LESSION PLANS FOR

A.Y: 2022-23

SEM – II

LESSON PLAN for SG, 2022-23, I/II, Civil-B. Mr. R Chandra Sekhar				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
1	I	Introduction to the earth surface and Theory of Geometry	BB	
2	I	Introduction to the Surveying and Objectives of Surveying	BB	
3	I	Classification of Surveying based on Accuracy	BB & Interactive	
4	I	Classification of Survey based Type of Instrument	BB & LCD	
5	I	Scales, Errors and Mistakes	BB & LCD	
6	I	Principles of Chain survey and Equipment of chain survey	BB& Student Seminar	
7	I	Types of Chains and Tapes	BB & LCD	
8	I	Direct and Indirect Ranging in Chain survey	BB & LCD	
9	I	Tape Variations and Corrections	BB & LCD	
10	I	Offsets and Related Numerical	BB & LCD	Unit-1 will be completed
11	II	Introduction to Compass survey	BB	
12	II	Various types of Bearings in Compass survey	BB& LCD	
13	II	Classification of Compasses	BB& LCD	
14	II	Measurements of Bearing with compass	BB& Student Seminar	
15	II	Conversion of Bearings from WCBS to QBS and Vice versa	BB& LCD	
16	II	Calculation of Angles from Bearings	BB	
17	II	Calculation of Bearings from Angles	BB	
18	II	Introduction to Local attraction and Correction of Bearings for local attraction	BB	Unit-2 will be completed
19	III	Introduction to levelling and Contouring	BB	
20	III	Principles of levelling and Various equipment related to levelling	BB& LCD	
21	III	Classification of benchmarks and classification of leveling	BB& Student Seminar	
22	III	Longitudinal and Cross sectional profile of roads	BB	
23	III	Plotting of profile and level	BB	

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		computations		
24	III	Contours and Characteristics of Contours	BB	
25	III	Methods of contouring and Interpolation of contours	BB& LCD	
26	III	Contour gradient and Maps	BB & Student Seminar	III-Unit will be Completed
27	IV	Introduction to Theodolite and Tacheometric Survey	BB	
28	IV	Principles of Theodolite survey	BB	
29	IV	Components of theodolite and Tacheometer	BB	
30	IV	Introduction to Tacheometry and Principles of Tacheometric survey	BB& Student Seminar	
31	IV	Trigonometric survey	BB	
32	IV	Fundamentals of Total station and GPS	BB	
33	IV	Introduction to curves	BB	
34	IV	Types of curves, design and setting out of Simple and Compound curves	BB	IV-Unit will be completed
35	V	Introduction to Photogrammetric Survey	BB & LCD	
36	V	Basic concepts of PS	BB & LCD	
37	V	Perspective geometry of Aerial Photograph	BB	
38	V	Relief and Tilt displacements	BB	
39	V	Terrestrial photogrammetry	BB	
40	V	Flight planning	BB& Student Seminar	
41	V	Stereoscopy and its applications	BB & LCD	V-Unit will be completed
42	VI	Introduction to Remote sensing	BB & LCD	
43	VI	Concept of Electromagnetic spectrum	BB & LCD	
44	VI	Interaction of EM spectra with atmosphere	BB & LCD	
45	VI	Interaction of EM spectra with earth surface	BB& Student Seminar	
46	VI	Data acquisition with remote sensing	BB & LCD	
47	VI	Various platforms and sensors in Remote sensing	BB& Student Seminar	

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48	VI	Visual image interpolation in RS	BB & LCD	
49	VI	Introduction to Global information System	BB & LCD	VI-Unit will be completed

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LESSON PLAN

Course Name: Python Programming

Branch:CEClass / Semester:II/II **Academic Year:2022-23**

Period	Unit No.	Topic	Teaching Methodology	Remarks
	I	**Introduction to Python Control Structures**		
1		History	PPT	
2		Features, Installing	PPT	
3		Operators	PPT	
4		Operators	PPT	
5		Statements and Expressions	PPT	
6		Conditional Statements	PPT	
7		Conditional Statements	PPT	
8		Loops	PPT	
	II	**Data Types**		
9		Mutable vs immutable data type	PPT	
10		Introduction to Numbers, Integers, Floating Point Real Numbers	PPT	
11		Complex Numbers, Operators	PPT	
12		Built-in Functions	PPT	
13		Related Modules	PPT	
14		Sequences - Strings	PPT	
15		Lists	PPT	
16		Tuples	PPT	
17		Dictionaries	PPT	
18		Set Types	PPT	
	III	**Functions & File Handling**		
19		Definitions, Declaration	PPT	
20		Parameter passing	PPT	
21		calling functions	PPT	
22		creating a file, opening a file	PPT	
23		I/O with file (read, write, append),	PPT	
24		closing a file	PPT	
25		Programs	PPT	
26		Programs	PPT	
	IV	**Modules**		
27		Modules and Files	PPT	
28		Namespaces	PPT	
29		Importing Modules	PPT	
30		Importing Module Attributes	PPT	
31		Module Built-in Functions	PPT	
32		Packages	PPT	
33		Other Features of Modules	PPT	
34		Other Features of Modules	PPT	

	V	**Classes in Python**		
35		Principles of Object Orientation	PPT	
36		Creating Classes, Instance Methods and Special Methods	PPT	
37		Class Variables and Inheritance	PPT	
38		Data base connectivity	PPT	
39		Programs demonstrating on oops	PPT	
40		Programs demonstrating on oops	PPT	
	VI	**Regular Expressions**		
41		Introduction to Regular Expressions	PPT	
42		Special Symbols	PPT	
43		Characters	PPT	
44		Res and Python	PPT	
45		Res and Python	PPT	
46		Programs	PPT	
47		Programs	PPT	
48		Programs	PPT	

BB: CLASS ROOM **PPT: POWER POINT PRESENTATION** **LCD**

TEXT BOOKS

1. Wesley J .C hun "Core Python Applications Programming", 3rd Edition, 2012, Prentice Hall.
2. Brian jones, David Beazley —Python Cookbook I, 3rd Edition.

REFERENCES BOOKS

1. Mark Lutz "Programming Python, 4th Edition" O'Reilly Media.
2. Think Python, Allen Downey, Green Tea Press

Web Links

https://docs.python.org/3/tutorial/index.html
https://pythonprogramminglanguage.com

LESSON PLAN

ACADAMIC YEAR: 2022-23
YEAR & SEM: II/II,
SECTION: A
FACULTY NAME: Sri. G. GOWRI SANKARAREAO
SUBJECT: STRUCTURAL ANALYSIS(Code:20CET206)

Contact Hour (Cumulative)	Unit No.	Topic	Teaching Methodology	Remarks
1	I	Introduction to static and kinematic indeterminacy. Analysis pin jointed frame trusses	Chalk & Talk	
3	I	Explanation of types of methods. Assumptions and solving forces in simple trusses	Chalk & Talk	
4	I	Solving the forces in members of the truss by method of joints	Chalk & Talk	
5	I	Find the forces by method of joints	Chalk & Talk	
6	I	Find the forces in members of truss by method of joints	Chalk & Talk	
8	I	Solving the problems by method of joints and method of sections	Chalk & Talk	
9	I	Solving the forced in cantilever truss	Chalk & Talk	
11	I	Solving the forced in member of cantilever truss by both methods	Chalk & Talk	Unit-1 will be completed
12	II	Explanation of propped cantilever beam	Chalk & Talk	
14	II	Find the prop. Reaction .Draw shear force and bending moment diagrams	Chalk & Talk	
15	II	Solving the problems of propped cantilever beams	Chalk & Talk	
16	II	Solving problems	Chalk & Talk	
17	II	Explanation of fixed end beams	Chalk & Talk	
18	II	Solving the fixed end moment of the fixed beams	Chalk & Talk	
20	II	Solving the problems and draw the S.F.& B.M.D.	Chalk & Talk	
21	II	Solving Problems	Chalk & Talk	
22	II	Solving the fixed end moments and draw the SF & BMD	Chalk & Talk	
23	II	Solving the problems of the fixed end beams	Chalk & Talk	
25	II	Solving the problems	Chalk & Talk	Unit-2 will be completed
26	III	Explanation of strain energy due to axial load	Chalk & Talk	
27	III	Solving the problems on axial load	Chalk & Talk	
28	III	Solving the problems	Chalk & Talk	
29	III	Strain Energy due to shear force	Chalk & Talk	
31	III	Solving the problems upon the shear force	Chalk & Talk	

32	III	Strain energy due to bending	Chalk & Talk	
33	III	Find the strain energy due to bending	Chalk & Talk	
35	III	Solving the problems		
36	III	Explanation of Castiglioni theorem-1	Chalk & Talk	
37	III	Explanation the Castiglioni theorem-2	Chalk & Talk	Unit-3 will be completed
38	IV	Explanation of three hinged arches and elastic theory of arch.	Chalk & Talk	
40	IV	Explanation of Eddy's theorem. Determination of horizontal thrust, bending moment, normal thrust and radial shear	Chalk & Talk	
41	IV	Find the problems of three hinged arches with point load and udl load	Chalk & Talk	
42	IV	Explanation of two hinged arches .Determination of horizontal thrust, BM	Chalk & Talk	
43	IV	Find the problems of two hinged arches	Chalk & Talk	Unit-4 will be completed
45	V	Analysis of continuous beams. Explain the theorem of three moments	Chalk & Talk	
46	V	Analysis of continuous beams with constant EI one or both fixed ends	Chalk & Talk	
47	V	Solving the problems	Chalk & Talk	
48	V	Solving the problems of continuous beams	Chalk & Talk	
50	V	Solving the problems on continuous beams	Chalk & Talk	Unit-5 will be completed
51	VI	Explanation of moving loads.	Chalk & Talk	
52	VI	Find the maximum shear force and bending moment at a given section and absolute max. shear force and bending moment	Chalk & Talk	
53	VI	Find the problems due to single concentrated load	Chalk & Talk	
55	VI	Find the problems due to UDL Load shorter thanthe span and longer than the span	Chalk & Talk	
56	VI	Find the problems	Chalk & Talk	
57	VI	Definition of influence lines	Chalk & Talk	
59	VI	Influence lines for SF & BM	Chalk & Talk	Unit-6 will be completed

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LESSON PLAN for GEOTECHNICAL ENGINEERING, 2022-23, II/II, (A) B.Harish				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
1	I	Introduction to Geotechnical Engineering	BB	
2	I	Soil formation, Geological cycle	BB	
3	I	Inter-relationships and Soil Characterization, Types of soil	BB	
4	I	Phase diagrams, Basic terms	BB&LCD	
5	I	Functional relationships based on index properties	BB	
6	I	Physical characterization of soil Dry and Wet sieve analysis	BB	
7	I	Water content and specific gravity	BBB	
8	I	Atterberg's Indices,	BB&LCD	
9	I	Soil Structures, Soil Water and its types	BB&LCD	
10	I	Standard nomenclature & IS Soil Classification	BB	
11	I	NUMERICALS	BB	
12	I	Numericals.	BB	Unit-1 will be completed
13	II	Introduction to permeability Darcy's law and its validity,	BB	
14	II	Factors affecting permeability,	BB	
15	II	Laboratory permeability tests,	BB	
16	II	Permeability of stratified soil masses,	BB	
17	II	Seepage pressure, 2-D flow and Laplace's equation, Flow net construction,	BB	
18	II	Quick condition, Piping Failure.	BB	
19	III	Numericals	BB	Unit-2 will be completed
20	III	Introduction to the stress on the soil	BB	
21	III	Numericals	BB	
22	III	Stresses when No Flow Takes Place Through the Saturated Soil Mass	BB	

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Contact Hour (Cumulative)	Unit No.			Remarks
23	III	Stresses When Flow Takes Place Through the Soil from Bottom to Top,	BB	
24	III	numericals	BB	Unit-3 will be completed
25	III	Effective Pressure Due to Capillary		
26	IV	Introduction to compressibility	BB	
27	IV	Definitions, Differentiate between compaction and consolidation,	BB	
28	IV	Compaction mechanism and proctor tests,	BB	
29	IV	field compactions methods, factors affecting compaction	BB	
30	IV	Consolidation mechanism through spring analogy	BB& Student Seminar	
31	IV	fundamental definitions and numericals	BB	
32	IV	Terzaghi's one dimensional consolidation theory	BB	
33	IV	Time factor, preconsolidation pressure	BB	Unit-4 will be completed
34	V	Causes of stresses in soil,	BB	
35	V	Boussinesque's equation for Point load	BB & LCD	
36	V	Boussinesque's equation for Strip Load	BB & LCD	
37	V	Boussinesque's equation for circular Load	BB	
38	V	Westergard's equation	BB	
39	V	Pressure Bulb	BB	
40	V	Stress distribution on horizontal and vertical planes	BB	
41	V	Stresses due to different shapes of footings	BB	
42	V	Newmark's influence chart	BB	
43		Numericals	BB	
44	V	Numericals	BB	Unit-5 will be completed
45	VI	Introduction to shear strength of Soil	BB	
46	VI	Mohr's strength theory,	BB	
47	VI	Mohr- coulomb's strength theory, Modified Mohr coulomb's theory,	BB	

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48	VI	shears parameters through lab and field tests based on drainage conditions,	BB	
49	VI	Direct Shear test	BB	
50	VI	Triaxial test	BB	
51	VI	Numericals	BB	
52	VI	Numericals	BB	Unit-6 will be completed

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Lesson Plan for Geotechnical Engineering Lab(II-II)(2022-23)

B Harish

S.No	Name of the Experiment	Hours
1	Introduction to Geotechnical Engineering Lab Atterberg's Limits.	3
2	Grain size analysis - Sieve Analysis	3
3	Field Density-Core cutter	3
4	Field Density- Sand replacement methods	3
5	Relative Density of Sand	3
6	Permeability of soil - Constant	3
7	Permeability of soil - Variable head tests	3
8	Compaction test	3
9	CBR test	3
10	Unconfined Compression test	3
11	Direct Shear test.	3
12	Vane Shear test.	3
Total		36

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LESSON PLAN for
INTODUCTION TO PROGRAMMING
2022-23
I/II
Civil-A
Mr. M Sai Babu

Contact Hour (Cumulative)	Unit No.	Topic	Teaching Methodology	Remarks
1	I	Introduction to components of Computer system	Chalk & Talk	
2	I	Algorithm	Chalk & Talk	
3	I	Flow chart	Chalk & Talk	
4	I	Program development steps	Chalk & Talk	
5	I	C Tokens	Chalk & Talk	
6	I	Data Types	Chalk & Talk	
7	I	Operator precedence and associativitiy	Chalk & Talk	
8	I	Structure of C program	Chalk & Talk	
9	I	simple programs using Basic I/O statements	Chalk & Talk	
10	I	SAMPLE PROGRAMS	Chalk & Talk	
11	I	SAMPLE PROGRAMS	Chalk & Talk	
12	I	SAMPLE PROGRAMS	Chalk & Talk	
13	II	Decision statements: if	Chalk & Talk	
14	II	if-else, nested if	Chalk & Talk	
15	II	if-else-if ladder, and switch	Chalk & Talk	
16	II	while loop,	Chalk & Talk	
17	II	do-while loop,	Chalk & Talk	
18	II	for loop, nested loops	Chalk & Talk	
19	II	Branching statements- Break, continue	Chalk & Talk	
20	III	Arrays: Definition Types: Single Dimensional arrays, Multi Dimensional arrays	Chalk & Talk	
21	III	declaration, initialization, accessing elements	Chalk & Talk	
22	III	Matrix operations	Chalk & Talk	
23	III	String Handling funtions	Chalk & Talk	
24	III	SAMPLE PROGRAMS	Chalk & Talk	

25	III	SAMPLE PROGRAMS	Chalk & Talk	
26	III	SAMPLE PROGRAMS	Chalk & Talk	
27	III	SAMPLE PROGRAMS	Chalk & Talk	
28	IV	Functions: Definition, Declaration, Types of Functions	Chalk & Talk	
29	IV	Call by value and call by reference,	Chalk & Talk	
30	IV	Passing Arrays to functions	Chalk & Talk	
31	IV	Recursion, Scope and lifetime of variables	Chalk & Talk	
32	IV	Command line arguments,	Chalk & Talk	
33	IV	Storage classes	Chalk & Talk	
34	IV	Pointers: Definition, Declaration, Initialization,	Chalk & Talk	
35	IV	Pointer arithmetic, functions and pointers	Chalk & Talk	
36	IV	Pointer to pointer	Chalk & Talk	
37	IV	Uses of Pointers, arrays and pointers	Chalk & Talk	
38	IV	SAMPLE PROGRAMS	Chalk & Talk	
39	IV	SAMPLE PROGRAMS	Chalk & Talk	
40	V	Structures: Definition	Chalk & Talk	
41	V	Declaration, Accessing the structure elements	Chalk & Talk	
42	V	Array of structures	Chalk & Talk	
43	V	Arrays with in structures,	Chalk & Talk	
44	V	pointer to structure, Self referential structure	Chalk & Talk	
45	V	passing structure to function	Chalk & Talk	
46	V	nested structures and unions	Chalk & Talk	
47	V	Dynamic memory allocation	Chalk & Talk	
48	V	SAMPLE PROGRAMS	Chalk & Talk	
49	V	SAMPLE PROGRAMS	Chalk & Talk	
50	VI	File Handling: Introduction, Types of files	Chalk & Talk	

51	VI	Defining and Opening a File	Chalk & Talk	
52	VI	Closing a File, Input/Output operations on Files	Chalk & Talk	
53	VI	Error Handling during I/O operations	Chalk & Talk	
54	VI	Random Access to Files	Chalk & Talk	
55	VI	SAMPLE PROGRAMS	Chalk & Talk	

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LESSON PLAN

Course Name: Python Programming **Code: 20ESI204**
Branch: CIVIL **Class / Semester: II/I** **Academic Year:2022-23**

Period	Unit No.	Topic	Teaching Methodology	Remarks
	I	**Introduction to Python Control Structures**		
1		History	PPT	
2		Features, Installing	PPT	
3		Operators	PPT	
4		Operators	PPT	
5		Statements and Expressions	PPT	
6		Conditional Statements	PPT	
7		Conditional Statements	PPT	
8		Loops	PPT	
	II	**Data Types**		
9		Mutable vs immutable data type	PPT	
10		Introduction to Numbers, Integers, Floating Point Real Numbers	PPT	
11		Complex Numbers, Operators	PPT	
12		Built-in Functions	PPT	
13		Related Modules	PPT	
14		Sequences - Strings	PPT	
15		Lists	PPT	
16		Tuples	PPT	
17		Dictionaries	PPT	
18		Set Types	PPT	
	III	**Functions & File Handling**		
19		Definitions, Declaration	PPT	
20		Parameter passing	PPT	
21		calling functions	PPT	
22		creating a file, opening a file	PPT	
23		I/O with file (read, write, append),	PPT	
24		closing a file	PPT	
25		Programs	PPT	
26		Programs	PPT	
	IV	**Modules**		
27		Modules and Files	PPT	
28		Namespaces	PPT	
29		Importing Modules	PPT	
30		Importing Module Attributes	PPT	
31		Module Built-in Functions	PPT	

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32		Packages	PPT	
33		Other Features of Modules	PPT	
34		Other Features of Modules	PPT	
	V	**Classes in Python**		
35		Principles of Object Orientation	PPT	
36		Creating Classes, Instance Methods and Special Methods	PPT	
37		Class Variables and Inheritance	PPT	
38		Data base connectivity	PPT	
39		Programs demonstrating on oops	PPT	
40		Programs demonstrating on oops	PPT	
	VI	**Regular Expressions**		
41		Introduction to Regular Expressions	PPT	
42		Special Symbols	PPT	
43		Characters	PPT	
44		Res and Python	PPT	
45		Res and Python	PPT	
46		Programs	PPT	
47		Programs	PPT	
48		Programs	PPT	

BB: CLASS ROOM **PPT: POWER POINT PRESENTATION** **LCD**

TEXT BOOKS

1. Wesley J .C hun "Core Python Applications Programming", 3rd Edition, 2012, Prentice Hall.
2. Brian jones, David Beazley —Python Cookbook I, 3rd Edition.

REFERENCES BOOKS

1. Mark Lutz "Programming Python, 4th Edition" O'Reilly Media.
2. Think Python, Allen Downey, Green Tea Press

Web Links

https://docs.python.org/3/tutorial/index.html
https://pythonprogramminglanguage.com

LESSON PLAN for GROUND IMPROVEMENT TECHNIQUES, A.Y 2022-23, III/II, Civil-B. Sri G. Anil Kumar				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
1	I	**Insitu densification methods** in granular Soils	PPT	
2	I	Vibration at the ground surface	PPT	
3	I	Vibration at depth	PPT & Chalk & Talk	
4	I	Impact at the Ground Surface and at depth	PPT & Chalk & Talk	
5	I	Impact at depth	PPT & Chalk & Talk	
6	I	Insitu densification methods in Cohesive soils	PPT & Chalk & Talk	
7	I	Preloading	PPT & Chalk & Talk	
8	I	Vertical drains	PPT & Chalk & Talk	
9	I	Sand Drains and geodrains	PPT & Chalk & Talk	
10	I	Stone columns	PPT & Chalk & Talk	
11	II	thermal methods	PPT & Chalk & Talk	Unit-1 will be completed
12	II	**Stabilization of Soils**	Chalk & Talk	
13	II	Methods of stabilization-	Chalk & Talk	
14	II	cement- stabilization	Chalk & Talk	
15	II	Lime- stabilization	Chalk & Talk	
16	II	bituminous and polymer stabilization	Chalk & Talk	
17	II	chemical stabilization with calcium chloride	Chalk & Talk	
18	II	sodium silicate stabilization	Chalk & Talk	
19	II	Gypsum stabilization	Chalk & Talk	
20	II	mechanical- stabilization	Chalk & Talk	Unit-2 will be completed
21	III	**Dewatering Introduction**	Chalk & Talk	

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LESSON PLAN for GROUND IMPROVEMENT TECHNIQUES, A.Y 2022-23, III/II, Civil-B. Sri G. Anil Kumar				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
22	III	Dewatering- by sumps and interceptor ditches	Chalk & Talk	
23	III	single and multi stage well points system of dewatering	Chalk & Talk	
24	III	vacuum well point-system	Chalk & Talk	
25	III	Horizontal wells-criteria for selection of fill material around drains	Chalk & Talk	
26	III	electro osmosis method of dewatering	Chalk & Talk	Unit-3 will be completed 1st Mid Exams
27	IV	**Geosynthetics:** Types, functions	Chalk & Talk	
28	IV	functions & applications of geotextiles (woven; nonwoven; knitted)	Chalk & Talk	
29	IV	functions & applications geogrids, geonet,	Chalk & Talk	
30	IV	functions & applications geomembranes, gabions,	Chalk & Talk	
31	IV	functions & applications geocells and geosynthetic clay liners.	Chalk & Talk	Unit-4 will be completed
32	V	**Reinforce earth** – introduction	Chalk & Talk	
33	V	principles – components of reinforced earth	Chalk & Talk	
34	V	design principles of reinforced earth walls	Chalk & Talk	
35	V	stability checks-reinforced earth	Chalk & Talk	
36	V	soil nailing & its applications	Chalk & Talk	Unit-5 will be completed
37	V	soil nailing methods	Chalk & Talk	
38	VI	**Grouting introduction**	Chalk & Talk	
39	VI	Objectives of grouting	Chalk & Talk	
40	VI	grouts and their applications-	Chalk & Talk	
41	VI	grouting methods-	Chalk & Talk	

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LESSON PLAN for GROUND IMPROVEMENT TECHNIQUES, A.Y 2022-23, III/II, Civil-B. Sri G. Anil Kumar				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
42	VI	stages of grouting	Chalk & Talk	
43	VI	Hydraulic fracturing in soils and rocks-	Chalk & Talk	
44	VI	post grout test.	Chalk & Talk	Unit-5 will be completed
45		Grand Test		2nd Mid Exams

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III - II

B-Sec

LESSON PLAN (I & WRE) (2022-23)				
Faculty Name	**Dr. M. Suresh**			
Contact Hour (cumulative)	**Unit No.**	**Topic**	**Teaching (*) Methodology**	**Remarks**
1	1	Hydrological Cycle	PPT	
2	1	Water - budget equation	BB	
3	1	World water balance, problems	BB	
4	1	Problems	BB	
5	1	Forms & measurement of precipitation	BB	
6	1	Rain gauge network	PPT	
7	1	Mean area precipitation	BB	
8	1	Depth-area duration relationship	BB	
9	1	Maximum intensity relationship	BB	
10	1	Depth-duration frequency relationship	BB	
11	1	Probable max precipitation	BB	
12	1	Probable max precipitation	BB	
13	2	Evaporation process frequency relationship	PPT	
14	2	Analytical methods of evaporation process	BB	
15	2	Analytical methods of evaporation process	BB	
16	2	Reservoir evaporation for its reduction	BB	
17	2	Interception, depression storage	BB	
18	2	Infiltration, infiltration capacity	BB	
19	2	Infiltration capacity	BB	
20	2	Measurement of infiltration	BB	
21	2	Classification of infiltration capacities	PPT	
22	2	Infiltration indices	BB	
23	3	Hydrograph	BB	
24	3	Factors affecting runoff hydrograph	PPT	
25	3	Components of hydrograph	PPT	
26	3	Baseflow separation	BB	
27	3	Effective rainfall and unit hydrograph	BB	
28	3	Effective rainfall and unit hydrograph	BB	
29	3	Unit hydrograph	BB	
30	3	S-hydrograph, IVH	BB	
31	4	Forms of subsurface water	PPT	
32	4	saturated formation, aquifer properties	PPT	
33	4	Geological formation of aquifers	PPT	
34	4	Hydraulics	BB	

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35	4	steady-state flow in wells	BB	
36	4	Equilibrium equations for confined and unconfined	BB	
37	4	Aquifer tests	PPT	
38	5	Water withdraws and uses introduction	BB	
39	5	Analysis of surface water supply	BB	
40	5	Duty and delta problems soil water relationships	BB	
41	5	Duty and delta problems soil water relationships	BB	
42	5	Infiltration, problems	BB	
43	5	Estimation of evapotranspiration	PPT	
44	5	Irrigation requirements	PPT	
45	5	Methods of applying water to the fields	PPT	
46	5	waterlogging	BB	
47	6	Design of channels introduction	PPT	
48	6	Alluvial channels	BB	
49	6	Kennedys and Lacey's theory	BB	
50	6	River and cross-drainage works	PPT	
51	6	classification and objectives of river treatment	PPT	
52	6	Types of cross-drainage works	PPT	
53	ALL	Revision and solving problems	BB	
54	ALL	Revision and solving problems	BB	

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LESSON PLAN for DESIGN OF STEEL STRUCTURES, 2022-23, III/II, Civil-A. Dr. V. SOWJANYA VANI				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
1	I	Basics of bolted/riveted connections	PPT	
2	I	Types of bolts, Types of bolted joints	PPT	
3	I	Failure of bolted joints, Specifications of bolted joints	PPT &Chalk & Talk	
4	I	Welded connections: Introduction, Advantages and disadvantages of welding	Chalk & Talk	
5	I	Strength of welds-Butt and fillet welds. IS Code requirements	Chalk & Talk	
6	I	Design of welds fillet weld subjected to moment acting in the plane to the plane of the joints	Chalk & Talk	
7	I	Design of welds fillet weld subjected to moment acting in the plane to the plane of the joints	Chalk & Talk	
8	I	Design of welds fillet weld subjected to moment acting out of plane to the plane of the joints	Chalk & Talk	
9	I	Design of welds fillet weld subjected to moment acting out of plane to the plane of the joints	Chalk & Talk	
10	I	Beam to beam and beam to Column connections	Chalk & Talk	Unit-1 will be completed
11	II	Beams: Allowable stresses, design requirements as per IS Code	Chalk & Talk	
12	II	design requirements as per IS Code	Chalk & Talk	
13	II	Design of laterally supported beams	Chalk & Talk	
14	II	Design of laterally supported beams	Chalk & Talk	
15	II	Design of laterally supported beams	Chalk & Talk	
16	II	Design of laterally unsupported beams	Chalk & Talk	
17	II	Design of laterally unsupported beams	Chalk & Talk	
18	II	Design of laterally unsupported beams	Chalk & Talk	
19	II	Design of plated beams	Chalk & Talk	
20	II	Design of plated beams	Chalk & Talk	Unit-2 will be completed
21	III	Tension members -Types of tension members	Chalk & Talk	
22	III	Net sectional Area, Effective net area, Types of failures	Chalk & Talk	
LESSON PLAN for DESIGN OF STEEL STRUCTURES, 2022-23, III/II, Civil-A. Dr. V. SOWJANYA VANI				

Contact Hour (Cumulative)	Unit No.	Topic	Teaching Methodology	Remarks
23	III	Design strength of tension members	Chalk & Talk	
24	III	Design strength of tension members	Chalk & Talk	Unit-3 will be completed 1st Mid Exams
25	IV	Effective length of columns. Slenderness ratio	Chalk & Talk	
26	IV	Design of compression members	Chalk & Talk	
27	IV	Design of compression members	Chalk & Talk	
28	IV	Design of Built up compression members – Design of lacings and battens.	Chalk & Talk	
29	IV	Design of Built up compression members – Design of lacings and battens.	Chalk & Talk	
30	IV	Design Principles of Eccentrically loaded columns, splicing of columns	Chalk & Talk	Unit-4 will be completed
31	V	Gantry girder: Introduction, Loads	Chalk & Talk	
32	V	Design of Gantry girders	Chalk & Talk	
33	V	Design of Gantry girders	Chalk & Talk	
34	V	Design of Gantry girders	Chalk & Talk	
35	V	Design of Gantry girders	Chalk & Talk	
36	V	Roof elements	Chalk & Talk	
37	V	Design of Purlin's	Chalk & Talk	
38	V	Design of Purlin's	Chalk & Talk	
39	V	Design of Purlin's	Chalk & Talk	
40	V	Design of Purlin's	Chalk & Talk	Unit-5 will be completed
41	VI	Plate Girder: Introduction, Elements of plate girder	Chalk & Talk	
42	VI	Plate Girder: Design consideration – I S Code recommendations	Chalk & Talk	
43	VI	Design of plate girder-Welded	Chalk & Talk	
44	VI	Design of plate girder-Welded	Chalk & Talk	
45	VI	Design of plate girder-Welded	Chalk & Talk	
46	VI	Design of stiffeners	Chalk & Talk	
47	VI	Design of stiffeners	Chalk & Talk	
48	VI	Design of stiffeners	Chalk & Talk	
49	VI	Design of stiffeners	Chalk & Talk	
50	VI	Design of stiffeners	Chalk & Talk	Unit-5 will be completed
51		Grand Test		2nd Mid Exams

U. S. Rani

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LESSON PLAN for ADVANCED DESIGN OF REINFORCED CONCRETE, 2022-23, III/II, Civil-B. Sri. S. Ramlal				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
1	I	Retaining walls introduction	Chalk & Talk	
2	I	Design of cantilever retaining wall	Chalk & Talk	
3	I	Design of cantilever retaining wall	Chalk & Talk	
4	I	Design of cantilever retaining wall	Chalk & Talk	
5	I	Design of counterfort retaining wall	Chalk & Talk	
6	I	Design of counterfort retaining wall	Chalk & Talk	
7	I	Design of counterfort retaining wall	Chalk & Talk	
8	I	Design of counterfort retaining wall	Chalk & Talk	
9	I	Design of combined footing	Chalk & Talk	
10	I	Design of combined footing	Chalk & Talk	Unit-1 will be completed
11	II	Design ofRCC water tanks on ground-introduction	Chalk & Talk	
12	II	Design of RCC water tanks on ground-circular	Chalk & Talk	
13	II	Design of RCC water tanks on ground-circular	Chalk & Talk	
14	II	Design of RCC water tanks on ground-circular	Chalk & Talk	
15	II	Design of RCC water tanks on ground-square	Chalk & Talk	
16	II	Design of RCC water tanks on ground-square	Chalk & Talk	
17	II	Design of RCC water tanks on ground-square	Chalk & Talk	
18	II	Design of RCC water tanks on ground-rectangle	Chalk & Talk	
19	II	Design of RCC water tanks on ground-rectangle	Chalk & Talk	
20	II	Design of RCC water tanks on ground-rectangle	Chalk & Talk	Unit-2 will be completed
21	III	Slabs: Yield line theory of slabs	Chalk & Talk	
22	III	Yield line theory of slabs	Chalk & Talk	
23	III	Circular slab design – Simply supported conditions with Uniformly Distributed Loads	Chalk & Talk	
24	III	Circular slab design – Simply supported conditions with Uniformly Distributed Loads	Chalk & Talk	

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LESSON PLAN for ADVANCED DESIGN OF REINFORCED CONCRETE, 2022-23, III/II, Civil-A. Sri. S. Ramlal				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
25	III	Circular slab design – Simply supported conditions with Uniformly Distributed Loads	Chalk & Talk	
26	III	Circular slab design – Fixed end conditions with Uniformly Distributed Loads	Chalk & Talk	
27	III	Circular slab design – Fixed end conditions with Uniformly Distributed Loads	Chalk & Talk	
28	III	Flat slab design	Chalk & Talk	
29	III	Flat slab design	Chalk & Talk	
30	III	Flat slab design	Chalk & Talk	Unit-3 will be completed 1st Mid Exams
31	IV	Piles and pile caps: Design of bored cast-in-situ piles (bearing and friction types)	Chalk & Talk	
32	IV	Design of bored cast-in-situ piles (bearing and friction types)	Chalk & Talk	
33	IV	Design of bored cast-in-situ piles (bearing and friction types)	Chalk & Talk	
34	IV	Design of bored cast-in-situ piles (bearing and friction types)	Chalk & Talk	
35	IV	Design of Pile cap for three piles using bending method	Chalk & Talk	
36	IV	Design of Pile cap for three piles using bending method	Chalk & Talk	
37	IV	Design of Pile cap for three piles using bending method	Chalk & Talk	
38	IV	Design of Pile cap for four piles using bending method	Chalk & Talk	
39	IV	Design of Pile cap for four piles using bending method	Chalk & Talk	
40	IV	Design of Pile cap for four piles using bending method	Chalk & Talk	Unit-4 will be completed
41	V	Multistory building system –detailing for Ductility	Chalk & Talk	
42	V	Multistory building system –detailing for Ductility	Chalk & Talk	
43	V	Multistory building system –detailing for Ductility	Chalk & Talk	

LESSON PLAN for ADVANCED DESIGN OF REINFORCED CONCRETE, 2022-23, III/II, Civil-A. Sri. S. Ramlal				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
44	V	Design for earthquake	Chalk & Talk	
45	V	Design for earthquake	Chalk & Talk	
46	V	Design for earthquake	Chalk & Talk	
47	V	Design for earthquake	Chalk & Talk	
48	V	Design of wind forces	Chalk & Talk	
49	V	Design of wind forces	Chalk & Talk	
50	V	Design of wind forces	Chalk & Talk	Unit-5 will be completed
51	VI	Different types of loadings on bridges according to IRC	Chalk & Talk	
52	VI	Design of RCC Culvert-deck slab for IRC Class AA loading	Chalk & Talk	
53	VI	Design of RCC Culvert-deck slab for IRC Class AA loading	Chalk & Talk	
54	VI	Design of RCC Culvert-deck slab for IRC Class AA loading	Chalk & Talk	
55	VI	Design of RCC Culvert-deck slab for IRC Class A loading	Chalk & Talk	
56	VI	Design of RCC Culvert-deck slab for IRC Class A loading	Chalk & Talk	
57	VI	Design of RCC Culvert-deck slab for IRC Class A loading	Chalk & Talk	Unit-6 will be completed
58		Grand Test		2nd Mid Exams

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V. DIVYASRI

SUBJECT : DSS				
A.Y 2022-23		III-II (B)	SEM-II	
CONTACT NO	UNIT NO	TOPIC	TEACHING (*) METHOLOGY	REMARKS
1	1	Bolted/riveted connections, Types of bolts	Class	
2	1	Types of bolted joints, Failure of bolted joints	Class	
3	1	Specifications of bolted joints	Class	
4	1	Design of foundation bolts	Class	
5	1	Welded connections	Class	
6	1	Advantages and disadvantages of welding	Class	
7	1	Design of sewers shapes and materials	Class	
8	1	Strength of welds, Butt and fillet welds	Class	
9	1	IS Code requirements	Class	
10	1	Design strength of fillet welds subjected to moment acting in the plane	Class	
11	1	Design strength of fillet welds subjected to moment acting at right angles to plane	Class	
12	2	Beams introduction	Class	
13	2	Allowable stresses	Class	
14	2	design requirements as per IS Code	Class	
15	2	design of laterally supported beam	Class	
16	2	design of laterally supported beam	Class	
17	2	design of laterally unsupported beam	Class	
18	2	design of laterally unsupported beam	Class	
19	2	Design of plated beams.	Class	
20	2	Design of plated beams.	Class	
21	3	Tension members Introduction	Class	
22	3	Types of tension members	Class	
23	3	Net sectional Area	Class	
24	3	Net sectional Area	Class	
25	3	Types of failures	Class	
26	3	Effective net area	Class	
27	3	Effective net area	Class	
28	3	Types of failures	Class	
29	3	Design of tension members	Class	
30	3	Design of tension members	Class	

31	3	Design of tension members	Class	
32	3	Design of Compression members Introduction	Class	
33	4	Effective length of columns, Slenderness ratio	Class	
34	4	Design of compression members	Class	
35	4	Design of compression members	Class	
36	4	Built-up sections, Design of lacings	Class	
37	4	Built-up sections, Design of lacings	Class	
38	4	Design of battens	Class	
39	4	Design of battens	Class	
40	4	Design Principles of Eccentrically loaded columns and splicing of columns	Class	
41	5	Gantry girder Introduction	Class	
42	5	Design of Gantry girders, roof elements	Class	
43	5	Design of Gantry girders, roof elements	Class	
44	5	Design of Gantry girders, roof elements	Class	
45	5	Design of Gantry girders, roof elements	Class	
46	5	Design of Purlin's.	Class	
47	5	Design of Purlin's.	Class	
48	6	Plate Girder Introduction	Class	
49	6	Design consideration	Class	
50	6	I S Code recommendations	Class	
51	6	Design of plate welded plate girder	Class	
52	6	Design of plate welded plate girder	Class	
53	6	post-critical method	Class	
54	6	Design of stiffeners	Class	

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ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AN AUTONOMOUS INSTITUTION)

Class: III-II [Section: A] **B. TECH (2022-23)**

Subject: Design and Detailing of Irrigation Structures Lab (20CEL309)

Faculty Name: Dr. Sanjay Kumar Ray

S.No	Name of the Experiment	Hours
1	Detailing of Surplus Weir.	6
2	Detailing of Canal Drop.	6
3	Detailing of Canal Regulator.	6
4	Detailing of Under Tunnel.	6
5	Detailing of Syphon Aqueduct Type-III.	6
6	Detailing of Syphon Well Drop	6
Total		36

Sign of Faculty

Sign of HOD, Civil

LESSON PLAN

LabName: Design of Steel Structures Lab

Branch:CivilEngineering **Year: 2022-2023**

Sec-A **Semester:3-2nd**

Course Code:20CEI311

FacultyName:Dr V Sowjanya Vani

S.No.	LabLesson Plan	No.ofHours
1	Design and Detailing of bolted connections of a lap joint.	3
2	Design and Detailing of bolted connections of a double cover butt joint.	3
3	Detailing of framed connection between primary beam and secondary beam.	3
4	Detailing of bracket welded connection in plane bending.	3
5	Design and Detailing of a framed connection between a column and beam.	3
6	Design and Detailing of a framed connection between a column and beam.	3
7	Design of lacing system.	3
8	Design and Detailing of Ties and Struts in truss member	3
9	Detailing of a gantry girder	3
10	Detailing of a gantry girder	3
11	Design and Detailing of plate girder without stiffeners	3
12	Design and Detailing of plate girder with stiffeners	3
	TotalContactHour	36

LESSON PLAN

Department of Civil Engineering

III B.Tech II SEM - A, AY: 2022-23

I &Water Resources Engineering

PERIOD	UNIT	Topic	Teaching methodology	Remarks
1	1	Introduction to engineering hydrology and its applications	Chalk & Talk	
2	1	water-budget equation, world water balance	Chalk & Talk	
3	1	Hydrologic cycle, types and forms of precipitation,	Chalk & Talk	
5	1	rainfall measurement, types of rain gauges	Chalk & Talk	
7	1	computation of average rainfall over a basin,	Chalk & Talk	
8	1	depth-area-duration relationships, maximum intensity/depth-duration-frequency relationship	Chalk & Talk	
9	1	Probable Maximum Precipitation (PMP)	Chalk & Talk	Unit 1 will be completed
10	2	Abstraction from rainfall-evaporation, factors affecting evaporation,	Chalk & Talk	
12	2	measurement of evaporation-evapotranspiration-consumptive use	Chalk & Talk	
13	2	reservoir evaporation and methods for its reduction	Chalk & Talk	
15	2	Interception, depression storage, infiltration, infiltration capacity,	Chalk & Talk	
17	2	factors affecting infiltration, measurement of infiltration,	Chalk & Talk	
18	2	infiltration indices.	Chalk & Talk	Unit 2 will be completed
19	3	**Hydrograph:** hydrograph, factors affecting runoff hydrograph	Chalk & Talk	
20	3	components of hydrograph ,	Chalk & Talk	
22	3	separation of base flow.	Chalk & Talk	
23	3	effective rainfall	Chalk & Talk	
24	3	Unit Hydrograph, definition, and limitations of applications of Unit hydrograph,	Chalk & Talk	
25	3	derivation of Unit Hydrograph, problem	Chalk & Talk	
26	3	S-hydrograph, problem	Chalk & Talk	

27	3	Problems on hydrograph	Chalk & Talk	
28	3	IUH	Chalk & Talk	Unit 3 will be completed
29	4	Ground water Occurrence, types of aquifers, aquifer parameters,	Chalk & Talk	
30	4	Sub surface distribution of water,ground water movement	Chalk & Talk	
31	4	porosity, specific yield, permeability, transmissivity and storage coefficient, intrinsic permiability	Chalk & Talk	
32	4	types of wells, Darcy's law, radial flow to wells in confined aquifers,problems	Chalk & Talk	
33	4	radial flow to wells in unconfined aquifers,problems	Chalk & Talk	
34	4	Determination of hydraulic properties of aquifer, Well losses, specific capacity of well, and well efficiency,	Chalk & Talk	
35	4	pumping tests- Recuperation test method for determination of well yield.	Chalk & Talk	
36	4	Problems	Chalk & Talk	Unit 4 will be completed
37	5	Analysis of surface water supply	Chalk & Talk	
38	5	Water requirement of crops, duty and delta	Chalk & Talk	
39	5	Quality of irrigation water; Soil-water relationships	Chalk & Talk	
40	5	root zone soil water, infiltration, consumptive use	Chalk & Talk	
41	5	estimation of evapo-transpiration,	Chalk & Talk	
42	5	Methods of applying water to the fields: surface, sub-surface	Chalk & Talk	
44	5	sprinkler and trickle / drip irrigation	Chalk & Talk	
45	5	Water logging: causes, effects and remedial measures.	Chalk & Talk	Unit 5 will be completed
46	6	Classification of irrigation canals	Chalk & Talk	
47	6	Canal alignment	Chalk & Talk	
48	6	Regime theory – Kennedy's	Chalk & Talk	
50	6	Regime theories – Laceys	Chalk & Talk	
51	6	river training, classification, and objectives	Chalk & Talk	
52	6	types of CDW	Chalk & Talk	
53	6	types of CDW	Chalk & Talk	Unit 6 will be completed

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LESSON PLAN for FOUNDATION ENGINEERING, 2022-23 III/II, Civil-B. Sri. B.HARISH				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
1	I	Methods of site exploration	BB	
2	I	soil samplers	BB	
3	I	sampling procedures	BB	
4	I	trail pits	BB & LCD	
5	I	borings	BB & LCD	
6	I	Penetration tests	BB& Student Seminar	
7	I	Plate load test	BB	
8	I	Analysis of borehole logs	BB	
9	I	geophysical investigation methods	BB	
10	I	Preparation of soil investigation report.	BB	Unit-1 will be completed
11	II	Stability of Slopes - Introduction	BB	
12	II	types of slopes	BB	
13	II	types of failures and their failure mechanisms	BB	
14	II	factor of safety	BB	
15	II	analysis of finite and infinite slopes	BB	
16	II	wedge failure	BB	
17	II	Swedish circle method	BB	
18	II	friction circle method	BB	
19	II	Bishop's Simplified method	BB	
20	II	Taylor's stability number and Stability of slopes of earth dams under different conditions	BB	Unit-2 will be completed
23	III	Rankine's theory of earth pressure	BB	
26	III	earth pressures in layered soils	BB	
27	III	Coulomb's earth pressure theory	BB	
29	III	Culmann's graphical method	BB	Unit-3 will be completed
30	IV	Types - choice of foundation – Location of depth	BB	
31	IV	Factors effecting bearing capacity	BB	
32	IV	Gross, net, Safe Bearing	BB	
34	IV	Terzaghi and IS Methods,	BB	
35	IV	effect of water table-	BB	
37	IV	Safe bearing pressure based on N- value – allowable bearing pressure;	BB	
38	IV	safe bearing capacity and settlement from plate load test	BB	

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39	IV	allowable settlements of structures.	BB	Unit-4 will be completed
40	V	Pile foundation: Types of piles	BB	
42	V	Load carrying capacity of piles based on static pile formulae	BB	
44	V	Dynamic pile formulae	BB & LCD	
45	V	Pile load tests	BB	
47	V	Load carrying capacity of pile groups in sands and clays – Settlement of pile groups.	BB	Unit-5 will be completed
48	VI	Types – Different shapes of wells	BB & LCD	
50	VI	Different shapes of wells	BB	
52	VI	Components of wells	BB & LCD	
55	VI	Sinking of wells – Tilts and shifts.	BB & LCD	Unit-6 will be completed

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LESSON PLAN for GROUNDWATER DEVELOPMENT & MANAGEMENT, 2022-23, B. Tech. CE IV/II				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
0		General Awareness on PEO, PO & PSO's	Chalk & Talk	
1	I	Introduction to Groundwater-Hydrological Cycle	Chalk & Talk	
2	I	Origin & Rock properties effects on groundwater	Chalk & Talk	
3	I	Vertical distribution of groundwater	Chalk & Talk	
4	I	Geological formation of an aquifers	Chalk & Talk	
5	I	Types of aquifers	Chalk & Talk	
6	I	Porosity, specific yield & retention	Chalk & Talk	
7	I	Permeability & Darcy's law	Chalk & Talk	
8	I	Storage Coefficient, Transmissivity and three dimensional derivation	Chalk & Talk	
9	I	Three dimensional derivation	Chalk & Talk	
10	I	Groundwater flow contours & their applications	Chalk & Talk	Unit-1 will be completed
11	I	Steady state flow towards a well- confined aquifers	Chalk & Talk	
12	I	Steady state flow towards a well- Un confined aquifers	Chalk & Talk	
13	I	Dupit's& Theims equations & assumptions	Chalk & Talk	
14	II	Formation Constants	Chalk & Talk	
15	II	Yield of an open well interface & well tests	Chalk & Talk	
16	II	Well Tests	Chalk & Talk	
17	II	Unsteady state flow towards a well	Chalk & Talk	
18	II	Theis Solution	Chalk & Talk	
19	II	Theis Solution	Chalk & Talk	
20	II	Leaky aquifers	Chalk & Talk	Unit-2 will be completed
21	III	Introduction to Methods of Groundwater Exploration	Chalk & Talk	
22	III	Surface Methods: Electrical Resistivity Method	Chalk & Talk	
23	III	Seismic Refraction Method	Chalk & Talk	
24	III	Sub-surface Methods: Geophysical Logging	Chalk & Talk	
25	III	Resistivity Logging	Chalk & Talk	
26	III	Resistivity Logging	Chalk & Talk	
27	III	Applications aerial Photogrammetry	Chalk & Talk	
28	III	Case Studies in Subsurface investigations	Chalk & Talk	Unit-3 will be completed

Contact Hour (Cumulative)	Unit No.	Topic	Teaching Methodology	Remarks
29	IV	Concept of artificial Recharge	Chalk & Talk	
30	IV	Recharge Methods	Chalk & Talk	
31	IV	Recharge Methods	Chalk & Talk	
32	IV	Recharge Methods	Chalk & Talk	
33	IV	Recharge Methods	Chalk & Talk	
34	IV	Relative merits	Chalk & Talk	
35	IV	Remote Sensing and GIS in Artificial Recharge	Chalk & Talk	
36	IV	Remote Sensing and GIS in Artificial Recharge	Chalk & Talk	
37	IV	Remote Sensing and GIS in Artificial Recharge	Chalk & Talk	
38	IV	Case Studies	Chalk & Talk	Unit-4 will be completed
39	V	Introduction to saline water intrusion	Chalk & Talk	
40	V	Occurrence of saline water intrusion	Chalk & Talk	
41	V	Occurrence of saline water intrusion	Chalk & Talk	
42	V	Ghyben-Herzberg relation	Chalk & Talk	
43	V	Ghyben-Herzberg relation	Chalk & Talk	
44	V	Shape of Interface	Chalk & Talk	
45	V	Shape of Interface	Chalk & Talk	
46	V	Controlling of saline water intrusion	Chalk & Talk	
47	V	Controlling measures of saline water intrusion	Chalk & Talk	
48	V	Groundwater basin & its management	Chalk & Talk	
49	V	Groundwater basin & its management	Chalk & Talk	
50	V	Concepts of Conjunction use of water	Chalk & Talk	
51	V	Concepts of Conjunction use of water	Chalk & Talk	
52	V	Case studies	Chalk & Talk	
53	V	Case studies	Chalk & Talk	
54	V	Revision	Chalk & Talk	
55	V	Revision	Chalk & Talk	
56	V	Revision	Chalk & Talk	Unit-5 will be completed

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LESSON PLAN for DISASTER MANAGEMENT, 2022-23, IV/II B. Tech.				
Contact Hour (Cumulative)	**Unit No.**	**Topic**	**Teaching Methodology**	**Remarks**
0		General Awareness on PEO, PO & PSO's	Chalk & Talk	
1	I	Introduction Disaster Management	Chalk & Talk	
2	I	Vulnerability, Risk severity & their concepts	Chalk & Talk	
3	I	Frequency and Details of Disasters	Chalk & Talk	
4	I	Capacity, Impact & Prevention of Disasters	Chalk & Talk	
5	I	Mitigation measures & Characteristics of Disasters	Chalk & Talk	
6	I	Types of Disasters	Chalk & Talk	
7	I	Disaster Management Cycle	Chalk & Talk	
8	I	Hazard & Vulnerability profile of India	Chalk & Talk	Unit-1 will be completed
9	I	Natural Disasters: Causes & Distribution pattern of Floods	Chalk & Talk	
10	I	Consequences & Mitigation Measures of Floods	Chalk & Talk	
11	I	Causes, Distribution Pattern, Consequences & Mitigation Measures of droughts	Chalk & Talk	
12	I	Cyclones: Causes, Distribution Pattern, Consequences & Mitigation Measures	Chalk & Talk	
13	I	Earthquakes & Tsunamies	Chalk & Talk	
14	II	Manmade Disasters: Landslides, forest fires & Nuclear Disasters	Chalk & Talk	
15	II	Chemical & Biological Disasters	Chalk & Talk	
16	II	Transportation Accidents & Urban Flooding	Chalk & Talk	Unit-2 will be completed
17	III	Environmental & Physical Impacts of Disasters	Chalk & Talk	
18	III	Social, Ecological & Economic Impacts	Chalk & Talk	
19	III	Political, Health& Demographic aspects	Chalk & Talk	
20	III	Hazard Locations, Global, & National Disaster trends	Chalk & Talk	
21	III	Disaster Mitigation Strategies	Chalk & Talk	
22	III	Disaster Mitigation Strategies	Chalk & Talk	
23	III	Emerging Trends in Disaster mitigation	Chalk & Talk	
24	III	National Disaster Management Authority Activities	Chalk & Talk	Unit-3 will be completed

Contact Hour (Cumulative)	Unit No.	Topic	Teaching Methodology	Remarks
25	IV	Phases of Disaster Management Cycle: Prevention & Mitigation	Chalk & Talk	
26	IV	Preparedness, relief & Recovery	Chalk & Talk	
27	IV	Structural Measures	Chalk & Talk	
28	IV	Non Structural Measures & Risk Analysis	Chalk & Talk	
29	IV	Vulnerability & Capacity Assessment	Chalk & Talk	
30	IV	Warning Systems & Post Disaster Environmental Response	Chalk & Talk	
31	IV	Role & Responsibilities of Govt. & Non. Govt. agencies	Chalk & Talk	
32	IV	Policies and Legislations for Disaster Risk reduction	Chalk & Talk	
33	IV	Policies and Legislations for Disaster Risk reduction	Chalk & Talk	Unit-4 will be completed
34	V	Damage Assessment and Rehabilitation	Chalk & Talk	
35	V	Rehabilitation & Reconstruction	Chalk & Talk	
36	V	Development of Physical & Economical Infrastructure	Chalk & Talk	
37	V	Role of Various agencies in Recovery measures	Chalk & Talk	
38	V	Role in dealing with victims psychology and education	Chalk & Talk	
39	V	Role in awareness, monitoring & evaluation of Rehabilitation work	Chalk & Talk	
40	V	Constraints in Monitoring and Evaluation	Chalk & Talk	
41	V	Long-term Counter Disaster Planning	Chalk & Talk	Unit-5 will be completed

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