Strength Of Coarse Aggregates.	1	3	1	2	2	2						1	1	1	1
	Solids Laboratory	3	Find The Compressive Strength Of Concrete Cubes And Bricks.	2	1	2	1	2	2	1			2		1	1	1	1
		4	Determine Physical Properties Of Given Coarse Aggregates, Fine Aggregates And Cement	2	2	1	2	1	2	1			1		1	1	1	1
		-	Samples.	~	2	· ·	2		2								لـــٰــــــــــــــــــــــــــــــــــ	<u> </u>
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2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	comes (l	POs)						PSOs	
			Course Outcomes (COs)					_									<u> </u>	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		4		2	2	2	4									1		
	Design of Steel		Identify And Compute The Design Loads And The Stresses Developed In The Steel Member.	2	2	2		-	-	-	-	-	-	-	-	-	2	
	Structures	2	Analyze And Design The Various Connections And Identify The Potential Failure Modes.	3	3	3	2	-		-	3	-	-	-	•	3	2	3
	BTCVC 501	3	Analyze And Design Various Tension, Compression And Flexural Members.	3	3	3	2	-		-	3	-	-	-	•	2	3	3
		4	Understand Provisions In Relevant Bis Codes.	2	-	-	-	-	-	1	2	-	-	-	-	3	3	2
2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	comes (l	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	with course coue				-	~		~	•		v	~	10		12			
		1	Have A Basic Understanding Of Matrix Method Of Analysis And Will Be Able To Analyze The	1					2	3						3	2	1
	Structural		Determinant Structure. Have A Regin Understanding Of The Bringinian And Concepts Related To Finite Difference And													-	l	L
	Mechanics-II	2	Finite Element Methods		2		2			3						3	2	1
		2	Have A Basic Understanding Of Concent Of Influence Line	2	2	2	2	2	2	2						2		1
		3	Trave A basic onderstanding of concept of mindence Line	2	2	3	2	2	2	2						2	<u> </u>	<u> </u>
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2018-10 2010-20 2020-24	Course/Subject		1		L	· · · · ·		Prov	aram Out	comes (I	POs)						PSOs	L
2010-13, 2013-20, 2020-21	Sour se/Subject		Course Outcomes (COs)		1	1		1.05	, out									
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Understand Different Soil Properties And Behavior		2		3	2							1	3	2	2
	Soil Mechanics	2	Understand Stresses In Soil And Permeability And Seepage Aspects	3	-	-	2	2	1						1	3	2	2
		3	Develop Ability To Take Up Soil Design Of Various Foundations.	3	-	3	2	3	3	-	-	-	-	-	1	2	2	1
		~				Ŭ	-	,	,							<u> </u>		<u> </u>
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					-													
2018-10 2010-20 2020-21	Course/Subject		1					Pror	aram Qut	comes (I	POs)						PSO ₅	L
2010-13, 2013-20, 2020-21	oou serousject		Course Outcomes (COs)		1	1			, out		55,							
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Apply The Water Treatment Concept And Methods.	3	2	· ·	2	1		3	-	-	1	1	3	2	3	-
	Environmental	2	Prepare Basic Process Designs Of Water And Wastewater Treatment Plants	-	1	-		-	-	-	-	-	2	2	-	1	2	1
	Engineering	3	Apply The Wastewater Treatment Concept And Methods.	1	2	3		2	3	3			-			3	بة م	. 1
	BTCVC 501	4	Apply The Solid Waste Management Concepts	1	1	2		1	3	3					-	2	ا	1
			· · · · · · · · · · · · · · · · · · ·	<u> </u>	<u> </u>	-			3	5			-	-		-		<u> </u>
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2018-19, 2019-20, 2020-21		Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
				Course Outcomes (COs)		•			-		-		•	40		40		•	•
		with course code			1	z	3	4	5	D	1	8	9	10	11	12	1	z	3
			1								2	2				2	2	3	1
		Transportation	<u> </u>	Comprehend Various Types Of Transportation Systems And Their History Of The Development							-	_				-		-	
		Engineering	2	Comprehend To Various Types Of Pavements	3					3	3				2		1		3
			3	Measures	3	2									2	3	2	2	1
				incastres.															
2018-10 2010-20 2020-21		Course/Subject							Pro	aram Out	comes (F	POs)						PSOs	
2010-13, 2013-20, 2020-21				Course Outcomes (COs)					_		- (
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Materials Testing	1	To Develop Skill Among Students To Construct Strong And Durable Structures By Applying Knowledge Of Material Science.	3	3	2	3									2	2	1
		& Evaluation		To Make The Students Aware Of Quality Assurance And Control In Their Real Life As A															
	V		2	Professional.	3	3			3	3	3				2		2	2	1
2018-19, 2019-20, 2020-21		Course/Subject							Pro	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	To Davidon Multi Scaled Perspective About Decisions In The Built Environment	1		2	1	_	1	2	2	2	2	2	1	1	2	
		Development		To Expose The Students To The Analysis And Evaluation Of Real World Problems Aiming To		-	2		-		3	2	2	2	2			2	-
		Engineering	2	Bring Desired Change In The Society.	2	2	2	2	2	3	2	2	1	3	2	2	2	1	-
2018-19, 2019-20, 2020-21		Course/Subject				-			Prog	gram Out	comes (F	POs)				-		PSOs	
		with course code		Course Outcomes (COs)	4	2	2	4	5	6	7	•	0	10	44	12	4	2	2
		with course code			•	-	3		3	U	'	•	3	10		12		4	3
		Business	1	Inculcate Basics Of Business Communication Skills & Relevant Tools.									2	3					1
		Communication &	2	Understand Business Sops And Essentials Of The Same									2						
		Presentation Skills	3	Adapt Modern Skills Regarding Communication, Presentation & Team Working									2	3		2			1
		Course (Outblact							Brou	arom Out	comoc (l	20c)						BSOc	
		Course/Subject		Course Outcomes (COs)	-	r	1		FIU	grain Out	comes (r	-05)				r		F305	
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		LOOLNOL OF	1	UNDERSTANDING THE FOUNDATIONS OF INDIAN TRADITIONAL KNOWLEDGE						3			1			1			1
		INDIAN	2	APPRECIATING THE DIVERSITY OF INDIAN TRADITIONAL KNOWLEDGE SYSTEMS							2								
		IRADITIONAL	3	APPLYING INDIAN TRADITIONAL KNOWLEDGE TO CONTEMPORARY CONTEXTS						2			1			1			1
2018-19, 2019-20, 2020-21		Course/Subject		·					Prog	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	4	2	2	4	5	6	7	•	0	10	44	12	4	2	2
		with course code				-	3	*	9	U	'	0	3	10		12		4	3
		Soil Mechanics	1	Determine different engineering properties of soil.	3	3	-	2	-	-	-	-	1	-	-	1	1	2	1
		Laboratory	2	Identity And Classity Soils Based On Standard Geotechnical Engineering Practices.	3	3	-	2	-		-	-	1	-	-	1	1	2	1
			3	Perform Laboratory compaction and in-place density tests.	3	3	-	2	-		-	-	1	-	-	1	1	1	1
			4	Perform and interpret direct shear tests and estimate shear strength parameters.	3	3	-	2	Der				1			1	1	2	1
2018-19, 2019-20, 2020-21		Course/Subject		Course Outcomes (COs)			_		Pro	gram Out	comes (F	-US)						P505	
		with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1		3
		Environmental	1	Quantify The Pollutant Concentration In Water, Wastewater And Ambient Air	2	2	1		3	1	3					3			2
		Engineering	2	Recommend The Degree Of Treatment Required For The Water And Vastewater	2	2	3		1	3	3					3			2
		Laboratory	3	Analyze The Survival Conditions For The Microorganism And Its Growth Rate	2	1	2		1	3	3					3			2
		B1C1/L500	~	,	-		-			,	,					Ŭ			-
2018-19, 2019-20, 2020-21		Course/Subject		•					Prog	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	0	10	11	12	1	2	2
		with course code				2	3	4	э	0	'	•	y	10		12	'	4	3
		Transportation	1	Perform Tests On Various Road Construction Materials.			2		2	3	2			2			2	1	
		Engineering	2	Perform Obs Tests On Level Only To Determine Outproved Descention No. 1, 15, 20, 1	2					3		1					1	1	1
		I aporatory		Perform Cor Tests On Local Solis To Determine Subgrade Properties Needed For Roadways.															
		Eaboratory																	

2018-19, 2019-20, 2020-21		Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Oceanity of Tar The Mariana Davies Dhilanaching Hand Fas Davies Of Davie (courd Oceanity	1	2	2	2	-			-	-				1		1
		Design of	2	Analyze And Design The Reinforced Concrete Slab Using Limit State And Working State	3	-	3	1	-	-	-	-	-	2	-	2	1	-	1
		Concrete Structures I	3	Analyze And Design The Reinforced Concrete Beam Using Limit State And Working State	3	-	3	1	-		-	-	-	3	-	2	1		1
			4	Analyze And Design The Reinforced Concrete Column Using Limit State And Working State Method.	2	-	2	1	-	-	-	-	-	1	-	1	1	-	1
2018-19, 2019-20, 2020-21		Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	To Predict Soil Behavior Under The Application Of Loads And Come Up With Appropriate Solutions To Foundation Design Queries.	3	3	2	-	-	-	-	-	-	-	-	2	3	1	1
		Foundation	2	Analyze The Stability Of Slope By Theoretical And Graphical Methods.	3	3	-	2	-	-	-	-	-	-	-	1	3	2	1
		Engineering	3	Analyze The Results Of In-Situ Tests And Transform Measurements And Associated Uncertainties Into Relevant Design Parameters.	3	3	-	2	2	-	-	-	-	-	-	1	3	2	1
			4	Synthesize The Concepts Of Allowable Stress Design, Appropriate Factors Of Safety, Margin Of Safety, And Reliability.	3	3	-	-	-	2	-	-	-	-	-	1	3	1	1
2018-19, 2019-20, 2020-21		Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Understand The Various Types And Properties Of Ingredients Of Concrete.	2					2	3			2	2	2			
		Concrete Technology	2	Understand Effect Of Admixtures On The Behavior Of The Fresh And Hardened Concrete.		3		3			3			2	2	2			
			3	Formulate Concrete Design Mix For Various Grades Of Concrete.	2	2	3	2	3	2	2			2	2	2	\square		
		0 0 1 1							Dree								┢───┘	DCO.	
2018-19, 2019-20, 2020-21		Course/Subject		Course Outcomes (COs)		r	1		FIQ	jrain Out	comes (r	-05)	1	r –		r	<u> </u>	F305	
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Understand Various Steps In Project Management, Different Types Of Charts.	1	2		1	-						3		┝───┘	1	2
		Project	2	Construct Network By Using Cpm And Pert Method.	2	3		3	2				1		1			2	2
		Management	3	Know The Concept Of Engineering Economics, Economic Comparisons, And Linear Break	2	3		3	2				2		1		3	1	2
		BTCVC604	4	Even Analysis Problems.	2	2		1	1						2		2	2	2
			5	Philosophy.		1					1		1		2			1	1
		0 10 11 1							Brog	tram Out	comoc (\vdash	BSOc	
2018-19, 2019-20, 2020-21		Course/Subject		Course Outcomes (COs)	1	2	3	4	5	fram Out	7	-US) 8	9	10	11	12	1	2	3
			1	Determine The Sowage Characteristics And Design Various Sowage Treatment Plants	2	2	2	2			2							2	1
			2	Understand Municipal Water And Wastewater Treatment System Design And Operation	3	3	3	2			3						2	2	1
		Waste Water Treatment	3	Apply Environmental Treatment Technologies And Design Processes For Treatment Of Industrial Waste Water	3	3	3				3			2			2	2	2
	VI		4	Understand The Rural Sanitation Schemes.	3	3	3			3	3			1			1	1	1
																	\square		
2018-19, 2019-20, 2020-21		Course/Subject		Course Outcomes (COs)		r –	1		Prog	gram Out	comes (F	Os)	r	r		r –	┝───	PSOs	
		with course code		Understand Coological Time Scale And Physiographic Division Of India And Their Coological	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Advanced	1	Characteristics And Different Geological Formation In India.	2	3	2	2	1	-	-	-	-	-	-	1	2	-	-
		Engineering	2	Perform Sub Surface Exploration And Interpret Core Log.	3	2	2	2	2	2	1	-	-	1	-	1	2	1	-
		Geology	3	Solve Numerical Problem Based On Core Drilling And Seismic Data.	3	-	-	-	-	2	-	-	-	-	-	-	3	-	-
			4	Parmilar with Origin Of Earthquake, Seisinic Wave And Landside in Deccari Hap	2	3	1	- 1	2		2	-	-	1	-	2	<u> </u>	1	2
2018-19, 2019-20, 2020-21		Course/Subject		l					Proc	ram Out	comes (F	POs)						PSOs	
2010 10,2010 20,2020 21		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Behavior Of Soil Based On Its Particle Size And Mineral Content	3	-	-	-	-	-	-	-	-	-	-	1	1	2	-
			2	Ability To Understand The Earth Work Equipment	3	-	-	-	-	1	2	-	-	-	-	1	3	1	3
		Advanced Soil Mechanics	3	Ability To Understand The Necessity Of Ground Improvement And Potential Of A Ground For Improvement	3	-	2	-	-	2	2	-	-	-	-	1	3	2	2
													_			-			2
			4	Understand The Soil Reinforcement Mechanisms	2	-	2	-	-	2	2	-	-	-	-	1	2	2	2
			4 5	Understand The Soil Reinforcement Mechanisms Understand The Grouting And Injection Methods.	2	-	2	-	-	2	2	-	-	-	-	1	2	2	2

2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Building Planning	1	To Plan Buildings Considering Various Principles Of Planning And Bye Laws Of Governing Body.	2					2	3		2	3		2	2	1	1
	and Design	2	To Comprehence Various Utility Requirements In Buildings			3			2				2			3	2	
		3	Students Are Able To Understand Various Techniques For Good Acoustics.	3		2				2						2		2
2018-19, 2019-20, 2020-21	Course/Subject							Pro	gram Ou	comes (F	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Concrete	1	Understand The Various Types And Properties Of Ingredients Of Concrete.	3					2	2						1	1	1
	Technology	2	Understand Effect Of Admixtures On The Behavior Of The Fresh And Hardened Concrete.		2		2			3						1	1	2
	Laboratory	3	Formulate Concrete Design Mix For Various Grades Of Concrete.	2	3	2	3	2		2						3	2	1
		-					-											
2018 40, 2010 20, 2020 24	Course (Cuthing)				I	l		Prov	aram Out	comes (F	206)	l	I	<u> </u>			PSOs	
2018-19, 2019-20, 2020-21	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Building Planning	1	Draw Plan Elevation And Section Of Load Bearing And Framed Structures	1		1		1	3	2			3	1	-	2	3	2
	Design and	2	Draw Plan, Elevation And Section Of Public Structures.	2	2			2	2	~	1		Ŭ	1	1	1	ů	1
											· · ·							
2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Ou	comes (F	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Able To Identify The Behavior, Analyze And Design Of The Beam Sections Subjected To	2	-	2	2	-	-	-	-	-	2	-	2	2	-	1
	Design of Concrete	2	Able To Analyze And Design Of Axially And Eccentrically Loaded Column And Construct The Interaction Diagram For Them.	2	-	2	2	-	-	-	-	-	2	-	2	2	-	1
	Structures - II	3	Understand Various Concepts, Systems And Losses In Pre-Stressing.	2	2	2	2	1	-	-	-	-	-	-	2	2	-	1
		4	Beam/Girders.	3	2	3	3	-	-	-	-	-	3	-	2	2	-	1
			•											-				
2018-19, 2019-20, 2020-21	Course/Subject							Pro	gram Ou	comes (F	POs)		1	1			PSOs	
2018-19, 2019-20, 2020-21	Course/Subject with course code		Course Outcomes (COs)	1	2	3	4	Proș 5	gram Out 6	comes (F 7	POs) 8	9	10	11	12	1	PSOs 2	3
2018-19, 2019-20, 2020-21	Course/Subject with course code	1	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering	1	2	3 2	4	Pro: 5 1	gram Ou 6 3	rcomes (F 7 1	POs) 8	9 1	10	11	12	1	PSOs 2 2	3
2018-19, 2019-20, 2020-21	Course/Subject with course code	1	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations.	1	2	3 2 1	4	Pro g 5 1	gram Out 6 3 2	rcomes (F 7 1	POs) 8	9 1 2	10	11	12	1 3 1	PSOs 2 2	3
2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering	1 2 3	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport	1 2 1	2	3 2 1 2	4	Prog 5 1	gram Out 6 3 2	rcomes (F 7 1	POs) 8	9 1 2	10	11	12	1 3 1 2	PSOs 2 2 1	3 1 1
2018-19, 2019-20, 2020-21	Course/Subject with course code	1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors.	1 2 1 2	2	3 2 1 2	4 2 2	Pros 5 1	gram Out 6 3 2 1	7 7 1	POs) 8 1	9 1 2	10	11 3	12	1 3 1 2 1	PSOs 2 2 1 2	3 1 1
2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering	1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors.	1 2 1 2	2	3 2 1 2	4 2 2	Pros	gram Out 6 3 2 1	7 7 1	POs) 8 1	9 1 2	10	11 3	12	1 3 1 2 1	PSOs 2 2 1 2	3 1 1
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject	1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs)	1 2 1 2	2	3 2 1 2	4	Prog 5 1 Prog	gram Out 6 3 2 1 gram Out	rcomes (F	20s) 8 1 20s)	9 1 2	10	11	12	1 3 1 2 1	PSOs 2 2 1 2 PSOs PSOs	3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code	1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs)	1 2 1 2 1	2 2 2	3 2 1 2 3	4 2 2 4	Prog 5 1 Prog 5	gram Out 6 3 2 1 gram Out 6	comes (F 7 1 comes (F 7	°Os) 8 1 °Os) 8	9 1 2 9	10	11 3 11	12	1 3 1 2 1	PSOs 2 2 1 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources	1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India.	1 2 1 2 1 2	2 2 2 3	3 2 1 2 3	4 2 2 4	Pros	gram Out 6 3 2 1 gram Out 6	comes (F	² Os) 8 1 2 2 Os) 8	9 1 2 9	10	11 3 11	12 12 12 2	1 3 1 2 1 1 1 2	PSOs 2 2 1 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 1 1 3 3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703	1 2 3 4 1 2	Course Outcomes (COs) Inderstand The Types And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology.	1 2 1 2 1 2 3	2 2 2 3 3	3 2 1 2 3 3	4 2 2 4 1 2	Prog 5 1 Prog 5 3 -	gram Out 6 3 2 1 1 gram Out 6	comes (F	² Os) 8 1 2 Os) 8	9 1 2 9	10	11	12 12 12 2 2	1 3 1 2 1 1 1 2 2 2	PSOs 2 2 1 2 2 4 2 2 2 2 2 2 3	3 1 1 3 3 3 3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703	1 2 3 4 1 2 3	Course Outcomes (COs) Know About The Basics And Design OI Various Components OI Railway Engineering Understand The Types And Functions OI Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components OI Airport Understand The Types And Components OI Docks And Harbors. Course Outcomes (COs) Understand Need OI Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes.	1 2 1 2 1 2 3 3 3	2 2 2 3 3 2	3 2 1 2 3 3 3 3 3	4 2 2 4 1 2	Prog 5 1 Prog 5 3 -	gram Out 6 3 2 1 gram Out 6	comes (F	POS) 8 1 2 2 0 5 8	9 1 2 9	10	11 3 11	12 12 12 2 2 2 2	1 3 1 2 1 1 1 2 2 2 2 2	PSOs 2 2 1 1 2 PSOs 2 2 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 2 3 3 2 3 3 3 2 3	3 1 1 3 3 3 3 3 3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703	1 2 3 4 1 2 3	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes.	1 2 1 2 1 2 3 3 3	2 2 2 3 3 2	3 2 1 2 3 3 3 3 3	4 2 2 4 1 2	Prog 5 1 Prog 5 3 - -	gram Out 6 3 2 1 gram Out 6	roomes (F	POS) 8 1 2 2 0 5 8 8 2 0 5	9 1 2 9	10	11 3 11	12 12 12 2 2 2 2	1 3 1 2 1 1 1 2 2 2 2	PSOs 2 2 1 1 2 PSOs 2 2 2 3 2 BSOc	3 1 1 3 3 3 3 3 3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject Water Resources EngineeringBTCV C 703 Course/Subject with course code	1 2 3 4 1 2 3	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Course Outcomes.	1 2 1 2 1 2 3 3 3	2 2 2 3 3 2 2	3 2 1 2 3 3 3 3 3 3 3	4 2 2 4 1 2	Prog 5 1 - - - - - 5 5 5	gram Out 6 3 2 1 1 gram Out 6 gram Out	comes (F	POS) 8 1 POS) 8 POS) 8	9 1 2 9 9	10	11 3 11 11	12 12 12 2 2 2 2 12	1 3 1 2 1 1 2 2 2 2 1	PSOs 2 2 1 1 2 PSOs 2 2 2 3 2 PSOs 2 PSOs 2 2	3 1 1 3 3 3 3 3 3 3 3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code	1 2 3 4 1 2 3	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures.	1 2 1 2 1 2 3 3 3 1 2	2 2 2 3 3 2 2 2 2	3 2 1 2 3 3 3 3 1	4 2 2 4 1 2 4 1	Pros 5 1 	gram Out 6 3 2 1 1 gram Out 6 gram Out	comes (F	POS) 8 1 POS) 8 POS) 8	9 1 2 9 9 9	10	11 3 11 11	12 12 12 2 2 2 2 12	1 3 1 2 1 1 2 2 2 2 2 1 1	PSOs 2 2 2 1 2 2 3 2 3 2 3 2 3 3 3	3 1 1 3 3 3 3 3 3 1
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code	1 2 3 4 1 2 3 3	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Need Of Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Know About The Rate Analysis And Bill Preparations And To Study About The Specification Writing.	1 2 1 2 3 3 3 3 1 2 2 2	2 2 3 3 2 2 2 2 1	3 2 1 2 3 3 3 3 3 1 1 1	4 2 2 4 1 2 4 1 2 4 1 2	Prog 5 1 - - - - - - 5 2 2 2	gram Out 6 3 2 1 gram Out 6 gram Out	comes (F	20s) 8 20s) 8 20s) 8 8	9 1 2 9 9 2	10	11 3 11 11	12 12 12 2 2 2 2 12 12 12	1 3 1 2 1 1 2 2 2 2 2 2 2 1 1 1 2	PSOs 2 2 1 2 2 3 2 2 3 3 3	3 1 1 3 3 3 3 3 1 1
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704	1 2 3 4 1 2 3 3	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Know About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Know The Various Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendering.	1 2 1 2 3 3 3 1 2 2 1	2 2 3 3 2 2 2 1 3	3 2 1 2 3 3 3 3 1 1 1 1	4 2 2 4 1 2 4 1 2	Pros	gram Out 6 3 2 1 gram Out 6 gram Out	comes (F 7 1 	20s) 8 1 20s) 8 20s) 8	9 1 2 9 9 2 1	10	11 3 11 11 11	12 12 2 2 2 2 12 12	1 3 1 1 1 2 2 2 2 2 2 1 1 1 2 1 1	PSOs 2 1 2 PSOs 2 2 3 2 3 3 3 2 3	3 1 1 3 3 3 3 3 1 1 1 2
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704	1 2 3 4 1 2 3 3 1 1 2 3 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Need Of Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Rnow About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Know The Various Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendening. Understand The Valuation Of Land And Buildings, Various Methods And Factors Alfecting Valuation.	1 2 1 2 3 3 3 3 1 2 2 2 1 2 2	2 2 3 3 3 2 2 2 2 1 3 3 2 2	3 2 1 2 3 3 3 3 3 1 1 1 1	4 2 2 4 1 2 2 4 1 2 2 2 2	Pros	gram Outure 3 2 1 1 gram Outure 6	comes (F 7 1 	8 1 1 200s) 8 8	9 1 2 9 9 2 1	10	11 3 11 11 11	12 12 12 2 2 2 2 2 2 12 12	1 3 1 2 1 1 2 2 2 2 2 2 1 1 1 2 1 1	PSOs 2 2 1 2 2 3 2 3 3 2 3 1 1	3 1 1 3 3 3 3 1 1 2 2
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704	1 2 3 4 1 2 3 3 1 1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Need Of Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Know About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Rnow The Various Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendering. Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Valuation.	1 2 1 2 3 3 3 3 1 2 2 2 1 2 2 1 2	2 2 3 3 3 2 2 2 2 1 3 3 2 2	3 2 1 2 3 3 3 3 1 1 1 1	4 2 2 4 1 2 4 1 2 2 2 2	Prog 5 1 - - - - - - - - - - - - - - - - - -	gram Out 6 3 2 1 1 gram Out 6 6 gram Out 6	comes (F 7 1 	2005) 8 1 2005) 8 8 2005) 8	9 1 2 9 9 9 2 1	10	11 3 11 11	12 12 12 2 2 2 2 2 12	1 3 1 2 1 1 2 2 2 2 2 1 1 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	PSOs 2 1 2 3 2 3 2 3 2 3 2 3 2 3 2 1	3 1 1 3 3 3 3 3 3 1 1 1 2 2
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704	1 2 3 4 1 2 3 3 1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Need Of Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Know About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Rnow The Various Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendering. Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Valuation.	1 2 1 2 3 3 3 1 2 2 2 1 2 2 1	2 2 3 3 3 2 2 2 2 2 1 3 3 2 2 2	3 2 2 2 2 2 3 3 3 3 1 1 1 1 1 3 3	4 2 2 2 4 1 2 2 4 1 2 2 2 4	Prov 5 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	gram Out 6 3 2 1 1 gram Out 6 6 gram Out 6	comes (F 7 1 	2005) 8 1 2005) 8 2005) 8 2005) 8	9 1 2 9 9 9 2 2 1	10	11 3 11 11 11	12 12 12 2 2 2 2 2 12	1 3 1 2 1 1 2 2 2 2 1 1 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 2 1 1 1 2 2 2 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	PSOs 2 2 1 2 PSOs 2 2 2 2 3 2 3 2 1 PSOs 2 3 2 1 PSOs 2	3 1 1 3 3 3 3 3 3 1 1 1 2 2 2
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704 Course/Subject with course code Construction	1 2 3 4 1 2 3 3 1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Know About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Know How Urious Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendering. Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Valuation. Course Outcomes (COs)	1 2 1 2 2 1 2 3 3 3 3 1 2 2 2 1 1 2 2 1 3	2 2 2 3 3 2 2 2 2 2 1 3 3 2 2 2 2 2 2 2	3 2 1 2 3 3 3 3 3 1 1 1 1 1 1 2 2	4 2 2 4 1 2 4 1 2 2 2 2 4 2 2	Pro 5 1 	gram Out 3 2 1 gram Out 6 gram Out 6 9 9 9 9 9 9 9 9 9 9 9 9 9	comes (F 7 1 	2005) 8 1 1 2005) 8 2005) 8 2005) 8 1	9 1 2 9 9 2 2 1 1	10		12 12 12 2 2 2 2 12 12 12 12	1 3 1 2 1 1 2 2 2 2 1 1 2 2 2 1 1 1 2 1 1 2 2 2 2 1 1 1 2 2 2 2 1 1 1 2 2 2 2 2 1 1 1 2 2 2 2 2 2 1 1 1 2 2 2 2 2 1 1 1 2 2 2 2 2 1 1 1 1 2 2 2 2 2 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1	PSOs 2 2 1 2 3 2 3 2 3 2 3 2 3 2 1 PSOs 2 3 2 1 PSOs 2	3 1 1 1 3 3 3 3 1 1 2 2 3 3 3
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704 Course/Subject with course code Construction Techniques	1 2 3 4 1 2 3 3 1 2 3 4 1 2 2 3	Course Outcomes (COs) Inderstand The Types And Functions Of Tracks, Junctions And Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Rnow About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Know The Various Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendening. Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Yaluation. Course Outcomes (COs) Understand The Planning Of New Project With Site Accessibility And Services Required Comprehend The Various Civil Construction Equipments.	1 2 1 2 3 3 3 3 1 2 2 2 1 1 2 2 1 1 2 2 1 1 3 3 3	2 2 2 3 3 3 2 2 2 2 2 2 1 3 3 2 2 2 2 2	3 2 1 2 3 3 3 3 3 1 1 1 1 1 2 2	4 2 2 2 4 1 2 2 4 1 2 2 2 4 2 2	Prov 5 1 Prov 5 3 3 - - - Prov 5 2 2 2 1 1 Prov 5 3	gram Out 6 3 2 1 1 gram Out 6 1 9 9 9 9 9 9 9 9 9 9 9 9 9	comes (F 7 1 	2005) 8 1 1 2005) 8 8 2005) 8 8 1 2005) 8 1 1	9 1 2 9 9 9 2 2 1 1	10	11 3 11 11 11	12 12 2 2 2 2 12 12 12 12 12	1 3 1 2 1 1 2 2 2 2 2 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	PSOs 2 1 2 1 2 3 2 3 2 3 2 3 2 3 2 1 PSOs 2 3 2 1 PSOs 2	3 1 1 3 3 3 3 3 1 1 2 2 3 3 2
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704 Course/Subject with course code Construction Techniques BTCVE705A	1 2 3 4 1 2 3 3 1 2 3 4 4 1 2 3	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Know About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Row The Various Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendering. Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Valuation. Course Outcomes (COs) Understand The Planning Of New Project With Site Accessibility And Services Required Comprehend The Various Civil Construction, Equipments. Fouries Outcomes (COs)	1 2 1 2 2 1 2 3 3 3 3 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 3 3 3 3	2 2 2 3 3 2 2 2 2 1 3 3 2 2 2 2 3 3 2 2	3 2 1 2 3 3 3 3 1 1 1 1 1 1 2 2 3	4 2 2 2 4 1 2 2 4 1 2 2 2 4 2 2	Pro 5 1 - - - - - - - - - - - - - - - - - -	gram Out 6 3 2 1 1 gram Out 6 3 gram Out 6 1 1	comes (F 7 1 	2005) 8 1 2005) 8 2005) 8 1	9 1 2 9 9 2 1 1	10		12 12 2 2 2 2 2 12 12 12 12 12 3 3 3 3	1 3 1 2 1 2 2 2 2 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	PSOs 2 2 1 2 3 2 3 2 3 2 3 2 3 2 1 PSOs 2 3 2 1 PSOs	3 1 1 1 3 3 3 3 1 1 2 2 3 3 2 2
2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21 2018-19, 2019-20, 2020-21	Course/Subject with course code Infrastructure Engineering Course/Subject with course code Water Resources EngineeringBTCV C 703 Course/Subject with course code Professional Practices BTCVC704 Course/Subject with course code Construction Techniques BTCVE705A	1 2 3 4 4 1 2 3 3 4 1 2 3 4	Course Outcomes (COs) Know About The Basics And Design Of Various Components Of Railway Engineering Understand The Types And Functions Of Tracks, Junctions And Railway Stations. Know About The Aircraft Characteristics, Planning And Components Of Airport Understand The Types And Components Of Docks And Harbors. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Need Of Irrigation Structures And Schemes. Water Hydrology. Develop Basis For Design Of Irrigation Schemes. Course Outcomes (COs) Understand The Importance Of Preparing The Types Of Estimates Under Different Conditions For Various Structures. Know About The Rate Analysis And Bill Preparations And To Study About The Specification Writing. Row The Various Types Of Contract, Accounts In Pwd, Methods For Initiating The Works In Pwd And Tendering. Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Valuation. Course Outcomes (COs) Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Valuation. Course Outcomes (COs) Understand The Valuation Of Land And Buildings, Various Methods And Factors Affecting Valuation. Course Outcomes (COs) Understand The Valuation Of New Project With Site Accessibility And Services Required Comprehend The Various Aspect Of Road Construction, Construction Of D	1 2 1 2 3 3 3 3 1 2 2 2 1 1 2 2 1 1 2 2 1 1 3 3 3 3	2 2 3 3 2 2 2 2 1 1 3 2 2 2 2 2 2 2 2 2	3 2 1 2 3 3 3 3 3 1 1 1 1 1 1 1 2 2 3 3 2	4 2 2 2 4 1 2 2 4 2 2 2 2 2	Prov 5 1 7 7 7 5 3 3 - - 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	gram Out 6 3 2 1 1 gram Out 6 6 1 1 2 2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3	comes (F / 7 1 comes (F / 7 7 2 comes (F / 7 7 2 comes (F / 7 7 2 comes (F / 7)	2005) 8 1 1 2005) 8 8 2005) 8 1 1	9 1 2 9 9 2 1 1	10		12 12 2 2 2 2 2 12 12 12 12 12 12 3 3 3 3	1 3 1 2 1 1 2 2 2 2 2 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 2 2 2 2 2 2 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2	PSOs 2 2 1 2 7 8 2 3 2 3 2 3 2 1 PSOs 2 3 2 3 2 3 2 3 3 2 3 3 3 3 3 3 3	3 1 1 1 3 3 3 3 3 1 1 2 2 3 3 2 2 2 3 3

2018-19 2019-20 2020-21		Course/Subject							Pro	aram Out	comes (I	POs)					1	PSOs	
2010 10, 2010 20, 2020 21				Course Outcomes (COs)					_		_								
		with course code			1	2	3	4	5	6	1	8	9	10	11	12	1	2	3
		Engineering	1	Adopt As Per Principles Of Economics And Financing					2						2				
		Economics	2	Analyze Available Alternatives And Propose Best Suitable Among Them											1				
		Economics	3	Apply Various Models Of Financial Management And Accounting	1								1		2				
2018-19, 2019-20, 2020-21		Course/Subject							Prog	gram Out	comes (l	POs)	-	-	-			PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
				Understand The Different Energy Methods in Structural Analysis And Resis Concents Of Finite					-							<u> </u>	<u> </u>	<u> </u>	<u> </u>
			1	Element Method	2	1								2		2	1	1	1
			-	Analyze 1-D Problems Related To Structural Analysis Like Bars, Trusses, Beams And Frames												<u> </u>	<u> </u>	<u> </u>	<u> </u>
			2	Using Finite Element Approach.	2		1							2		1	1	1	1
		Finite Element	_	Find Solution To Problems Using Direct Approach Methods Like Rayleigh – Ritz Or Galerkin'S													<u> </u>		<u> </u>
		Method	3	Method.	2	1	1							2		1	1	1	1
			4	Solve 2-D Problems Using Knowledge Of Theory Of Elasticity.	2		1							2		1	1	1	1
			5	Students Will Be Able To Implement The Knowledge Of Numerical Methods In Fem To Find	2	2	2							2		2	1	1	1
			3	The Solution To The Various Problems In Statics And Dynamics.	2	2	3							2		-	<u> </u>		<u> </u>
			6	Analyze 1D, 2D, And 3D Structures Using Different Software Packages Based On Fem.		2			3					2		2	1	1	1
2018-19, 2019-20, 2020-21		Course/Subject				-			Pro	gram Out	comes (l	POs)						PSOs	
		with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
							-									<u> </u>	L	<u> </u>	
	VII	Limit State Design	1	Identify And Compute The Design Loads And The Stresses Developed In The Steel Member	2	2	2												
		of Steel	3	Analyze And Design The Various Connections And Identify The Potential Failure Modes	3	3	3					3					3	2	3
		Structures	3	Analyze And Design Various Tension, Compression And Elexural Members	2	3	3					3					2	3	2
			4	Understand Provisions In Relevant Bis Codes.	1	-					1	2					3	3	3
							1												
2018-19 2019-20 2020-21		Course/Subject							Pro	aram Out	comes (I	POs)					-	PSOs	
2010 10,2010 20,2020 21				Course Outcomes (COs)							_								L .
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Understand Modes Of Structural Collapse	1	1		1						2		1	1	1	1
		Plastic Analysis	2	Perform The Plastic Analysis And Design Of Various Determinant And In-Determinant	1	1	2	1								1	1	1	1
		and Design	2	Structures.			2									<u> </u>		'	'
			3	Adapt Plastic Theory Of Design For Various Structures	1	1	2	1								1	1	1	1
																			L
2018-19, 2019-20, 2020-21		Course/Subject					-		Pro	gram Out	comes (l	POs)		•				PSOs	
		with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
				Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In			-									├ ──	<u> </u>		
		Water Power	1	India.	3	1	1	1	1							3	2	2	3
		Engineering	2	Understand Various Irrigation Structures And Schemes.	3	1	3	1	1							3	2	2	2
		• •	3	Develop Basis For Design Of Irrigation Schemes.	2	1	1	1	1							3	2	2	1
							1											1	1
2018-19, 2019-20, 2020-21		Course/Subject							Pro	gram Out	comes (l	POs)						PSOs	
		with course code		Course Outcomes (COs)	4	2	2	4	5	6	7	•	0	10	44	12	4	2	2
		with course code					3		3	U		•	3	10		12		2	3
			1	Identify The Sources Of Air Pollutants And Their Effect On Human, Plants And Materials.		2				3	3					2	2	2	2
		Air Pollution	2	Apply Knowledge Of Meteorology For Controlling Air Pollution		3				2	3					3	2	3	3
		Control	3	Design Air Pollution Controlling Equipment.		3				3	3					3	3	2	2
			4	Apply Knowledge Of Legislation For Prevention And Control Of Air Pollution.		2				3	3					<u> </u>	2		
						I		I								<u> </u>	<u> </u>		
2018-19, 2019-20, 2020-21		Course/Subject		Course Outcomes (COs)					Pro	gram Out	comes (I	POs)		-			<u> </u>	PSOs	
		with course code		course ourcomes (cos)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			4	Understand Components Of Bridges And Its Various Types		1	1	2		3						-	1	1	
		Bridge	2	Understand Somponents of Endges And its validus Types.	2	2	1	2		J	2		3			-	<u> </u>	<u> </u>	
		Engineering	3	Analyze Bridge Structures Using Different Analysis Techniques	2	2	1	2		1	2		1			-		-	
			4	Understand The Importance Of Different Types Of Bridge Bearings	3	1	1	-		1				2				-	
				endeledand the impertance of bineford types of binege bearings.	Ŭ	<u> </u>	1							-			1	-	
2018-19, 2019-20, 2020-21		Course/Subject							Pro	gram Out	comes (I	POs)					1	PSOs	
2010 10,2010 20,2020 21				Course Outcomes (COs)							_								L .
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Introduction to	1	Capture Complexities In Earthquake Resistant Design Of Structures	1	3	1	2	1							1	1	1	1
		Earthquake	2	Grasp Nature Of Earthquake Vibration And Associated Forces On Structures	2	1	1	2	1							1	1	1	1
		Engineering	3	Understand Importance Of Designing The Building To Targeted Seismic Performance.		2	3	1	1					2		2	1	1	1
2018-19, 2019-20, 2020-21		Course/Subject							Prog	gram Out	comes (I	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
				Hadroniand Town And Habon Dispersion And Their Connection Attain to a	· ·	-	<u> </u>		-							<u> </u>	⊢ <u>·</u>	<u>⊢</u>	<u>ا</u>
		Town and Urban	1	Understand Town And Urban Planning And Their Essential Attributes.	-	-	-	1	1	2	2	-	-	2	1		+		1
		Planning	2	Internative Elements of Planning And Regulations of The Same.	-	-	-	1	-	2	2	1	-	1	1	1	<u>1</u>		1
		1	- 3	Implement Guidelines Flovided by Standard Authonites.	-	-		1 1	-	2			-				1 1	1 1	1 1

2018-19, 2019-20, 2020-21	Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Tuppeling and	1	Understand Types Of Tunnels And Tunneling Methods Conforming To Site Conditions	2	2	1	2	2	2	1	•	-	1	-	1	1	1	1
	Lindorground	2	Investigate Various Tunneling Operations And Relevant Machinery Required	-	-	-	-	-	1	-	•	-	-	-	1	1	1	1
	Executions	3	Understand Methods And Operations Of Excavating Large And Deep Tunnels	1	1	2	2	3	1	1	•	-	-	-	1	1	1	1
	LACAVALIONS	4	Propose Suitable Tunneling And Excavations Methods To Optimize The Same	2	2	2	1	2	2	1	•	-	-	1	1	1	1	1
2018-19, 2019-20, 2020-21	Course/Subject							Pro	gram Out	comes (F	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Design & Drawing of RC & Steel Structures Lab.	1	To Simulate A Practical Design Requirement In To A Theoretical Statement To Solve Mathematically To Arrive At A Safe Economical And Realistic Feasible Solution That Can Be Executed.	3	3	3			2						3	3	2	3
																	I	1

			-						_										
2021-22, 2022-23		Course/Subject		Course Outcomes (COs)					Pro	gram Out	comes (I	POs)					l	PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Understand The Concept Of Laplace Transform And Inverse Laplace Transform Of Elementary Functions And Apply It To Solve The Linear Differential Equations With Constant Coefficients Having Their Applications In Mechanical, Electrical, Chemical, Communication Etc. Systems.	3	2											2		
		Mathematics - III	2	Apply The Concept Of Fourier Transform To Solve The Boundary Value Problems, Problems In Signal Processing And Communication System.	2	1											1		
			3	Apply Partial Differential Equations To Solve Heat Equation, Wave Equation And Laplace Equation Etc.	3	2											3		
			4	Analyze Conformal Mapping, Transformation And Perform Contour Integration Of Complex Function In The Study Of Electromagnetics And Signal Processing	3	2											1		
2021-22, 2022-23		Course/Subject		· · · · · · · · · · · · · · · · · · ·					Pro	aram Out	comes (I	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Perform The Stress-Strain Analysis	2			2	2	1	1	1					1	2	1
		Mechanics of	2	Draw Force Distribution Diagrams For Members And Determinate Beams	1		1	1									1	2	1
		Solids	3	Visualize Force Deformation Behavior Of Bodies	3	2		3	3	2	2	2					1	1	1
			4	Perform Failure Analysis	3	2		3	3	2	2	2					1	1	1
2021-22 2022-23		Course/Subject							Pro	gram Out	comes (I	POs)					<u> </u>	PSOs	
1011 12, 1012 10		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Understand Types Of Masonry Structures	3	2		2		1	3		3				1	1	1
		Building	2	Comprehend Components Of Building And There Purposes.	<u> </u>			3			2		-		2		2		2
		Construction &	3	Draw Plan, Elevation And Section Of Various Structures			2	-	2		3	1	2						
		Drawing	4	Apply The Principles Of Planning And By Laws Used For Building Planning.		2		2						2					
			5	Prepare Detailed Working Drawing For Doors And Windows	1			2		2		2					· · · · ·		
				g															
2021-22 2022-23		Course/Subject						ļ	Pro	aram Out	comes (I	POs)			ļ	ļ		PSOs	
1011 12, 1012 10		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Calibrate The Various Flow Measuring Devices.	3	2	3	1	1	2	1					2	1	2	3
			2	Determine The Properties Of Fluid And Pressure And Their Measurement.	3	2	3	1	1	2						1	2	2	3
		Hydraulics -I	3	Understand Fundamentals Of Pipe Flow, Losses In Pipe And Analysis Of Pipe Network.	3	2	3	1		1	1					1	2	1	2
			4	Visualize Fluid Flow Phenomena Observed In Civil Engineering Systems	2			2						1			3	1	2
2021-22, 2022-23		Course/Subject							Pro	gram Out	comes (l	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	111		1	Perform Measurements In Linear/Angular Methods.	3	2	2	1	2							1	3	1	1
		Surveying	2	Perform Plane Table Surveying In General Terrain.	2	2	1	1									1	1	2
		BTCVC305	3	Know The Basics Of Leveling And Theodolite Survey In Elevation And Angular Measurements.	3	2	2	2	1							1	3	2	2
2021-22, 2022-23		Course/Subject		· · · · · · ·					Pro	gram Out	comes (l	POs)	-					PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
				Acquire Interpersonal Communication Skills									2	3			1		
			1	Develop The Ability To Work Independently.									2				(
		Soft Skills	2	Develop The Qualities Like Self-Discipline, Self-Criticism And Self-Management								2	2			1	1		
		Development	3	Have The Qualities Of Time Management And Discipline									1				1		
			4	Present Themselves As An Inspiration For Others												1	(
2021-22, 2022-23		Course/Subject							Pro	gram Out	comes (l	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Evaluate Young Modulus, Torsional Strength, Hardness And Tensile Strength Of Given Specimens.	2	1	1	2	2	2	1			1		1	2	1	1
		Solid Mechanics	2	Determine The Strength Of Coarse Aggregates.	1	3	1	2	2	2						1	1	1	1
		Laboratory	3	Find The Compressive Strength Of Concrete Cubes And Bricks.	2	1	2	1	2	2	1			2		1	1	1	1
		,		Determine Physical Properties Of Given Coarse Aggregates, Fine Aggregates And Cement															
			4	Samples.	2	2	1	2	1	2	1			1		1		1	1
2021-22, 2022-23		Course/Subject		Cauraa Outaamaa (COa)					Pro	yram Out	comes (l	-US)					⊢	P50s	
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Hydraulics-I	1	Analyze The Properties Of Fluids And Their Verification.	3	2	2	1								3	2	1	1
		Laboratory	2	Predict Empirical Behavior Of Fluids	3	2	3	1								3	2	1	1
			3	Apply Principles Of Hydraulics While Working In Field.	3	2	3	1								3	2	1	1
2021-22, 2022-23		Course/Subject							Pro	gram Out	comes (I	POs)					i —	PSOs	

		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Use The Theodolite Along With Chain/Tape, Compass On The Field.	2	1	1	2	1								3	1	2
		Surveying	2	Apply Geometric And Trigonometric Principles Of Basic Surveying Calculations.	3	2	3	2	1								2	1	3
		Laboratory BTCVI 309	3	Plan A Survey, Taking Accurate Measurements, Field Booking, And Adjustment Of Errors.	1	1	2	2									2	1	2
		01012000	4	Apply Field Procedures In Basic Types Of Surveys, As Part Of A Surveying Team.	2	2	1	2					2				2	1	1
			5	Employ Drawing Techniques In The Development Of A Topographic Map.	2	1	1	2	2								3	1	2
2021 22 2022 22		Course/Subject							Pro	gram Out	comes (F	POs)						PSOs	
2021-22, 2022-23		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Building Planning	1	To Plan Buildings Considering Various Principles Of Planning And Bye Laws Of Governing Body.	2					2	2		2	3		2	2	1	1
		and Drawing	2	To Comprehence Various Utility Requirements In Buildings			3			2				2			3	2	
		Ŭ	3	Students Are Able To Understand Various Techniques For Good Acoustics.	2		1				2						1		2
2021-22, 2022-23		Course/Subject							Pro	gram Out	comes (F	POs)						PSOs	
1011 11, 1011 10		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		F	1	Apply The Water Treatment Concept And Methods.	3		2	3		2	2						1	2	2
		Environmental	2	Prepare Basic Process Designs Of Water And Wastewater Treatment Plants.	1	2	3		1	3	3						1	2	2
		Engineering	3	Apply The Wastewater Treatment Concept And Methods.	1	1	2		1	3	3						1	2	2
		BICVC402	4	Apply The Solid Waste Management Concents	1	2			1	3	3						1	2	2
2024 22 2022 22		Course/Subject		Apply the bolid waste management bolicopts.			I		Pro	aram Out	comes (20e)						PSOe	
2021-22, 2022-23		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Describe The Concept Of Structural Analysis, Degree Of Indeterminacy	1					2	3						2	2	2
		Structural	2	Calculate Slopes And Deflection At Various Locations For Different Types Of Beams		2		2			3						2	2	2
		Mechanics - I		Identify Determinate And Indeterminate Trusses And Calculate Forces In The Members Of		- 2		~			5						2		~
			3	Trusses	2	2	3	2	2	2	2						2	2	2
2021-22 2022-23		Course/Subject							Pro	aram Out	comes (F	POs)						PSOs	
1011 11, 1011 10		o cui corcusjoor		Course Outcomes (COs)			1												
		with course code		Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Water Resources	1	India.	2	3		2	2							2	2	2	3
		Engineering	2	Understand Various Irrigation Structures And Schemes, Water Hydrology,	3	3	3	1	-							3	2	3	3
		5 5	3	Develop Basis For Design Of Irrigation Schemes	3	2	3									1	2	2	3
2021-22 2022-23		Course/Subject	•				Ŭ		Pro	gram Out	comes (F	20s)					-	PSOs	
2021-22, 2022-23		Course/Subject		Course Outcomes (COs)			r					,							
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Design Open Channel Sections In A Most Economical Way	3	3	2	1									3	3	3
				Know About The Non-Uniform Flows In Open Channel And The Characteristics Of Hydraulic	5	5	2										5		
		Hydraulics - II	2	Jump.	3	3		2								2	3	2	3
			3	Understand Application Of Momentum Principle Of Impact Of Jets On Plane.	3	3	3	1								3	2	3	3
	IV																	1	
2021-22, 2022-23		Course/Subject							Pro	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Recognize The Different Land Forms Which Are Formed By Various Geological Agents.	2	1	1	1			2						1	2	1
		Engineering	2	Identify The Origin, Texture And Structure Of Various Rocks And Physical Properties Of Mineral.	1	1	2	1									1	2	
		Geology BTCVC406	3	Emphasize Distinct Geological Structures Which Have Influence On The Civil Engineering Structure.	2	1	3	1			1						2	1	1
			4	Understand How The Various Geological Conditions Affect The Design Parameters Of Structures.	2	2	1	2	1	1	2						1	2	
2021-22, 2022-23		Course/Subject							Pro	gram Out	comes (F	POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Building Dioprime	4	Draw Plan Elevation And Section Of Load Bearing And Framed Structures	4			2	2			2					4	├── ┥	
		and CAD Lab	2	Draw Plan, Elevation And Section Of Public Structures	4			2	2			2					1	⊢−−−∔	
		and CAD Lab.	2	Diaw Plan, Elevation And Section Of Public Structures	1			2	2			2					1	\vdash	
																		┢──┥	
																		لـــــا	
2021-22, 2022-23		Course/Subject		0			_	_	Pro	gram Out	comes (F	·US)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Environmental	1	Quantify The Pollutant Concentration In Water, Wastewater And Ambient Air.	2	2	1		3	1	3					3	1	2	1
		Enga Lab	2	Recommend The Degree Of Treatment Required For The Water And Wastewater.	2	2	3		1	3	3					3	1	2	1
		Lingg. Lab.	3	Analyze The Survival Conditions For The Microorganism And Its Growth Rate	2	1	2		1	3	3					3	1	1	

2021-22, 2022-23	Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
,	with course code		Course Outcomes (COs)	4	2	2		5	6	7		•	10	11	12	4	2	2
	with course code				2	3	*	2	0	'	°	3	10		12	'	2	3
		1	Design Open Channel Sections in A Most Economical Way. Know About The Non-Uniform Flows in Open Channel And The Characteristics Of Hydraulic	3	3	2	1									3	3	3
	HE-II Lab.	2	Jump.	3	3		2								2	3	2	3
		3	Understand Application Of Momentum Principle Of Impact Of Jets On Plane.	3	3	3	1								3	2	3	3
2022-23	Course/Subject							Prog	gram Out	comes (F	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	With Course coue				-	, v					, i i i i i i i i i i i i i i i i i i i	•						
		1	Identify And Compute The Design Loads And The Stresses Developed In The Steel Member.	2	2	2	2	-	-	-	-	-	-	-	-	-	3	-
	Design of Steel	2	Analyze And Design The Various Connections And Identify The Potential Failure Modes.	3	3	3	2	-	-	-	3	-	-	-	-	3	2	3
	Structures	3	Analyze And Design Various Tension, Compression And Flexural Members.	3	3	3	2	-	•	-	3	-	-	•	•	2	3	3
		4	Understand Provisions In Relevant Bis Codes.	2	-	-	-	-	-	2	2	-	-	-	-	3	3	2
2022-23	Course/Subject		Course Outcomes (COs)					Pro	gram Out	comes (F	POs)			-	-		PSOs	
	with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Understand Different Soil Properties And Behavior	-	2	-	3	2	-	-	-	-	-	-	1	1	2	2
	Geotechnical	2	Understand Stresses In Soil And Permeability And Seepage Aspects.	3	-	-	2	2	1	-	-	-	-	-	1	1	2	2
	Engineering	3	Develop Ability To Take Up Soil Design Of Various Foundations	3	-	3	3	3	3	-	-	-	-	-	1	3	2	1
2022-23	Course/Subject		Courses Outcourses (COo)			1		Prog	gram Out	comes (F	POs)		1				PSOs	
	with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			Have A Basic Understanding Of Matrix Method Of Analysis And Will Be Able To Analyze The															
	Structural	1	Determinant Structure.	1					2	3						3	2	1
	Mechanics –II	2	Have A Basic Understanding Of The Principles And Concepts Related To Finite Difference And		2		2			3						3	2	1
	inoonanioo ii	-	Finite Element Methods	2	-	2	-	2	2	-						2	-	4
2022.22	Course/Subject	3	Have A Basic Understanding Of Concept Of Initidence Line	2	2	3	2	2 Pro	Z Aram Out	comes (F	POs)					2	2 PSOs	
2022-23	Course/Subject		Course Outcomes (COs)					-		-								
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Understand The Various Types And Properties Of Ingredients Of Concrete.	1					2	3			2	2	2			
	Technology	2	Inderstand Effect Of Admixtures On The Rehavior Of The Fresh And Hardened Concrete		2		2			3			2	2	2			
	recrimology	3	Formulate Concrete Design Mix For Various Grades Of Concrete.	2	2	3	2	2	2	2			2	2	2			
			•															
2022-23	Course/Subject				-			Pro	gram Out	comes (F	POs)						PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Inderstand Various Steps In Project Management, Different Types Of Charts	2	2									2	2	2	3	
		2	Construct Network By Using Cpm And Pert Method.	3	-			2						3	3	~	3	2
	Project	3	Determine The Optimum Duration Of Project With The Help Of Various Time Estimates.		2		1							2		1	3	2
	Management	4	Know The Concept Of Engineering Economics, Economic Comparisons, And Linear Break	2	2							1		2	2		1	
		-	Even Analysis Problems.	-	-	-							-	-	-		· ·	
		5	Philosophy.				1									2		2
2022-23	Course/Subject				-		-	Pro	gram Out	comes (F	POs)			-	-		PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Determine The Sewage Characteristics And Design Various Sewage Treatment Plants	3	3	2			2	2				1		2	2	1
	Advanced	2	Understand Municipal Water And Wastewater Treatment System Design And Operation.	3	3	2			2	2				1		2	2	1
	Environmental	•	Apply Environmental Treatment Technologies And Design Processes For Treatment Of	2	2	2	2		1	1				1		2	2	1
	Engg.	3	Industrial Waste Water.	3	3	2	2							-		2	2	-
		4	Understand The Rural Sanitation Schemes.	1	1	1	1			2			-	1		1	1	
2022-23	Course/Subject							Pro	gram Out	comes (l	POs)						PSOs	
2022-23	course/oubject		Course Outcomes (COs)						g. ani oʻuti	-								
	with course code		· ·	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		1	Understand Geological Time Scale And Physiographic Division Of India And Their Geological	2	2	-	-	-	-	-	-	-	-	-	1	3	2	3
	Analised Onel		And Unaracteristics Different Geological Formation In India.	-	-		2	1						1	4	-	-	-
	Applied Geology	4	Solve Numerical Problem Based On Core Drilling And Seismic Data.	2	2		3	1	-		-	-	-	1	1	3	2	3
		4	Familiar With Origin Of Earthquake, Seismic Wave And Landslide In Deccan Trap.	2	2		-		-		-	-	-	-	1	3	2	3
																	_	

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2022-23	_	Course/Subject							Prog	gram Out	comes (I	PUS)						PSUS		
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
					•	-	, v			· ·	· ·							-	•	
		Hydraulic	1	Design Open Channel Sections In A Most Economical Way.	3	3	2	1									3	3	3	
		Engineering	2	Know About The Non-Uniform Flows In Open Channel And The Characteristics Of Hydraulic	3	3		2								2	3	2	3	
		Design		Jump.	,	,		~								-	ů	-	ů	
		Design	3	Understand Application Of Momentum Principle Of Impact Of Jets On Plane.	3	3	3	1								3	2	3	3	
2022-23	v	Course/Subject							Prog	gram Out	comes (F	POs)						PSOs		
				Course Outcomes (COs)		•	•		-	•	1	•	•	40		40		•	•	
	```	with course code			1	2	3	4	2	0		8	9	10	11	12	1	2	3	
			1	Apply Methods To Recharge Ground Water	2			1			2					3	2	2	2	
		A	•	Ability To Know About Various Surface And Subsurface Geophysical Methods For Groundwater	0						0									
		Advanced water	2	Explorations.	2			1			2					3	2	1	1	
		Resources	3	Ability To Know About Well Hydraulics	2						2					3	2	2	2	
		Ī	4	Ability To Know About Design Principles Of Well	1		3				2					3	2	2	2	
2022-23		Course/Subject							Prog	gram Out	comes (F	POs)						PSOs		
	-			Course Outcomes (COs)		•	•		-	•	-	•	•	40		40		•	•	
	```	with course code			1	2	3	4	2	0		8	9	10	11	12	1	2	3	
			1	Understand Basics Different Types Of Curves On Roads And Their Preliminary Survey.	2	1	2			1							2		2	
		Ī	2	Perform Setting Of Curves, Buildings, Culverts And Tunnels.	2	1	2			1	1						2		2	
		Geomatics	~	Comprehend Different Geodetic Methods Of Survey Such As Triangulation, Trigonometric												1				
			3	Leveling.	2	1		2									1		2	
			4	Comprehend Modern Advanced Surveying Techniques.		1		1	2	1							2	1	1	
2022-23		Course/Subject							Prog	gram Out	comes (F	POs)						PSOs		
		and the second se		Course Outcomes (COs)		•	•			•	1			40		40		•	•	
	`	with course code				z	3	4	5	b	1	8	9	10	11	12	1	z	3	
		Town and Lithon	1	Understand Town And Urban Planning And Their Essential Attributes.	-	-	-	1	1	2	2	-	-	2	1	1	1	1	1	
		Planning	2	Identify Elements Of Planning And Regulations Of The Same.	•		-	1	-	2	2	1	-	1	1	1	1	1	1	
		Fidining	3	Implement Guidelines Provided By Standard Authorities.	-	-	-	1	-	2	1	1	-	1	1	1	1	1	1	
2022-23		Course/Subject							Prog	gram Out	comes (F	POs)						PSOs		
		dela composición de de		Course Outcomes (COs)		•	2				7	•	•	40		40		2	2	
	`	with course code			•	2	3	4	5	0	· ·	•	3	10		12		2	3	
		Material Testing	1		3	3	2	2									2	2	1	
		and Evaluation		To develop skill to construct strong and durable structures by applying knowledge of material science	5	5	2	2									2	2		
			2	To make the students aware of quality assurance and control in their real life as a professional.	3	3			3	3	3				2		2	2	1	
			3	To propose suitable material in adverse condition	3	3	2	3									1	1		
2022-23		Course/Subject		Program Ou									n Outcomes (POs)							
		with course code		Course Outcomes (COs)	4	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
	<u> </u>	with course code				-	, , , , , , , , , , , , , , , , , , ,		~	•		v	~				•	-	•	
		Construction	1	Adopt As Per Principles Of Economics And Financing	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	
		Economics &	2	Analyze Available Alternatives And Propose Best Suitable Among Them									1				-	-	-	
	_	Finance	3	Apply Various Models Of Financial Management And Accounting									1		1		-	-	-	
2022-23		Course/Subject						-	Prog	gram Out	comes (F	POs)						PSOs		
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
							-		-	-								-	-	
		Software	1	Understand & Analyse Civil Engineering Softwares	-	1	1	1	3	-	-	-	-	2	-	1	1	2	2	
	_	applications in	2	Use Applications Of Various Softwares In Specialized Works Of Civil Engineering	-	1	1	1	3	-	-	-	-	2	-	1	1	2	2	
2022-23	_	Course/Subject		0		_		_	Prog	gram Out	comes (F	POs)			_	_		PSOs		
		with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
	L L			Simulate & Practical Design Requirement In To & Theoretical Statement To Solvo															-	
		SDD of Steel	4	Mathematically To Arrive At A Safe Economical And Realistic Feasible Solution That Can Re-	3	3	3			2						3	1	1	1	
		Structures Lab.	1	Executed.	3	3	3			4					_	3				
2022-23	-	Course/Subject		Enoodida.			L		Pror	aram Quite	comes (POs)		L	L	L		PSOs	L	
	-	e car ser ousjeet		Course Outcomes (COs)													İ			
	N 1	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	
	F		1	Determine Different Engineering Properties Of Soil.	3	3	-	2	-	-	-	-	1	-	-	1	1	2	1	
		Geotechnical	2	Identify And Classify Soils Based On Standard Geotechnical Engineering Practices	3	3	-	2	-	-	-		1	-	-	1	1	2	1	
		Engineering Lab	3	Perform Laboratory Oratory Compaction And In-Place Density Tests	3	3	-	2	-				1	-	-	1	1	1	1	
		J	4	Parform And Interpret Direct Shoar Taste And Estimate Shoar Strength Parameters	2	2		2					1			1	1	2	1	

2022-23	Course/Subject							Pro	gram Out	comes (l	POs)						PSOs	
with course of			Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1 1	2	3
	with course coue		Hadaratand The Mariana Turana And Description Of Jame diants Of Occurrents		-		-	•	•	•	•	-				Ļ		<u> </u>
	Conorato	1	Understand The Various Types And Properties Of Ingredients Of Concrete.	3					2	2					 		1	1
	Technology Lab	2	Understand Effect Of Admixtures On The Behavior Of The Fresh And Hardened Concrete		2		2			3					1	1	1	2
	reennoiogy Eab.	3	Formulate Concrete Design Mix For Various Grades Of Concrete	2	3	2	3	2		2						3	2	1
					Ű	-	Ű	-		~						—		<u> </u>
	0 10 11 1							Dree							L		DEOn	
2022-23	Course/Subject		Course Outcomes (COs)					Pioj	gram Out	comes (i	-Us)						P305	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			Comprehend The Various Design Bhilesephics Lload In Design Of Beinferend Constrate			-		0					0		<u> </u>	\vdash		<u> </u>
	Design of RC	1	Analyze And Design The Beinforced Concrete Sections Liging Working Stress Mathed	1	1	2	1	2	-	-	-	-	2	-		\vdash		
	Structures	2	Analyze And Design The Reinforced Concrete Sections Using Working Stress Method.	2	2	2	2	2	-	-	-	-	3	-	<u> </u>			
2022.22	Course (Cubicot	3	Analyze And Design The Reinforced Concrete Sections Using Limit State Method.	3	3	3	3	3 Prov	aram Out	comes (I	-	-	2	-	<u> </u>		PSOs	
2022-23	Course/Subject		Course Outcomes (COs)					110	grani Out	comes (i	03)					<u> </u>	1003	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			To Predict Soil Behavior Under The Application Of Loads And Come Up With Appropriate													<u> </u>		<u> </u>
		1	Solutions To Foundation Design Queries	3	3	3	-	-	-	-	-	-	-	-	1	1 1	1	1
	Foundation	2	Analyze The Stability Of Slope By Theoretical And Graphical Methods.	3	3	-	3	-	-	-	-	-	-	-	1	1	2	1
	Engineering	2	Analyze The Results Of In-Situ Tests And Transform Measurements And Associated	2	2		2								2	1	2	1
	Engineening	3	Uncertainties Into Relevant Design Parameters.	3	3	-	2	-	-	-	-	-		-	2	<u> </u>	2	<u> </u>
		4	Synthesizethe Concepts Of Allowable Stress Design, Appropriate Factors Of Safety, Margin Of	3	3	-	-	-	2	-	-	-			1		1	1
			Safety, And Reliability.	-	-	1										لنا		
2022-23	Course/Subject		Course Outcomes (COs)		-	1		Pro	gram Out	comes (I	Os)	-	-			<u> </u>	PSOs	-
	with course code		course outcomes (cos)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
															├ ──	\vdash		
	_	1	Comprehend Various Types Of Transportation Systems And Their History Of The Development							3	3				3	1	1	2
	Transportation	2	Comprehend To Various Types Of Pavements	3					3	3				2		2	1	1
	Engineering		Design The Pavements By Considering Various Aspects Associated With Traffic Safety						-									
		3	Measures.	3	3									2	3	2	2	2
																		1
																· · · ·	1	<i>(</i>
2022-23	Course/Subject							Pro	gram Out	comes (l	POs)						PSOs	
2022-23	Course/Subject		Course Outcomes (COs)	1	2	3	4	Pro	gram Out	comes (I 7	POs)	9	10	11	12		PSOs	3
2022-23	Course/Subject with course code		Course Outcomes (COs)	1	2	3	4	Proș 5	gram Out 6	comes (I 7	POs) 8	9	10	11	12	1	PSOs 2	3
2022-23	Course/Subject with course code	1	Course Outcomes (COs)	1	2 2	3 2	4	Prog 5	gram Out 6 1	comes (I 7 2	POs) 8	9	10	11 1	12	1	PSOs 2	3
2022-23	Course/Subject with course code	1 2	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent.	1 2 2	2 2	3 2	4 1	Prog 5	gram Out 6 1 2	comes (I 7 2 2	20s) 8	9	10	11 1	12 1	1	PSOs 2	3
2022-23	Course/Subject with course code Industrial Waste Treatment	1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste	1 2 2 3	2 2 3	3 2 3	4 1 1 2	Prog 5	gram Out 6 1 2 2	7 2 2 2	20s) 8	9	10	11 1	12 1	1 1	PSOs 2 1 1	3
2022-23	Course/Subject with course code Industrial Waste Treatment	1 2 3 4	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan	1 2 2 3	2 2 3	3 2 3	4 1 1 2 2	Pros	gram Out 6 1 2 2 1	comes (I 7 2 2 2 1	20s) 8	9	10	11 1 1 1	12 1 1	1 1	PSOs 2 1 1	3
2022-23	Course/Subject with course code Industrial Waste Treatment	1 2 3 4	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan	1 2 2 3	2 2 3	3 2 3	4 1 1 2 2	Prog 5	gram Out 6 1 2 2 1	7 2 2 2 1	20s) 8	9	10	11 1 1 1	12 1 1	1 1 1	PSOs 2 1 1 1	3
2022-23	Course/Subject with course code Industrial Waste Treatment	1 2 3 4	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan	1 2 2 3	2 2 3	3 2 3	4 1 1 2 2	Prog	gram Out 6 1 2 2 1	comes (I 7 2 2 2 1	20s) 8	9	10	11 1 1 1	12 1 1	1	PSOs 2 1 1 1	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject	1 2 3 4	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs)	1 2 2 3	2 2 3	3 2 3	4 1 1 2 2	Prog	gram Out 6 1 2 1 1 gram Out	comes (I 7 2 2 2 1 1	20s) 8	9	10	11 1 1	12 1 1	1	PSOs 2 1 1 1 PSOs	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code	1 2 3 4	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs)	1 2 3 1	2 2 3	3 2 3 3	4 1 1 2 2 4	Prog	gram Out 6 1 2 2 1 9 gram Out 6	comes (I 7 2 2 2 1 5 comes (I 7	20s) 8 20s) 8	9	10 1 10	11 1 1 1	12 1 1 12	1 1 1 1	PSOs 2 1 1 1 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code	1 2 3 4	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices	1 2 3 3	2 2 3 2	3 2 3 	4 1 1 2 2 4	Prog	gram Out 6 1 2 2 1 3 gram Out 6	comes (I 7 2 2 2 1 0 comes (I 7	20s) 8 20s) 8	9	10 1 10 1	11 1 1 1 1 1 1 1 1 3	12 1 1 1	1 1 1 1 1 1 2	PSOs 2 1 1 1 PSOs 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial	1 2 3 4	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent, Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Toles And Techniques To Improve The Outcome	1 2 3 3	2 2 3	3 2 3 3	4 1 1 2 2 4	Prog	gram Out 6 1 2 2 1 3 gram Out 6	comes (I 7 2 2 2 1 comes (I 7	POs) 8 POs) 8	9 9 9 1 2	10 1 1 10 1	11 1 1 1 1 1 1 1 3 2	12 1 1 1 12	1 1 1 1 2 2	PSOs 2 1 1 PSOs 2 1 1 1 2 1 2 1 1 2 1 2 1 2 1 2 1 1 2 1	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques	1 2 3 4 1 2	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome	1 2 3 3	2 2 3 2	3 2 3 3	4 1 2 2 4	Prog	gram Out 6 1 2 2 1 3 gram Out 6	comes (I 7 2 2 2 1 comes (I 7	20s) 8 20s) 8 8	9 9 1 2	10 1 10 10	11 1 1 1 1 1 1 1 1 3 2	12 1 1 1 12	1 1 1 1 2 2	PSOs 2 1 1 1 PSOs 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 2 1 2 2 1 1 2 2 2 1 2 2 2 2 1 2	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques	1 2 3 4 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large.	1 2 2 3	2 2 3	3 2 3 3	4 1 2 2 4	Prog	gram Out 6 1 2 2 1 3 gram Out 6	comes (I 7 2 2 2 1 comes (I 7	POS) 8 POS) 8 8	9 9 1 2 1	10 1 10 1	11 1 1 1 1 1 1 1 3 2 3	12 1 1 1 1 12	1 1 1 2 2 2	PSOs 2 1 1 1 PSOs 2 1 2 1 2 2	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques	1 3 4 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large.	1 2 2 3 1	2 2 3	3 2 3 3	4 1 2 2 4	Prog	gram Out	comes (I 7 2 2 2 1 1 comes (I 7	² Os) 8 ² Os) 8 8	9 9 1 2 1	10 1 1 10 1	11 1 1 1 1 1 1 3 2 3	12 1 1 12	1 1 1 2 2 2 2	PSOs 2 1 1 1 1 PSOs 2 1 2 1 2 2 2	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques	1 2 3 4 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large.	1 2 2 3	2 2 3 2	3 2 3 3	4 1 2 2 4	Pro	gram Out	comes (I 7 2 2 2 1 1 5 7	² Os) 8 2 ² Os) 8	9 9 1 2 1	10 1 10 10	11 1 1 1 1 1 1 3 2 3	12 1 1 1 12	1 1 1 2 2 2 2	PSOs 2 1 1 1 PSOs 2 1 2 1 2 2 2	3
2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject	1 2 3 4 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large.	1 2 3 1	2 2 3 2 2	3 3 3	4 1 1 2 2 4	Prog	gram Out 6 1 2 2 1 gram Out gram Out	comes (I 7 2 2 2 1 1 comes (I 7 comes (I	20s) 8 20s) 8 8	9 9 1 2 1	10 1 10 10 1	11 1 1 1 1 1 3 2 3	12 1 1 1 12	1 1 1 2 2 2	PSOs 2 1 1 1 1 PSOs 2 1 2 2 1 2 2 PSOs PSOs	3 3
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code	1 2 3 4 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Course Outcomes (COs)	1 2 2 3 1 1 1	2 2 3 2	3 2 3 3 3 3	4 1 1 2 2 4 4 4	Prog 5 Prog 5 Prog 5	gram Out 6 1 2 2 1 gram Out 6 gram Out	comes (I 7 2 2 2 1 1 comes (I 7 2 2 1 1 7 0 7	POS) 8 POS) 8 POS) 8	9 9 9 1 2 1 1 9 9	10 1 1 10 1 1 10	11 1 1 1 1 1 1 1 3 2 3 	12 1 1 12 12	1 1 1 2 2 2 2	PSOs 2 1 1 1 1 PSOs 2 1 2 1 2 2 PSOs 2 PSOs 2	3 3 1 3
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code	1 2 3 4 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Course Outcomes (COs)	1 2 2 3 1 1	2 2 3 2 2	3 3 3 3 3	4 1 2 2 4	Prog	gram Out 6 1 2 2 1 gram Out 6 gram Out 6 gram Out	comes (I 7 2 2 2 1 (comes (I 7 2 2 2 1 7 2 2 2 1 7 7	POS) 8 POS) 8 POS) 8 POS) 8	9 9 1 2 1 9	10 1 1 10 1	11 1 1 1 1 1 1 1 3 2 3 	12 1 1 12 12 12	1 1 1 2 2 2 2	PSOs 2 1 1 PSOs 2 1 2 PSOs 2 1 2 PSOs 2 1 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code Open Channel	1 2 3 4 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs)	1 2 3 3 1	2 2 3 2 2 2	3 3 3 3 3 3 3	4 1 2 2 4 4	Pros	gram Out 6 1 2 1 1 9 7 9 7 9 7 9 9 9 9 9 9 9 9 9 9 9 9	comes (I 7 2 2 2 1 1 comes (I 7 comes (I 7	² Os) 8 ² Os) 8 ² Os) 8	9 9 1 2 1 9	10 1 1 10 1 10	11 1 1 1 1 1 1 3 2 3 11	12 1 1 12 12 12	1 1 1 2 2 2 2 1	PSOs 2 1 1 PSOs 2 1 2 2 1 PSOs 2 1 2 2 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2 2 2 1 2 2 2 1 2 2 2 1 2 2 2 1 2 2 2 2 1 2	3 3 1 3 1
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code Open Channel Flow	1 2 3 4 1 2 3 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Compute Discharge Through Various Open Channel Sections	1 2 3 3 1 1 1 1 2	2 2 3 2 2 2 2 2 3	3 2 3 3 3 3	4 1 1 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pros	gram Out 6 1 2 2 1 1 gram Out 6 gram Out 6 2 2 2 2	comes (I 7 2 2 2 1 1 comes (I 7 comes (I 7 1	20s) 8 20s) 8 20s) 8	9 9 1 2 1 9	10 1 10 1 10	11 1 1 1 1 1 1 1 1 1 1 1 1	12 1 1 12 12 12	1 1 1 2 2 2 2 2 1 1 2	PSOs 2 1 1 PSOs 2 1 2 2 1 2 2 PSOs 2 1 2 1 2 2 1 2 2 1 2 1 2 1 2 1 2 1 2	3 3 1 3 1 3 4
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject With course code Managerial Techniques Course/Subject with course code Open Channel Flow	1 2 3 4 1 2 3 3 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Compute Discharge Through Various Open Channel Sections Discuss Different Applications Of Gradually Varied Flow Profiles.	1 2 2 3 	2 2 3 3 2 2 2 2 3 3	3 2 3 3 3	4 1 2 2 4 4 2 2	Pros	gram Out 6 1 2 1 1 3 7 9 7 9 7 9 7 9 9 9 9 9 9 9 9 9 9 9 9	comes (I 7 2 2 1 1 comes (I 7 comes (I 7 1	² Os) 8 	9 9 1 2 1 9 9	10 1 1 10 10 1 10 10 10 10 10 10 10 10 1	11 1 1 1 1 1 1 3 2 3 1 11 11 11 11 11 11 11 11	12 1 1 12 12	1 1 1 2 2 2 2 2 1 1 2 2	PSOs 2 1 1 1 1 2 2 1 2 2 2 1 2 2 1 2 1 2 1	3 3 1 3 1 3 1
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code Open Channel Flow	1 2 3 4 1 2 3 3 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs) Discuss Different Applications Of Gradually Various Open Channel Sections	1 2 3 3 1 1 1 2 1	2 2 3 2 2 2 2 2 3	3 2 3 3 3	4 1 1 2 2 4 4 2 2 2	Prog	gram Out 6 1 2 2 1 1 gram Out 6 2 2 2 2 2 2 2 2 2 2	comes (i 7 2 2 2 1 1 comes (i 7 7 7 7 1	POS) 8 POS 9 POS 8 POS 9 POS 8 POS 9 POS 8 POS 9 POS 9 POS 8 POS 9 POS	9 9 1 2 1 9	10 1 1 1 10 1 10 1 10 10 10 10 10 10 10	11 1 1 1 1 1 1 1 1 1 1 1 1	12 1 1 1 12 12 12 12	1 1 1 2 2 2 1 1 2 2	PSOs 2 1 1 1 PSOs 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	3 3 1 3 1 3 1 3 1
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject With course code Managerial Techniques Course/Subject with course code Open Channel Flow Course/Subject	1 2 3 4 4 1 2 3 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Compute Discharge Through Various Open Channel Sections Discuss Different Applications Of Gradually Varied Flow Profiles. Course Outcomes (COs)	1 2 3 3 1 1 1 1 2 1	2 2 3 2 2 2 2 3	3 3 3 3 3 3 3 3	4 1 1 2 2 4 4 4 2	Prop 5 Prop 5 5 Prop Prop	gram Out 6 1 2 2 1 gram Out 6 2 2 2 2 2 2 2 2 2 2 2 2 2	comes (I 7 2 2 1 comes (I 7 7 7 7 1 1 comes (I	2005) 8 22005) 8 22005) 8 8 22005) 8	9 9 1 2 1 9 9	10	111 1 1 1 1 1 1 1 1 1 1 1 1	12 1 1 12 12 12 12	1 1 1 2 2 2 2 2 1 1 2 2	PSOs 2 1 1 1 1 PSOs 2 1 2 1 2 2 2 PSOs 2 1 2 1 2 1 PSOs 2 1 PSOs PSOs	3 3 1 1 3 1 3 1
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code Open Channel Flow Course/Subject with course code	1 2 3 4 	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Compute Discharge Through Various Open Channel Sections Discuss Different Applications Of Gradually Varied Flow Profiles.	1 2 2 3 3 1 1 1 1 2 1 1 1 2 1	2 2 3 3 2 2 2 3 3	3 2 3 3 3 3 3 3 3 3 3	4 1 1 2 2 2 4 4	Prov 5 Prov 5 5 9 Prov 5 3 3 2 Prov 5 5	gram Out 6 1 2 2 1 1 gram Out 6 6 2 2 2 2 2 2 gram Out	comes (i 7 2 2 2 1 1 comes (i 7 7 7 1 1 comes (i 7 7 7	220s) 8 8 9 90s) 8 8 8 8 8 9 90s) 8 8 8 8	9 9 1 2 1 1	10 1 10 1 10 10	11 1 1 1 1 1 1 3 2 3 3 		1 1 1 2 2 2 2 1 1 2 2 1 1	PSOs 2 1 1 1 PSOs 2 1 2 2 1 2 2 PSOs 2 1 2 1 2 1 PSOs 2 1 2 1 2 2 2 1 2 2 2 1 2 2 2 2 2 2 2	3 3 1 1 3 1 3 1 3 3
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Course/Subject with course code Open Channel Flow Course/Subject with course code	1 2 3 4 4 1 2 3 3 1 2 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes Scons Discuss Different Applications Of Gradually Varied Flow Profiles. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs) Understand Phenomena Of Industria Jump Course Outcomes (COs)	1 2 2 3 3 1 1 1 2 1 1 2 1	2 2 3 3 2 2 2 3 3 2 2 2 2	3 2 3 3 3 3 3 3 3 3	4 1 1 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Proo	gram Out 6 1 2 2 1 gram Out 6 6 2 2 2 2 gram Out 6 6	comes (i 7 2 2 1 1 comes (i 7 7 7 1 1 comes (i 7 7	2005) 8 2205) 8 8 2205) 8 8 2205) 8 8 2205) 8 8 2205) 8 8 2205) 8 8 2205) 8 8 2205) 8 8 2205) 8 8 8 8 2005) 8 8 8 8 8 8 8 8 8 8 8 8 8	9 9 1 2 1 9 9	10 1 10 1 10 10 10	11 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 2 2 2 2 1 1 1 2 2	PSOs 2 1 1 PSOs 2 1 2 2 PSOs 2 1 2 1 PSOs 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 2 1 2 2 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 1 3 3
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code Open Channel Flow Course/Subject with course code	1 2 3 4 4 1 2 3 3 1 2 3 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Compute Discharge Through Various Open Channel Sections Discuss Different Applications Of Gradually Varied Flow Profiles. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Compute Discharge Through Various Open Channel Sections Discuss Different Applications Of Gradually Varied Flow Profiles. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India.	1 2 2 3 3 1 1 1 1 2 1 1 1 3	2 2 3 2 2 2 2 3 3 3 2 2 2 3 3	3 2 3 3 3 3 3 3 3 3 1	4 1 1 2 2 2 4 4 4 2 2 4 1	Pros	gram Out 6 1 2 2 1 1 gram Out 6 6 2 2 2 2 3 2 3 3 2 3 4 5 5 5 5 5 5 5 5 5 5 5 5 5	comes (i 7 2 2 2 2 1 1 7 7 7 1 1 comes (i 7 7 7 7 7 7	2005) 8 	9 9 1 2 1 1 9 9	10 1 1 1 10 1 10 1 10 10 10 10 10 10 10	11 1 1 1 1 1 1 1 1 1 1 1 1	12 1 1 1 12 12 12 12 12 12 3	1 1 1 2 2 2 2 1 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 1 2 1 1 1 1 2 1	PSOs 2 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 2 2 2	3 3 1 1 3 1 3 3 3
2022-23 2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Managerial Techniques Course/Subject with course code Open Channel Flow Course/Subject with course code Water Power Engineering	1 2 3 4 4 1 2 3 3 1 2 3 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Effluent. Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Incuicate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (COs) Understand Need Of Irrigation N Gradually Varied Flow Profiles. Course Outcomes (COs) Understand Need Of Irrigation In India And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes.	1 2 2 3 3 1 1 1 2 1 1 2 1 1 3 3 3	2 2 3 2 2 2 2 3 3 3 2 2 1 1	3 2 3 3 3 3 3 3 3 1 3	4 1 1 2 2 2 4 4 4 1 1	Prov 5 9 9 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	gram Out 6 1 2 2 1 gram Out 6 2 2 2 2 gram Out 6 6 6	comes (I 7 2 2 2 2 1 1 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	POS) 8 POS) 8 POS) 8 POS) 8 POS) 8 8 POS) 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	9 9 1 2 1 9 9	10 1 10 1 10 10	11 1 1 1 1 1 3 2 3 3 11 11 11 11 11 11 11 11	12 1 1 1 12 12 12 12 12 3 3	1 1 1 2 2 2 2 2 2 2 1 1 2 2 1 2 2 2 1 2 2 2 2 2 2 1 2	PSOs 2 1 1 1 PSOs 2 1 1 PSOs 2 1 1 PSOs 2 1 PSOs 2 1 PSOs 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 1 3 3 2
2022-23 2022-23 2022-23	Course/Subject with course code Industrial Waste Treatment Course/Subject with course code Course/Subject with course code Open Channel Flow Course/Subject with course code Water Power Engineering	1 2 3 4 1 2 3 3 1 1 2 3 3	Course Outcomes (COs) Identify And Analyze The Characteristics Of Industrial Wastewater Describe Pollution Effects Of Disposal Of Industrial Effluent. Identify And Design Treatment Options For Industrial Handling Industrial Liquid Waste Formulate Environmental Management Plan Course Outcomes (COs) Inculcate Various Managerial Techniques In Practices Analyze Process Control Tools And Techniques To Improve The Outcome Adopt Modern Technological Advancements To Suit The Project Characteristics, At Large. Course Outcomes (COs) Understand Phenomena Of Hydraulic Jump Course Outcomes (Cos) Understand Phenomena Of Hydraulic Jump Course Outcomes (Cos) Understand Need Of Imigation SI Gradually Varied Flow Profiles. Course Outcomes (COs) Understand Need Of Imigation Structures And Water Requirement As Per Farming Practice In India. Understand Various Irrigation Structures And Schemes. Develop Basis For Design Of Irrigation Schemes.	1 2 2 3 3 1 1 1 1 2 1 1 3 3 2	2 2 3 2 2 2 2 3 3 3 1 1 1	3 2 3 3 3 3 3 3 1 1 3 1	4 1 2 2 2 4 4 4 1 1 1 1	Prov 5 5 5 5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7	gram Out 6 1 2 2 1 1 gram Out 6 2 2 2 2 2 3 gram Out 6 6	comes (l 7 2 2 2 1 1 7 7 5 5 5 6 7 7 1 1 2 5 7 7 7 7 7	220s) 8 220s) 8 220s) 8 8 220s) 8 8 220s) 8 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s) 8 220s 220s) 8 220s 200s 20	9 9 1 2 1 9 9 9	10 1 10 1 10 10 10 10	11 1 1 1 1 1 1 1 1 1 1 1 1	12 1 1 12 12 12 12 12 12 12 3 3 3 3	1 1 1 2 2 2 2 1 1 1 2 2 2 2 2 2 2 2 2 2	PSOs 2 1 1 1 2 3 4 2 2 2 2 1 2 2 1 2 1 2 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 1 3 3 3 2 1

2022-23		Course/Subject	urse/Subject						Pro	gram Out	tcomes (POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Orrend			•			0	-				-				0		
		Improvement	1	To Identify And Evaluate The Deficiencies If Any In The Deposits Of The Given Project Area	2	2	2	2	-	3	1	-	-	-	-	1	Z	2	2
		Techniques	2	On It Will Be Stable And Serve The Intended Purpose.	1	1	2	-	-	3	2	-	-	2	1	3	2	2	2
2022-23	2022-23								Pro	gram Out	tcomes (POs)						PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Gain The Knowledge Of Bye Laws, Procedure Of Structural Audit And Study The Typical	3												1	1	1
			2	Problems in Structures. Aware Of Causes And Types Of Deterioration In Structures	1				2								2	1	1
		Otresternal Assolit	-	Develop Skills For Use Of Various Nondestructive Tests Required During Auditing Of	2		2	2									-		
		Structural Audit	3	Structures.	2		2	2									1	1	1
			4	Strength Evaluation Of Existing Structures.	1	2			2								1	1	1
			5	Acquire Knowledge Of Legal Procedure To Conduct Structural Audits.	2	0	0	<u> </u>		2							1	1	1
2022.22		O a una a l'Outh is at	0	Prepare A Structural Audit Report.	3	2	2	2	1 Pro-	arom Out	loomoc (l	I			1	BEOC	1
2022-23		Course/Subject		Course Outcomes (COs)		1	1		FIU	grain Out	icomes (i	-05)						F305	
		with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		Intelligent	1	Gain The Knowledge Intelligent Transport Components	3			2				3			2		3	1	2
		Transportation	2	Understand Functional Areas Of Its		2				3	2							3	1
		Systems	3	Management Of Its And Correlated Systems	2	1		2		1		2		1			2		2
2022-23		Course/Subject						-	Pro	gram Out	tcomes (POs)		-	-	-		PSOs	
		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			1	Understand Modes Of Structural Collapse	1	1		1						2		1	1	1	1
		Plastic Analysis of		Perform The Plastic Analysis And Design Of Various Determinant And In-Determinant	4	4	2	4								4	4	4	4
		Structures	2	Structures.	1	1	2	1								1	1	1	1
			3	Adapt Plastic Theory Of Design For Various Structures	1	1	2	1								1	1	1	1
						I	I											D 00-	
	Contract (Contract of the set							Pro	aram Ou	comoc (Priet						L C C C C		
2022-23		Course/Subject		Course Outcomes (COs)		1	1				comes (03)		-	-			F303	
2022-23		with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
2022-23		with course code		Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
2022-23		with course code	1	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations.	1 3	2 2	3	4	5	6	7	8	9	10	11	12	1 3	2	3
2022-23		with course code	1	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical	1 3 2	2 2	3	4	5	6	7	8	9	10	11	12	1 3	2	3
2022-23		with course code Numerical Methods in Civil	1 2	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use OI Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data.	1 3 2	2 2 2	3	4 2	5	6	7	8	9	10	11	12	1 3 2	2	3
2022-23	VI	with course code Numerical Methods in Civil Engg.	1 2 3	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems.	1 3 2 2	2 2 2 2	3	4 2 3	5	6	7	8	9	10	11	12	1 3 2 1	2	3
2022-23	VI	Numerical Methods in Civil Engg.	1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++.	1 3 2 2 1	2 2 2 2	3	4 2 3	5	6	7	8	9	10	11	12	1 3 2 1	2	3
2022-23 2022-23	VI	with course code Numerical Methods in Civil Engg. Course/Subject	1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++.	1 3 2 2 1	2 2 2 2	3	4 2 3	5 1 Pro	6 gram Out	7 tcomes (8 8 POs)	9	10	11	12	1 3 2 1	2 2 2 PSOs	3
2022-23 2022-23	VI	with course code Numerical Methods in Civil Engg. Course/Subject with course code	1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs)	1 3 2 2 1 1	2 2 2 2	3	4 2 3	5 1 5 5	gram Out	7 tcomes (i	8 POs) 8	9	10	11	12	1 3 2 1	2 2 PSOs 2	3
2022-23 2022-23	VI	with course code Numerical Methods in Civil Engg. Course/Subject with course code	1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Numeros Of Management Experiment	1 3 2 2 1 1	2 2 2 2 2	3	4 2 3 4	5 1 5 5	6 gram Out	7 7 tcomes (i 7	8 8 POs) 8	9	10	11	12	1 3 2 1 1	2 2 PSOs 2 1	3
2022-23 2022-23	VI	with course code Numerical Methods in Civil Engg. Course/Subject with course code	1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Nuances Of Management Functions.	1 3 2 2 1 1	2 2 2 2 2 2	3	4 2 3 4	5 1 Pro 5	6 gram Out	7 7 tcomes (i	8 POs) 8	9 9 1 2	10 10	11 11 3 2	12	1 3 2 1 1 2 2 2	2 2 PSOs 2 1 2	3
2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management	1 2 3 4 1 2 3	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Andora An Empirical Anongane Toward Business Situations	1 3 2 2 1 1	2 2 2 2 2	3	4 2 3 4	5	6 gram Out	7 7 tcomes (i	8 POs) 8	9 9 1 2 1	10 10 1	11 11 3 2 3	12	1 3 2 1 1 2 2 2 2	2 2 PSOS 2 1 2 2	3
2022-23 2022-23	VI	with course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management	1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Aoplv Various Management Techniques.	1 3 2 2 1 1	2 2 2 2 2	3	4	5	gram Out	tcomes ()	8 POs) 8	9 9 1 2 1 2	10 10 10	11 11 3 2 3 3	12	1 3 2 1 1 2 2 2 3	2 2 PSOs 2 1 2 2 2 2	3 3 1 1
2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject	1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Texchiques.	1 3 2 2 1 1	2 2 2 2 2	3	4 2 3 4	5	gram Out 6 gram Out	tcomes ()	POs) 8 POs)	9 9 1 2 1 2	10 10 1	11 11 3 2 3 3 3	12	1 3 2 1 1 2 2 2 3	2 2 PSOs 2 1 2 2 PSOs 2 PSOs	3 3 1 1
2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code	1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs)	1 3 2 2 1 1	2 2 2 2 2 2	3	4 2 3 4 4 4	5 1 Pro 5 Pro	gram Out 6 gram Out	tcomes (i	8 8 POs) 8 POs) 8	9 9 1 2 1 2 9	10 10 1 10	11 11 3 2 3 3 3	12	1 3 2 1 1 2 2 2 3 3	2 2 PSOs 2 1 2 2 2 2 PSOs 2 2 PSOs 2	3 3 1 1 3
2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code	1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs)	1 3 2 2 1 1 1	2 2 2 2 2 2	3	4 2 3 4 4 4 4	5 1 Pro 5 	gram Out 6 gram Out 6	tcomes (i	8 POs) 8 POs) 8	9 9 1 2 1 2 9 9	10 10 1 10 10	11 11 3 2 3 3 3	12	1 3 2 1 1 2 2 2 3 3 1	2 2 PSOs 2 1 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3
2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental	1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Exercise Of Diversion of the Disc Studies	1 3 2 2 1 1 1	2 2 2 2 2 2 2	3	4 2 3 4 	5 1 9 5 9 7 7 5 1 2	gram Out 6 gram Out 6 2	tcomes (i 7 7 tcomes (i 7 3 2	8 POs) 8 POs) 8	9 9 1 2 1 2 9	10 10 1 10 10	11 11 3 2 3 3 3 11 1	12	1 3 2 1 1 2 2 2 3 3	2 2 PSOs 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3
2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject evith course code Environmental Impact	1 2 3 4 1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies	1 3 2 2 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1	5 1 Pro 5 5 1 2	gram Out 6 gram Out 6 2 1	7 tcomes (i 7 tcomes (i 7 3 2 1	8 POs) 8 POs) 8 POs) 8	9 9 1 2 1 2 9	10 10 1 10	11 11 3 2 3 3 3 11 1	12	1 3 2 1 1 2 2 2 3 3 1	2 2 PSOs 2 1 2 2 PSOs 2 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3
2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment	1 2 3 4 1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Methodology To Prepare Rapid Eia Prenare Eia Beronts And Environmental Management Plans	1 3 2 2 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1	5 1 Pro 5 Pro 5 1 2	gram Out 6 gram Out 6 2 1	tcomes () 7 7 1 1	POs) 8 POs) 8 1	9 9 1 2 1 2 9 9	10 10 1 10	11 11 3 2 3 3 3 3 11 1 1	12	1 3 2 1 1 2 2 2 3 3 1	2 2 PSOs 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3
2022-23 2022-23 2022-23	VI	Course/Subject with course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment Course/Subject	1 2 3 4 1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studes Identify The Methodology To Prepare Rapid Eia Prepare Eia Reports And Environmental Management Plans	1 3 2 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1	5 1 Pro 5 	gram Out 6 gram Out 6 2 1	tromes (7 7 7	8 POs) 8 POs) 8 1 POs)	9 9 1 2 1 2 9 9	10 10 1 10	11 11 3 2 3 3 3 11 1 1 2	12	1 3 2 1 1 2 2 2 3 3	2 2 PSOS 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3
2022-23 2022-23 2022-23 2022-23	VI	Course/Subject with course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment	1 2 3 4 1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Methodology To Prepare Rapid Eia Prepare Eia Reports And Environmental Management Plans Course Outcomes (COs)	1 3 2 2 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1	5 1 Pro 5 5 1 2 2	gram Out 6 gram Out 6 2 1 1	tcomes () 7 7 1 1 1 1 1 1	POs) 8 POs) 8 1 POs) 1 POs)	9 9 1 2 1 2 9	10 10 1 10	11 11 3 2 3 3 11 1 2 2 11 1 1 1 1 1 1 1 1 1 1 1 1	12	1 3 2 1 1 2 2 2 3 3 1	2 2 PSOs 2 1 2 2 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3
2022-23 2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment Course/Subject with course code	1 2 3 4 4 1 2 3 4 4	Course Outcomes (COS) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COS) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COS) Linetify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Methodology To Prepare Rapid Eia Prepare Eia Reports And Environmental Management Plans Course Outcomes (COS)	1 3 2 2 1 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1 1 1 4	5 1 Pro 5 1 2 Pro 5	gram Out 6 gram Out 6 2 1 gram Out	tcomes () 7 7 1 1 1 1 1 1 1 7	POs) 8 POs) 8 1 POs) 8	9 9 1 2 1 2 9 9 9	10 10 1 10 10 10	11 11 3 2 3 3 11 1 2 11 1	12 12 12 12 12	1 3 2 1 1 2 2 2 3 3 3 1	2 2 PSOs 2 1 2 2 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3 3 3
2022-23 2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment Course/Subject with course code	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 1 2 3 1 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of Prepare Rapid Eia Prepare Eia Reports And Environmental Management Plans Course Outcomes (COs) Understand The History Of Human Rights	1 3 2 2 2 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1 1 1	5 5 9 9 9 9 7 9 7 9 7 9 7 9 7 9 7 9 7 9	gram Out 6 gram Out 6 1 gram Out 6 1	comes (7 comes (7 7 3 2 1 1 comes (7 7	Pos) 8 Pos) 8 1 Pos) 8 1 Pos) 8	9 9 1 2 1 2 9 9 9	10 10 1 10 10 10	11 11 3 2 3 3 3 3 11 1 1 2 2 11	12 12 12 12 12	1 3 2 1 1 2 2 2 3 3 1 1 1	2 2 PSOs 2 1 2 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3 3 3
2022-23 2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment Course/Subject with course code	1 2 3 4 1 2 3 4 4 1 2 3 4 1 2 3 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Methodology To Prepare Rapid Eia Prepare Eia Reports And Environmental Management Plans Course Outcomes (COs) Understand The History Of Human Rights Learn To Respect Others Caste, Religion, Region And Culture.	1 3 2 2 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1 1 1	5 1 Prov 5 Prov 5 1 2 Prov 5 5 1 2 2 	gram Out 6 gram Out 6 2 1 gram Out 6 1	comes (7 7 7 7 7 7 3 2 1 1 1 comes (7 7 7 7	8 POs) 8 POs) 8 	9 9 1 2 1 2 9 9 9	10 10 1 10 10 10	11 11 3 2 3 3 11 1 2 11 1 1 1 1 1 1 1 1 1 1 1 1	12 12 12 12 12	1 3 2 1 1 2 2 3 3 1 1	2 2 PSOs 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3 3 3
2022-23 2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment Course/Subject with course code Basic Human	1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 3	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Methodology To Prepare Rapid Eia Prepare Eia Reports And Environmental Management Plans Course Outcomes (COs) Understand The History Of Human Rights Learn To Respect Others Caste, Religion, Region And Culture. Be Aware Of Thei Rights As Indian Citizen	1 3 2 2 1 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 1 1 1 4 4	5 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	gram Outgram Outgr	comes (7 7 	8 POS) 8 POS) 8 	9 9 1 2 1 2 9 9 9	10 10 10 10 10 10 10	11 11 3 2 3 3 3 11 1 1 2 11	12 12 12 12 12	1 3 2 1 1 2 2 2 3 3 1 1 1	2 2 PSOs 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3 3
2022-23 2022-23 2022-23 2022-23	VI	Course/Subject with course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment Course/Subject with course code Basic Human Rights	1 2 3 4 1 2 3 4 4 1 2 3 4 4	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Methodology To Prepare Rapid Eia Prepare Eia Reports And Environmental Management Plans Course Outcomes (COs) Understand The History Of Human Rights Leam To Respect Others Caste, Region And Culture. Be Aware Of The Right Sas Indian Citizen Understand The Importance Of Groups And Communities In The Society	1 3 2 2 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1 1 	5 1 Prov 5 1 2 Prov 5 1 2 	gram Out 6 gram Out 6 2 2 1 1 gram Out 6 1	comes (7 7 2 2 1 1 2 2 1 1 2 2 1 1 2 2	8 POs) 8 POs) 8 1 POs) 8	9 9 1 2 1 1 2 9 9 9 9 9 9 3 3	10 10 10 10 10 10	111 111 3 2 3 3 3 3 111 1 1 2 2 111	12 12 12 12 12	1 3 2 1 1 2 2 2 3 3 1 1 1 1	2 2 PSOs 2 2 2 1 2 PSOs 2 2 PSOs 2 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3 3 3
2022-23 2022-23 2022-23 2022-23	VI	vith course code Numerical Methods in Civil Engg. Course/Subject with course code Engineering Management Course/Subject with course code Environmental Impact Assessment Course/Subject with course code Basic Human Rights	1 2 3 4 4 1 2 3 4 4 1 2 3 4 4 5	Course Outcomes (COs) Use Appropriate Numerical Methods To Determine Approximate Solutions Of Systems Of Linear Equations, Non-Linear Equations And Ordinary Differential Equations. Demonstrate The Use Of Interpolation Methods To Find Intermediate Values In Given Graphical And/Or Tabulated Data. Analyze Experimental Data And Apply Regression Analysis In Various Types Of Problems. Familiar With Programming Languages Like Fortran / C / C++. Course Outcomes (COs) Demonstrate The Nuances Of Management Functions. Analyze The Framework Of A Business Organization. Adopt An Empirical Approach Toward Business Situations. Apply Various Management Techniques. Course Outcomes (COs) Identify The Environmental Attributes To Be Considered For The Eia Study Formulate Objectives Of The Eia Studies Identify The Environmental Attributes To Be Considered For The Eia Study Frepare Eia Reports And Environmental Management Plans Course Outcomes (COs) Understand The History Of Human Rights Learn To Respect Others Caste, Religion, Region And Culture. Be Aware Of Their Rights As Indian Citizen Understand The Inportance Of Groups And Communities In The Society Realize The Philosophical Aproach Communities and Historical Perspectives Of Humanninths.	1 3 2 2 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2	3	4 2 3 4 4 1 1 1 	5 1 Pro 5 Pro 7 5 1 2 Pro 7 5	gram Out 6 gram Out 6 2 1 9 gram Out 6 1	comes (7 7 comes (7 7 3 2 1 1 comes (7 7	8 POs) 8 POs) 8 	9 9 1 2 1 2 9 9 9 9 9 9 3	10 10 10 10 10 10 2	111 111 3 2 3 3 3 111 1 2 2 111	12	1 3 2 1 1 2 2 2 2 3 3 1 1 1	2 2 PSOs 2 1 1 2 2 2 PSOs 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 3 1 1 3 3 3 3

0000 00	October 10 while at	Subject						Brog	arom Out	comoc (F	20c)						DSOc.	
2022-23	Course/Subject		Course Outcomes (COs)					FIU	ji ani Out	Joines (F	03)						F305	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Dusiness	-	Insulante Region Of Rusingen Communication Skills & Relevant Tools									2	2					-
	Communication		Inducate Dasics of Dasiness Communication Skins & Relevant Tools.									2	3					-
	and Presentation	2	Adapt Madam Okilla Depending Operation Dependencies & Team Madving									2	0		0			
	Skille	3	Adapt Modern Skills Regarding Communication, Presentation & Team Working					Breek				2	3		2		D 00-	
2022-23	Course/Subject		Course Outcomes (COs)				-	Prog	Jram Out	comes (P	'US)		-				PSUS	
	with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
			Understand Europeants Manufades in Machanizal Archeric													<u> </u>		
		1	Understand Pundamental Knowledge in Mechanical Analysis	3	2	1			-								1	1
	Composite	2	Understand Design Or Structures made Or Composite Materials	2	1	2		1	2							1	1	1
	waterials	3	Propose Suitable Materials in Relation with The Project	2	2	1	3		1							1	1	1
											20-1					·	D00	·
2022-23	Course/Subject		Course Outcomes (COs)				-	Pio	Jram Out	Joines (P	·0s)		-				P305	
	with course code		Course Outcomes (COS)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		-	Analy Detection of Electricity Theory To Detection Observes And Observe	0	0			•	-			0						
	Europeiro estal		Apply Principles Of Elasticity friedry to Determine Stresses And Strains.	3	2	0		2	2			2						
	Experimental Otrages Application	2	Apply Theory Of Elasticity And Formulate Plane Stress And Plane Strain Problems	2	2	3												
	Stress Analysis	3	Formulate The Stress Analysis Problems Using Elasticity Theory	2	1		2	2	1			1				1		
		4	Apply Experimental Techniques To Solve Field Problems.	2	2		2	1	2		200					1	DEOr	·
2022-23	Course/Subject		Course Outcomes (COs)				-	Pio	Jram Out	Jomes (P	·0s)		-				P305	
	with course code		course outcomes (cos)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Applications of	-																
	Applications of Remote Sensing	1	Acquire Knowledge Demonstrating Of Earth Resources Management Lising Remote Sensing	3	3	-	-	3	- 1	2	-	-	-	-	2	3	3	3
	cod Coographia	2	Cain Skills In Staring, Managing Digital Data For Planning And Development	2	2	1	2	2						1	1	2	2	2
	Information	2	Acquire Skills In Advance Software's Deale With Remote Sensing Data For Litilization	2	2		2	2							1	2	2	2
2022.22	Course/Subject	3	Acquire Skills in Advance Software S Deals with Remote Sensing Data 1 of Othization.	2	2		2	Proc	aram Out	comes (F	20e)	-					PSOe	
2022-23	Course/Subject		Course Outcomes (COs)					1105	ji ani oʻuu	Joines (i	03)						1003	
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
	Civionics:	1	Understand Workings Of Sensors And Transducers	2	2	1	1	2								1		
	Instrumentation &	2	Determine The In-Situ Characterization And Various Properties	2	2	1		2	1							1		
	Sensor	3	Carry Out Subsurface Measurements And Techniques Of Data Collection.	1	2	1	1	_								1		
	Technologies for																	
	Civil Engineering	4	Understand Ongoing Studies On Use Of Sensors In Civil Engineering Practice & Research	1	2	2	2									1		1
2022-23								Prog	gram Out	comes (F	POs)					í l	PSOs	
			Course Outcomes (COs)		•	•		-		-		~	40		40		•	
	with course code			1	2	3	4	5	6	1	8	9	10	11	12	1	z	3
		1	To Understand And Evaluate The Concept Of Sustainable Development.	1					3	3			1	1	2	1	1	
	Planning for	2	Recognize Impact On Environmental And Poverty Sustainable Development	1					2	3			1	1	2	1	1	1
	Sustainable	3	Comprehend Strategies And Challenges Of Sustainable Development.	1					2	3			1	2	2	1	1	1
	Development	4	To Identify Innovations And Its Strategies To Attain Sustainable Development- Environmental	1				2	2	2			1	2	2	1	1	1
	Development	-	Management And Innovation Strategies.					3	3	3				2	2			
		5	Familiar With Governance And Policies Of Sustainable Development At Societal Level.	1				2	3	3	2		2	2	2	1	1	
2022-23	Course/Subject							Prog	gram Out	comes (P	'Os)					L	PSOs	
	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
					_			-									_	
	Development	1	To Develop Multi Scaled Perspective About Decisions In The Built Environment,	1	-	2	1	-	1	3	2	2	2	2	1	3	2	3
	Engineering	2	To Expose The Students To The Analysis And Evaluation Of Real World Problems Aiming To	2	2	2	2	2	3	2	2	1	3	2	2	2	2	3
			Bring Desired Change in The Society.													·'		
	0 10 11 1							Dree			200					·'	DEOr	
2022-23	Course/Subject		Course Outcomes (COs)					Prog	Jram Out	comes (P	'US)						PSUS	
	with course code		course ouccomes (cos)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
		4	Understand And Identify The Matives Philosophical Rasis Of The Indian Constitution								1	1						
		2	Be Aware Of Their Rights As Indian Citizen						\rightarrow	_	2	1					<u> </u>	(
		-	Understand The Structure And Classify Functions Of The Executive. The Legislature Of India To							_	-					[_]	<u> </u>	
	Indian Constitution	3	Examine The Decentralization Of Power				_									1		1
																I		
		4	Understand The Structure And Functions Of The State Govt. Union Govt. And Local Govt.													1		1
		5	Know The Role And Functioning Of Election Commission															
2022-23	Course/Subject							Prog	gram Out	comes (F	'Os)						PSOs	
	with course costs		Course Outcomes (COs)	4	2	2		5	6	7	•	0	10	44	12	4	2	2
	with course code				4	3	•	9	•		°	3	10		12	<u> </u>	4	3
	SDD of RC												2			- 1	1	1
	SDD of RC	1	Comprehend The Various Design Philosophies Used In Design Of Reinforced Concrete.	1	1	1	1	1	-	-	-	-	2	-	-			
	SDD of RC Structures Lab.	1 2	Comprehend The Various Design Philosophies Used In Design Of Reinforced Concrete. Analyze And Design The Reinforced Concrete Sections Using Working Stress Method.	1	1	1	2	1	-	-	-	-	2	-	-	1	1	1

2022-23 Course/Subject		Course Outcomes (COs)				Program Outcomes (POs)														
, -	with course code		Course Outcomes (COS)		2	3	4	5	6	7	8	9	10	11	12	1	2	3		
	Transportation	1	Perform tests on various road construction materials.			2		2	3	2			2			3	2			
	Engineering Lab	2	Perform Cbr Tests On Local Soils To Determine Subgrade Properties Needed For Roadways.	2					3		1					1	2			
																		. <u> </u>		
2022-23	Course/Subject		Course Outcomes (COs)	Program Outcomes (POs)													PSOs	-		
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
		1	To Do Innovative Thinking And Thereby Prepare Students For The Main Project	-	2	2	1	1	-	-	-	-	1	•	1	3	2	1		
	Mini Project BTCVM609	2	To Provide Students Hands-On Experience In Problem-Solving, Fabrication, Record Keeping, Documentation, And Enhancing Skill And Competency	1	2	2	2	1	-	-	-	2	2	-	2	3	2	1		
-		3	To Develop An Industrial Environment And Culture Within The Department.	-	-	-	-	-	-	-	-	1	-	-	1	3	1	3		
																		1		
2022-23	Course/Subject							Pro	gram Out	comes (l	POs)						PSOs			
2022-23 C	with course code		Course Outcomes (COs)	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
		1	Explore Career Alternatives Before Graduation																	
	Internship	2	Integrate Theory And Practical Concepts	2	1	2	2	3	2	2	3	-	2	2	2	3	2	3		
	BTCVP610	3	To Apply Different Soft Skills Such As Time Management And Communication Skills During The Internship Program.	-	-	-	-	1	2	-	2	-	1	-	1	3	2	2		
		4	To Develop Confidence In Building Employability Skills And Making Students Industry Ready.	1	2	2	2	3	-	1	3	-	1	2	1	3	2	3		
2022-23	Course/Subject		Course Outcomes (CCo)					Prog	gram Out	comes (I	POs)						PSOs			
	with course code			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3		
		1	To Identify Problem Statement Based On Literature Survey And Area Of Interest	2	3	-	2	-	-	-	-	-	4	•	1	3	2	2		
	Seminar BTCVS710	2	To Develope Competency In Presenting Relevant Topics	1	2	-	2	-	1	-	-	-	3	-	1	3	2	2		
E	2	3	To Develpoe The Skill Of Delevering The Topics Clearly And Audibly In A Appropriate Manner Relating To The Identified Statement	-	1	-	2	2	2	-	-	-	-	-	1	3	2	3		
																		1		