



LESSON PLAN

Department: CIVIL

Program: B.Tech

Course : – DESIGN OF STEEL STRUCTURES -I (S 185)

SEM: VI

A.Y :2016-2017

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
UNIT-I: BOLTED AND WELDED CONNECTION					
1.	02-01-17	Review for Basics		1	DM1
2.	03-01-17	Introduction to Steel structures		1	DM1
3.	05-01-17	Structural steel, Products of steel structures		1	DM1
4.	06-01-17	Standards, codes and specifications		1	DM1
5.	07-01-17	Fatigue, Brittle fracture, corrosion		1	DM1
6.	09-01-17	Design philosophies		1	DM1
7.	10-01-17	Methods of structural analysis		1	DM1
8.	11-01-17	Plate buckling, classification of sections		1	DM1
9.	12-01-17	Types of connections, Tutorial -1		1	DM2
10	17-01-17	Welded connections under axial loads		1	DM1
11	19-01-17	Problems on axial load		1	DM1
12	20-01-17	Welded connections under eccentric load		1	DM1
13	21-01-17	Problems on eccentric load		1	DM1
14	23-01-17	Problems on eccentric load		1	DM1
15	24-01-17	Bolted connections, Problems on axial loads		1	DM1
16	27-01-17	Bolted connections under eccentric load		1	DM1
17	28-01-17	Problems on Eccentric load		1	
18	28-01-17	Tutorial -2		1	DM2
UNIT-II: COMPRESSION AND TENSION MEMBER					
19	30-01-17	Introduction to compression members		1	DM1
20	31-01-17	Euler's buckling theory		1	DM1
21	02-02-17	Behaviour of real columns, Types of sections		1	DM1
22	03-02-17	Design procedure of compression members		1	DM1
23	04-02-17	Problems on compression members		1	DM1
24	06-02-17	Problems on compression members		1	DM1
25	07-02-17	Tutorial-3		1	DM2
26	09-02-17	Design procedure of tension members		1	DM1
27	10-02-17	Problems on tension members		1	DM1
28	13-02-17	Problems on tension members		1	DM1

29	14-02-17	Problems on tension members		1	DM1
30	16-02-17	Tension splices		1	DM1
31	17-02-17	Design of lug angles, Problem on lug angles		1	DM1
32	18-02-17	Tutorial-4		1	DM2
33	20-02-17	I-MID EXAMS		1	
34	21-02-17	I-MID EXAMS		1	
35	22-02-17	I-MID EXAMS		1	
36	23-02-17	I-MID EXAMS		1	
UNIT-III: DESIGN OF LACING ,BATTEN& BASES					
37	25-02-17	I-MID EXAMS		1	
38	27-02-17	I-MID EXAMS		1	
39	28-02-17	Design procedure of laced columns.		1	DM1
40	02-03-17	Problem on laced columns		1	DM1
41	03-03-17	Design procedure of battened columns		1	DM1
42	04-03-17	Problem on Batten columns		1	DM1
43	06-03-17	Problem on Batten columns		1	DM1
44	07-03-17	Tutorial-5		1	DM2
45	09-03-17	Introduction about bases		1	DM1
46	10-03-17	Design of column bases		1	DM1
47	13-03-17	Design Procedure of slab bases		1	DM1
48	14-03-17	Problem on slab base		1	DM1
49	16-03-17	Design Procedure of gusseted base		1	DM1
50	17-03-17	Problem on gusseted base		1	DM1
51	18-03-17	Problem on gusseted base		1	DM1
52	20-03-17	Problem on slab base		1	DM1
53	21-03-17	Tutorial-5		1	DM2
UNIT-IV: BEAMS					
54	22-03-17	Behaviour of steel beams		1	DM1
55	24-03-17	Limit state of serviceability		1	DM1
56	25-03-17	Design procedure of laterally restrained steel beam		1	DM1
57	27-03-17	Problems on laterally restrained steel beam		1	DM1
58	28-03-17	Tutorial-6		1	DM2
59	29-03-17	Problems on laterally restrained steel beam		1	DM1
60	30-03-17	Design procedure of laterally unrestrained steel beams		1	DM1
61	31-03-17	Problems on laterally unrestrained steel beam		1	DM1
62	01-04-17	Problems on laterally unrestrained steel beam		1	DM1

63	03-04-17	Problems on laterally unrestrained steel beam		1	DM1
64	06-04-17	Lateral torsional buckling of beams		1	DM1
65	07-04-17	Problem on lateral torsional buckling of beams		1	DM1
66	08-04-17	Problem on lateral torsional buckling of beams		1	DM1
67	10-04-17	Factors affecting lateral stability.		1	DM1
68	11-04-17	Problems on laterally restrained steel beam		1	DM1
69	13-04-17	Tutorial-6		1	DM2
UNIT-V: DESIGN OF ROOF TRUSSES AND PURLINS					
70	15-04-17	Design of roof trusses		1	DM1
71	17-04-17	Materials of roof trusses		1	DM1
72	18-04-17	Loads on roof truss		1	DM1
73	20-04-17	Design problem on roof trusses		1	DM1
74	21-04-17	Wind pressure problems		1	DM1
75	22-04-17	Tutorial -9		1	DM2
76	24-04-17	Wind pressure problems		1	DM1
77	25-04-17	Wind pressure problems		1	DM1
78	27-04-17	Design of Purlin		1	DM1
79	28-04-17	Design Problem on purlin		1	DM1
80	29-04-17	Tutorial -10, Revision		1	DM1
81	01-05-17	II-MID EXAMS		1	
82	02-05-17	II-MID EXAMS		1	
83	04-05-17	II-MID EXAMS		1	
84	05-04-17	II-MID EXAMS		1	
85	06-04-17	II-MID EXAMS		1	
		Total		74	
Total number of classes required to complete the syllabus					68
Total number of classes available as per Schedule					74

NOTE: DELIVERY METHODS : **DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial,

DM3: Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration (laboratory, field visit),

DM6: Presentations/PPT

At the End of the course, students attained the **Course Outcomes:CO1,CO2,CO3,CO4,CO5** & sample proofs are enclosed in Course file.

Signature			
	Name of the Faculty	Name of Course Co-ordinator	HOD
	M.SATYANARAYANA	M.SATYANARAYANA	Dr. V. RAMA KRISHNA



LESSON PLAN

Department: CIVIL

Course : – GEOTECHNICAL ENGINEERING-II (S 256)

SEM: VI

Program: B.Tech

A.Y :2016-2017

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
UNIT-I:SITE INVESTIGATION AND SELECTION OF FOUNDATION					
1.	28/12/2016	Introduction to site investigation		1	DM1
2.	30/12/2016	Objectives and methods of site investigation		1	DM1
3.	30/12/2016	Significant depth and depth of exploration		1	DM1
4.	31/12/2016	Soil sampling techniques and sampling disturbance		1	DM1
5.	02/01/2017	Tutorial-1		1	DM2
6.	04/01/2017	Methods of obtaining undisturbed samples		1	DM1
7.	06/01/2017	Standard penetration test		1	DM1
8.	06/01/2017	Site investigation report		1	DM1
9.	07/01/2017	Types of foundation		1	DM1
10	16/01/2017	Requirements of foundation		1	DM1
11	18/01/2017	Depth of footing		1	DM1
12	20/01/2017	Problems and revision		1	DM1
13	20/01/2017	Tutorial-2		1	DM2
UNIT-II:SHALLOW FOUNDATIONS AND BEARING CAPACITY OF SOILS					
14	21/01/2017	Introduction BC of soils		1	DM1
15	23/01/2017	Terzaghi's Bearing Capacity theory		1	DM1
16	25/01/2017	Types of BC failures		1	DM1

17	27/01/2017	Meyerhof Bearing Capacity theory and factors affecting BC of soils		1	DM1
18	27/01/2017	Differentiate b/w T.B.T and M.B.T		1	DM1
19	28/01/2017	Problems		1	DM1
20	30/01/2017	Problems		1	DM1
21	01/02/2017	Plate load test and its limitations		1	DM1
22	03/02/2017	Tutorial-3		1	DM2
23	03/02/2017	Conventional procedure for proportioning of footing for equal settlement		1	DM1
24	04/02/2017	General principal of shallow foundations		1	DM1
25	06/02/2017	General principal of shallow foundations		1	DM1
26	08/02/2017	Vibro-flotation methods of improving BC of sandy soils		1	DM1
27	10/02/2017	Total and Differential Settlement of foundations in sand and clays		1	D1M1
28	10/02/2017	Methods of controlling settlement		1	DM1
29	11/02/2017	Problems and revision		1	DM1
30	13/02/2017	Test		1	DM1
31	15/02/2017	Tutorial-4		1	DM2
32	17/02/2017	I-MID EXAMS		1	
33	17/02/2017	I-MID EXAMS			
34	18/02/2017	I-MID EXAMS			
UNIT-III:DEEP FOUNDATIONS AND GROUP CACITY OF PILES					
35	20/02/2017	Introduction to pile foundation		1	DM1
36	22/02/2017	Selection of pile foundation		1	DM1

37	25/02/2017	Functions of pile foundation and types of piles		1	DM1
38	27/02/2017	Pile grouping		1	DM1
39	01/03/2017	Soil structure interaction		1	DM1
40	03/03/2017	Pile capacity by static and dynamic approaches		1	DM1
41	03/03/2017	Problems		1	DM1
42	04/03/2017	Tutorial-5		1	DM2
43	06/03/2017	Pile group efficiency		1	DM1
44	08/03/2017	Downward drag phenomenon on piles		1	DM1
45	10/03/2017	Pile load test		1	DM1
46	10/03/2017	Impact of pile driving		1	DM1
47	11/03/2017	Problems		1	DM1
48	13/03/2017	Revision and tutorial-6		1	DM2
49	15/03/2017	Test		1	DM4
UNIT-IV: EARTH PRESSURE THEORIES AND RETAINING WALLS					
50	17/03/2017	Introduction to earth pressure		1	DM1
51	17/03/2017	Rankine's earth pressure theory at rest, active and passive earth pressure for cohesive soils		1	DM1
52	18/03/2017	Rankine's earth pressure theory at rest, active and passive earth pressure for non cohesive soils		1	DM1
53	20/03/2017	coulomb's earth pressure theory at rest, active and passive earth pressure for cohesive soils		1	DM1
54	22/03/2017	coulomb's earth pressure theory at rest, active and passive earth pressure for cohesive soils		1	DM1

55	24/03/2017	Problems		1	DM1
56	24/03/2017	Problems		1	DM1
57	25/03/2017	Tutorial-7		1	DM2
58	27/03/2017	Types of retaining walls		1	DM1
59	29/03/2017	Design of cantilever retaining walls		1	DM1
60	31/03/2017	Design of cantilever retaining walls		1	DM1
61	31/03/2017	Design of counterfort retaining walls		1	DM1
62	01/04/2017	Design of counterfort retaining walls		1	DM1
63	03/04/2017	Tutorial-8		1	DM2
64	05/04/2017	Test		1	DM4
UNIT: SPECIAL FOUNDATIONS AND STABILITY OF SLOPES					
65	07/04/2017	Necessity and types of caisson foundation and Design principles of caisson foundation		1	DM1
66	07/04/2017	Foundation in filled up grounds and Foundation on expansive soil		1	DM1
67	08/04/2017	Machine foundation design principles		1	DM1
68	10/04/2017	Problems		1	DM1
69	12/04/2017	Tutorial-9		1	DM2
70	15/04/2017	Stability analysis of finite earth slopes		1	DM1
71	17/04/2017	Factors of safety		1	DM1
72	19/04/2017	Taylor's stability number		1	DM1
73	21/04/2017	Method of slices		1	DM1
74	21/04/2017	Problems		1	DM1

75	22/04/2017	Tutorial-10		1	DM2
76	24/04/2017	II-MID EXAMS		1	
77	26/04/2017	II-MID EXAMS		1	
			Total	77	
Total number of classes required to complete the syllabus				62	
Total number of classes available as per Schedule				77	

NOTE: DELIVERY METHODS :DM1: Lecture interspersed with discussions/BB, **DM2:** Tutorial,

DM3: Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration (laboratory, field visit),

DM6: Presentations/PPT

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Signature			
	Name of the Faculty	Name of Course Co-ordinator	HOD
	B. NARASIMHARAO	B. NARASIMHARAO	Dr. V. RAMA KRISHNA



LESSON PLAN

Department: CIVIL

Course : – **TRANSPORTATION ENGINEERING -II (S 183)**

SEM: VI

Program: B.Tech

A.Y :2016-2017

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
UNIT-1					
1.	02-01-17	INTRODUCTION		1	DM1
2.	03-01-17	Role of Indian railways in national development, alignments		1	DM1
3.	05-01-17	Role of remote sensing		1	DM1
4.	06-01-17	Permanent way and its components		1	DM1
5.	07-01-17	Specification of gauges		1	DM1
6.	09-01-17	Ballast ,sleepers		1	DM1
7.	10-01-17	Tutorial -1		1	DM2
8.	11-01-17	Typical cross sections		1	DM1
9.	12-01-17	Quiz-1		1	DM3
10	17-01-17	Embankments and cuttings		1	DM1
11	19-01-17	Construction of railway track		1	DM1
12	20-01-17	Renewal and maintenance		1	DM1
13	21-01-17	Renewal and maintenance of permanent way		1	DM1
14	23-01-17	Rail joints		1	DM1
15	24-01-17	Welding of railways		1	DM1
16	27-01-17	Quantity estimation of track		1	DM1
17	28-01-17	Problems		1	DM1

18	28-01-17	Tutorial -2		1	DM2
19	30-01-17	Quiz-2		1	DM3
20	31-01-17	Revision		1	DM1
UNIT-2					
21	02-02-17	Introduction to track junctions		1	DM1
22	03-02-17	Points or switches		1	DM1
23	04-02-17	Crossings or turnouts		1	DM1
24	06-02-17	Devices and layouts		1	DM1
25	07-02-17	Most commonly used layout of track junctions		1	DM1
26	09-02-17	Special fittings		1	DM1
27	10-02-17	Safety devices		1	DM1
28	13-02-17	Tutorial -3		1	DM2
29	14-02-17	Station and layout		1	DM1
30	16-02-17	Yards and layout		1	DM1
31	17-02-17	Quiz-3		1	DM3
32	18-02-17	Different types and layouts		1	DM1
33	20-02-17	General equipment's in railways		1	DM1
34	21-02-17	Track junctions		1	DM1
35	22-02-17	Tutorial-4		1	DM2
36	23-02-17	Quiz -4		1	DM3
UNIT -3					
37	25-02-17	Introduction to signals and interlocking		1	DM1
38	27-02-17	Signals and their types and working principles		1	DM1
39	28-02-17	Location of signals		1	DM1

40	02-03-17	Principles and mechanism of interlocking		1	DM1
41	03-03-17	Safety devices in signals		1	DM1
42	04-03-17	Tutorial -5 and quiz -5		1	DM2
43	06-03-17	Control systems on trains		1	DM1
44	07-03-17	Modern trends in Indian railways		1	DM1
45	09-03-17	Design adopted for high speed tracks		1	DM1
46	10-03-17	MRTS and suburban railways		1	DM1
47	13-03-17	Electric traction		1	DM1
48	14-03-17	BOT and BOLT concepts		1	DM1
49	16-03-17	Tutorial -6		1	DM1
50	17-03-17	Quiz -6		1	DM2
51	20-03-17	Introduction to Airport engineering		1	DM1
52	21-03-17	Airport planning		1	DM1
53	22-03-17	Standards for planning of airports as per ICAO, Airport zoning and runway orientation		1	DM1
54	24-03-17	TUTORIAL-7			
55	25-03-17	Geometric design elements		1	DM1
56	27-03-17	Different types ,patterns and layout of taxiways		1	DM1
57	28-03-17	Aprons and holding aprons		1	DM1
58	29-03-17	Planning and layout of terminal buildings		1	DM1
59	30-03-17	Hangars and parking area		1	DM1
60	31-03-17	TUTORIAL -8		1	DM1

UNIT-5

61	01-04-17	Introduction to ports and harbours		1	DM1
62	03-04-17	Requirements and classification		1	DM1
63	06-04-17	Wind and waves concept , Hydro graphic surveying		1	DM1
64	07-04-17	Breakwaters and classification		1	DM1
65	08-04-17	Pier head, Docks and their platforms		1	DM1
66	10-04-17	Fender mooring accessories		1	DM1
67	11-04-17	Entrance channels, Inland water transport		1	DM1
68	13-04-17	Container transportation		1	DM1
69	15-04-17	Introduction navigational systems		1	DM1
70	17-04-17	Docks and their types		1	DM2
71	18-04-17	Marine railways, Offshore docks, Floating docks		1	DM3
72	20-04-17	Tutorial--9		1	DM1
73	21-04-17	Quiz -9		1	DM1
74	22-04-17	Lock dredgers, Dredging,		1	DM1
75	24-04-17	Transit sheds, Warehouses		1	DM1
76	25-04-17	Terminal building		1	DM1
77	27-04-17	Navigational aids and navigational signals		1	DM1
78	28-04-17	Tutorial -10		1	DM2
79	29-04-17	Revision		1	
			TOTAL	81	
Total number of classes required to complete the syllabus					
Total number of classes available as per Schedule					

NOTE: DELIVERY METHODS:

DM1: Lecture interspersed with discussions/BB, **DM2:**Tutorial, **DM3:** Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration(laboratory,fieldvisit), **DM6:** Presentations/PPT

At the End of the course, students attained the **Course Outcomes: CO1, CO2,CO3,CO4,CO5**& sample proofs are enclosed in Course file.

Signature			
	Name of the Faculty	Name of Course Co-ordinator	HOD



LESSON PLAN

Department: CIVIL
Course : – WASTE WATER ENGINEERING (S 420)
SEM: V

Program: B.Tech
A.Y :2016-2017

Subject Name: Wastewater Engineering (S 420)	A.Y: 2016-2017
Course: B.Tech (VI sem)	Faculty Name: Dr V. Ramakrishna

S No	Proposed date	Topic	Actual date	No of hours	DM
1	27.12.16	Overview	27.12.16	1	1
2	29.12.16	Introduction	29.12.16	1	1
3	29.12.16	Introduction	29.12.16	1	1
4	30.12.16	Sanitation – Basic definitions	30.12.16	1	1
5	2.1.17	Basics	2.1.17	1	1
6	3.1.17	Systems of sanitation	3.1.17	1	1
7	4.1.17	Wastewater flow rates	4.1.17	1	1
8	5.1.17	Sewer design	5.1.17	1	1
9	6.1.17	Problems	6.1.17	1	1
10	9.1.17	Problems	9.1.17	1	1
11	10.1.17	Problems	10.1.17	1	1
12	11.1.17	Problems – Tutorial-1	11.1.17	1	2
13	17.1.17	Storm water drains design	17.1.17	1	1
14	18.1.17	Time constant calculation	18.1.17	1	1
15	19.1.17	Storm water drains	19.1.17	1	1
16	20.1.17	Storm water drains – Tutorial-2	20.1.17	1	2
17	23.1.17	Sewage Quality	23.1.17	1	1
18	24.1.17	Solids calculations	24.1.17	1	1
19	25.1.17	pH and DO	25.1.17	1	1

20	27.1.17	BOD	27.1.17	1	1
21	30.1.17	Dilution factor – Problems	30.1.17	1	1
22	31.1.17	Problems	31.1.17	1	1
23	1.2.17	BOD equation	1.2.17	1	1
24	3.2.17	Problems	3.2.17	1	1
25	6.2.17	Problems	6.2.17	1	1
26	7.2.17	Problems – Tutorial-3	7.2.17	1	2
27	8.2.17	COD & other parameters	8.2.17	1	1
28	9.2.17	Population equivalent	9.2.17	1	1
29	9.2.17	Self purification of rivers	9.2.17	1	1
30	15.2.17	DO model	15.2.17	1	1
31	16.2.17	Problems	16.2.17	1	1
32	17.2.17	DO curve	17.2.17	1	1
33	18.2.17	Zones of pollution	18.2.17	1	1
34	20.2.17	Problems	20.2.17	1	1
35	21.2.17	Problems – Tutorial-4	21.2.17	1	2
36	22.2.17	Mid-1	22.2.17	1	4
37	23.2.17	Mid-1	23.2.17	1	4
38	27.2.17	Mid-1	27.2.17	1	4
39	28.2.17	Mid-1	28.2.17	1	4
40	1.3.17	Mid-1	1.3.17	1	4
41	2.3.17	Mid-1	2.3.17	1	4
42	3.3.17	Revision	3.3.17	1	6
43	6.3.17	Revision	6.3.17	1	6
44	7.3.17	Revision	7.3.17	1	6
45	8.3.17	Revision	8.3.17	1	6

46	10.3.17	Revision	10.3.17	1	6
47	11.3.17	Revision	11.3.17	1	6
48	13.3.17	Sewage treatment basics	13.3.17	1	1
49	14.3.17	Grit channel	14.3.17	1	1
50	16.3.17	Skimming tank	16.3.17	1	1
51	17.3.17	Primary clarifier	17.3.17	1	1
52	18.3.17	Problems	18.3.17	1	1
53	20.3.17	Problems	20.3.17	1	1
54	21.3.17	Aeration system basics	21.3.17	1	1
55	22.3.17	ASP basics	22.3.17	1	1
56	23.3.17	ASP parameters	23.3.17	1	1
57	24.3.17	Complete mix process	24.3.17	1	1
58	27.3.17	Diffused aeration process	27.3.17	1	1
59	30.3.17	Problems	30.3.17	1	1
60	31.3.17	Problems	31.3.17	1	1
61	1.4.17	Extended aeration	1.4.17	1	1
62	3.4.17	Secondary clarifier	3.4.17	1	1
63	4.4.17	Problems – Tutorial 5	4.4.17	1	2
65	6.4.17	Problems	6.4.17	1	1
66	7.4.17	Ponds – Problems	7.4.17	1	1
67	10.4.17	Oxidation ditch	10.4.17	1	1
68	10.4.17	Problems	10.4.17	1	1
69	11.4.17	Problems	11.4.17	1	1
70	12.4.17	Problems	12.4.17	1	1
71	13.4.17	Trickling filter	13.4.17	1	1
72	13.4.17	Trickling filter design	13.4.17	1	1

73	18.4.17	Problems	18.4.17	1	1
74	18.4.17	Problems – Tutorial 6	18.4.17	1	2
75	19.4.17	Sludge handling basics	19.4.17	1	1
76	19.4.17	Problems	19.4.17	1	1
77	20.4.17	Sludge digestion	20.4.17	1	1, 6
78	20.4.17	Problems – Tutorial 7	20.4.17	1	2
79	22.4.17	Sludge drying beds	22.4.17	1	1, 6
80	24.4.17	Sludge processing techniques	24.4.17	1	6
81	24.4.17	Septic tank– Tutorial 8	24.4.17	1	2
82	25.4.17	Sewer appertunances	25.4.17	1	6
83	26.4.17	Traps and pipes	26.4.17	1	6
84	27.4.17	Sewage disposal, sewer materials – Tutorial 9	27.4.17	1	6, 2
85	28.4.17	Forces on sewers, rural sanitation – Tutorial 10	28.4.17	1	6, 2
86	1.5.17	Mid-2	1.5.17	1	4
87	2.5.17	Mid-2	2.5.17	1	4
88	3.5.17	Mid-2	3.5.17	1	4
89	4.5.17	Mid-2	4.5.17	1	4
90	5.5.17	Mid-2	5.5.17	1	4

NOTE: DELIVERY METHODS: **DM1:** Lecture interspersed with discussions/BB, **DM2:** Tutorial,

DM3: Lecture with a quiz, **DM4:** Assignment/Test, **DM5:** Demonstration (laboratory, field visit),

DM6: Presentations/PPT

At the End of the course, students attained the **Course Outcomes: CO1, CO2,CO3,CO4,CO5** & sample proofs are enclosed in Course file.

Signature			
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	Name of the Faculty	Name of Course Co-ordinator	HOD
	Dr V. Ramakrishna	Dr V. Ramakrishna	Dr V. Ramakrishna



LESSON PLAN

Department: CIVIL

Course : – WATER RESOURCES ENGINEERING (S 421)

SEM: VI

Program: B.Tech

A.Y :2016-2017

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
UNIT-1					
1.	27-12-16	Reservoir planning:, , - Dams:, ,		1	DM1
2.	28-12-16	Types of reservoirs		1	DM1
3.	30-12-16	Selection of site for reservoir		1	DM1
4.	31-12-16	Zones of storage of a reservoir, reservoir yield		1	DM1
5.	18-12-17	Estimation of capacity of reservoir using mass curve		1	DM1
6.	02-01-17	Problems on reservoir capacity		1	DM1
7.	03-01-17	Problems on reservoir capacity		1	DM1
8.	04-01-17	Reservoir sedimentation		1	DM1
9.	06-01-17	Tutorial-1		1	DM2
10.	07-01-17	Types of dams		1	DM1
11.	16-01-17	Merits and demerits of varies types of dams		1	DM1
12.	17-01-17	Factors affecting selection of type of dam,		1	DM1
13.	18-01-17	Quiz-1		1	DM3
14.	20-01-17	Factors governing selecting site for dam		1	DM1
15.	21-01-17	Tutorial-2		1	DM2
UNIT-2					

16.	23-01-17	Forces acting on a gravity dam		1	DM1
17.	24-01-17	Causes of failure of a gravity dam		1	DM1
18.	25-01-17	Elementary profile and practical profile of a gravity dam,		1	DM1
19.	27-01-17	Limiting height of a low gravity dam		1	DM1
20.	28-01-17	Stability analysis		1	DM1
21.	30-01-17	Problems on stability analysis		1	DM1
22.	31-01-17	Problems on stability analysis		1	DM1
23.	01-02-17	Problems on stability analysis		1	DM1
24.	02-02-17	Drainage galleries.		1	DM1
25.	04-02-17	Tutorial-3		1	DM2
26.	06-02-17	Types of Earth dams		1	DM1
27.	07-02-17	Causes of failure of earth dam		1	DM1
28.	08-02-17	Criteria for safe design of earth dam,		1	DM1
29.	10-02-17	Seepage through earth dam		1	DM1
30.	11-02-17	Graphical method		1	DM1
31.	13-02-17	Measures for control of seepage.		1	DM1
32.	14-02-17	Spillways: types of spillways		1	DM1
33.	15-02-17	Design principles of Ogee spillways		1	DM1
34.	17-02-17	Types of spillway gates		1	DM1
35.	18-02-17	Tutorial-4		1	DM2
36.	20-02-17	MID-1		1	DM4
37.	21-02-17	MID-1		1	DM4
38.	22-02-17	MID-1		1	DM4
39.	25-02-17	MID-1		1	DM4
40.	27-02-17	MID-1		1	DM4

UNIT-3

41.	28-02-17	Types of Diversion head works		1	DM1
42.	01-03-17	Layout of diversion head works,		1	DM1
43.	03-03-17	Causes and failure of hydraulic structures on permeable foundations		1	DM1
44.	04-03-17	Bligh's creep theory		1	DM1
45.	06-03-17	Problems		1	DM1
46.	07-03-17	Khosla's theory		1	DM1
47.	08-03-17	Problems		1	DM1
48.	10-03-17	Tutorial-5		1	DM2
49.	11-03-17	Determination of uplift pressure		1	DM1
50.	13-03-17	Impervious floors using Bligh's theory		1	DM1
51.	14-03-17	Impervious floors using Khosla's theory		1	DM1
52.	15-03-17	Exit gradient		1	DM1
53.	17-03-17	Functions of U/s and d/s sheet piles.		1	DM1
54.	18-03-17	Tutorial-6		1	DM2
UNIT-4					
55.	20-03-17	Canals: Classification of canals		1	DM1
56.	21-03-17	Design of canals by Kennedy's theories		1	DM1
57.	22-03-17	Design of canals by Lacey's theories		1	DM1
58.	24-03-17	Balancing depth of cutting		1	DM1
59.	25-03-17	Canal lining, design of lined canal		1	DM1
60.	27-03-17	Economics of canal lining		1	DM1
61.	29-03-17	Tutorial-7		1	DM2
62.	31-03-17	Canal structures		1	DM1
63.	01-04-17	Types of falls and their location		1	DM1
64.	03-04-17	Design principles of Sarda type fall		1	DM1
65.	07-04-17	Design principles of trapezoidal notch fall		1	DM1

66.	08-04-17	Design principles of straight glacis fall.		1	DM1
67.	10-04-17	Problems		1	DM1
68.	11-04-17	Problems		1	DM1
69.	12-04-17	Tutorial-8		1	DM2
UNIT-5					
70.	15-04-17	Head regulator and cross regulator		1	DM1
71.	17-04-17	Design principles of cross regulator		1	DM1
72.	18-04-17	Design principles of head regulators		1	DM1
73.	19-04-17	Canal outlets, types of canal modules		1	DM1
74.	21-04-17	Proportionality, sensitivity and flexibility		1	DM1
75.	22-04-17	Tutorial-9		1	DM2
76.	24-04-17	Types, selection of site for Cross Drainage works		1	DM1
77.	25-04-17	Design principles of aqueduct		1	DM1
78.	26-04-17	Design principles of siphon aqueduct		1	DM1
79.	28-04-17	Design principles of super passage.		1	DM1
80.	29-04-17	Tutorial-10		1	DM2
81.	01-05-17	MID-2		1	DM4
82.	02-05-17	MID-2		1	DM4
83.	03-05-17	MID-2		1	DM4
84.	05-05-17	MID-2		1	DM4
85.	06-05-17	MID-2		1	DM4
			TOTAL	85	
Total number of classes required to complete the syllabus				65	
Total number of classes available as per Schedule				85	

NOTE: DELIVERY METHODS:

DM1: Lecture interspersed with discussions/BB,

DM2:Tutorial,

DM3: Lecture with a quiz,

DM4: Assignment/Test,

DM5: Demonstration(laboratory, field visit),

DM6: Presentations/PPT

At the End of the course, students attained the **Course Outcomes: CO1, CO2,CO3,CO4,CO5**& sample proofs are enclosed in Course file.

Signature			
	Name of the Faculty	Name of Course Co-ordinator	HOD



LESSON PLAN

Department: CIVIL
Course : – S435- MMSA
SEM: VI

Program: B.Tech

A.Y :2016-2017

S No.	Tentative Date	Topics to be covered	Actual Date	Num. of classes	Content Delivery Methods
UNIT-I Stiffness And Flexibility Matrix					
1	02-01-17	Introduction about Flexibility matrix and stiffness method & Steps on flexibility matrix method		1	DM1
2	03-01-17	Problems on flexibility matrix method		1	DM1
3	05-01-17	Problems on flexibility matrix method		1	DM1
4	06-01-17	Problems on flexibility matrix method		1	DM1
5	07-01-17	Problems on flexibility matrix method		1	DM1
6	09-01-17	Problems on flexibility matrix method		1	DM1
7	10-01-17	Tutorial -1		1	DM2
8	11-01-17	Problems on stiffness matrix method		1	DM1
9	12-01-17	Problems on stiffness matrix method		1	DM1
10	17-01-17	Introduction about Flexibility matrix and stiffness method & Steps on flexibility matrix method		1	DM1
11	19-01-17	Problems on flexibility matrix method		1	DM1
12	20-01-17	Problems on flexibility matrix method		1	DM1
13	21-01-17, 23-01-17	Stiffness matrix method steps and problem		1	DM1,DM-2

UNIT-II Force Method And Displacement Method					
14	30-01-17	Introduction about force method and displacement method		1	DM1
15	31-01-17	Problems on force method		1	DM1
16	02-02-17	Problems on force method		1	DM1
17	03-02-17	Problems on forcemethod		1	DM1
18	04-02-17	Problems on displacement method		1	DM1
19	06-02-17	Problems on displacement method		1	DM1
20	07-02-17	TUTORIAL-3		1	DM2
21	09-02-17	Problems on displacement method		1	DM1
22	10-02-17	Problems on displacement method		1	DM1
23	13-02-17	Problems on displacement method		1	DM1
24	14-02-17	Problems on displacement method		1	DM1
25	16-02-17	Problems on displacement method		1	DM1
26	17-02-17, 18-02-17	TUTORIAL-4		1	DM2
UNIT-III Rigid jointed plane frame					
27	25-02-17	Introduction about force method		1	DM1
28	27-02-17	Shear equation for rigid jointed plan frame		1	DM1
29	28-02-17	Stiffness of rigid joint rotational stiffness and transitional stiffness		1	DM1
30	02-03-17	Problems on stiffness matrix		1	DM1
31	03-03-17	TUTORIAL-5		1	DM2
32	04-03-17	Problems on rectangular frame using displacement method		1	DM1
33	06-03-17	Problems on rectangular frame using displacement method		1	DM1
34	07-03-17	Problems on rectangular frame using displacement method		1	DM1
35	09-03-17	Problems on rectangular frame		1	DM1

		using displacement method			
36	10-03-17, 13-03-17	Problems on rectangular frame using displacement method		1	DM1
37	14-03-17, 16-03-17	Problems on rectangular frame using displacement method		1	DM1
38	21-03-17	TUTORIAL-6		1	DM2
UNIT-IV Pin jointed frame					
39	22-03-17	Introduction about pin jointed frame		1	DM1
40	24-03-17	Displacement of pin jointed plane frame		1	DM1
41	25-03-17	Problems on pin jointed by using force method		1	DM1
42	27-03-17	Problems on pin jointed by using force method		1	DM1
43	28-03-17	Problems on pin jointed by using force method		1	DM1
44	29-03-17	TUTORIAL-7		1	DM2
45	30-03-17	Pin jointed force method		1	DM1
46	31-03-17	Problems on Stiffness of pin jointed		1	DM1
47	01-04-17	Member forces problem on displacement method		1	DM1
48	03-04-17	Member forces problem on displacement method		1	DM1
49	06-04-17, 07-04-17	Member forces problem on displacement method		1	DM1
50	13-04-17	TUTORIAL-8		1	DM1,DM-2
UNIT: V Transformation matrices Element approach					
51	15-04-17	Introduction about transformation matrices		1	DM1
52	17-04-17	Problems on transformation matrix by using force method		1	DM1
53	18-04-17	Problems on transformation matrix by using force method		1	DM1
54	20-04-17	Static analysis by method of joint displacement method		1	DM1
55	21-04-17	Problems on Static analysis by method of joint displacement method		1	DM1
56	22-04-17	TUTORIAL-9		1	DM2
57	24-04-17	Effective of axial deformation of members		1	DM1
58	25-04-17	Problems on axial deformation of		1	DM1

		members			
59	27-04-17	TUTORIAL-10		1	DM2
	28-04-17	Revision			
	29-04-17	Revision			
		Revision			
		Total		59	
Total number of classes required to complete the syllabus				59	
Total number of classes available as per Schedule				59	

Signature			
	Name of the Faculty	Name of Course Co-ordinator	HOD



LAB SCHEDULE

Department: CIVIL

Program: B.Tech

Course : – ENVIRONMENTAL ENGINEERING LAB

SEM: VI

Batch: VI sem

A.Y:2015-2016

DAY/ TURN	C11	C12	C13	C14	C15	C16
22.12.16	B1	B2	B3	B4	B5	B6
03.01.17	B2	B1	B2	B3	B4	B5
10.01.17	B3	B4	B5	B6	B1	B2
17.01.17	B4	B3	B6	B5	B2	B1
24.01.17	B5	B6	B1	B2	B3	B4
31.01.17	B6	B1	B2	B3	B4	B5

DAY/ TURN	C11	C12	C13	C14	C15	C16
29.12.17	A1	A2	A3	A4	A5	A6
5.1.17	A2	A1	A2	A3	A4	A5
19.1.17	A3	A4	A5	A6	A1	A2
7.2.17	A4	A3	A6	A5	A2	A1
9.2.17	A5	A6	A1	A2	A3	A4
16.2.17	A6	A1	A2	A3	A4	A5

DAY/ TURN	C21	C22	C23	C24	C25	C26
02.02.17	B1	B2	B3	B4	B5	B6
14.02.17	B2	B1	B2	B3	B4	B5
21.02.17	B3	B4	B5	B6	B1	B2
7.3.17	B4	B3	B6	B5	B2	B1
14.3.17	B5	B6	B1	B2	B3	B4

21.3.17	B6	B1	B2	B3	B4	B5
28.3.17						
4.4.17	Repetitions					
15.4.17	Repetitions					
25.04.17	INTERNAL EXAM					

DAY/ TURN	C21	C22	C23	C24	C25	C26
23.2.17	B1	B2	B3	B4	B5	B6
2.3.17	B2	B1	B2	B3	B4	B5
16.3.17	B3	B4	B5	B6	B1	B2
23.3.17	B4	B3	B6	B5	B2	B1
16.3.17	B5	B6	B1	B2	B3	B4
23.3.17	B6	B1	B2	B3	B4	B5
30.3.17	B4	B3	B6	B5	B2	B1
06.4.17	Repetitions					
15.4.17	Repetitions					
27.4.17	INTERNAL EXAM					

Lab In-charge
HOD

DEPARTMENT OF CIVIL ENGINEERING
NOTIFICATION OF SCHEDULE
GEOTECHNICAL ENGINEERING LAB

Faculty Name: B. NARASIMHA RAO
 J. RANGAIAH

subject code: L149

B.Tech (VI SEM)

A.Y 2016-2017

CYCLE-I

DATE	B-1	B-2	B-3	B-4	B-5	B-6
27-12-16	INTRO-1	INTRO-1	INTRO-1	INTRO-1	INTRO-1	INTRO-1
03-01-17	EXP-I	EXP-II	EXP-III	EXP-IV	EXP-V	EXP-VI
17-01-17	EXP-II	EXP-III	EXP-IV	EXP-V	EXP-VI	EXP-I
24-01-17	EXP-III	EXP-IV	EXP-V	EXP-VI	EXP-I	EXP-II
31-01-17	EXP-IV	EXP-V	EXP-VI	EXP-I	EXP-II	EXP-III
07-02-17	EXP-V	EXP-VI	EXP-I	EXP-II	EXP-III	EXP-IV
14-02-17	EXP-VI	EXP-I	EXP-II	EXP-III	EXP-IV	EXP-V

DATE	B-7	B-8	B-9	B-10	B-11	B-12
29-12-16	INTRO-1	INTRO-1	INTRO-1	INTRO-1	INTRO-1	INTRO-1
05-01-17	EXP-I	EXP-II	EXP-III	EXP-IV	EXP-V	EXP-VI
19-01-17	EXP-II	EXP-III	EXP-IV	EXP-V	EXP-VI	EXP-I
02-02-17	EXP-III	EXP-IV	EXP-V	EXP-VI	EXP-I	EXP-II
09-02-17	EXP-IV	EXP-V	EXP-VI	EXP-I	EXP-II	EXP-III
16-02-17	EXP-V	EXP-VI	EXP-I	EXP-II	EXP-III	EXP-IV
02-03-17	EXP-VI	EXP-I	EXP-II	EXP-III	EXP-IV	EXP-V

EXP-I- Determination of specific gravity by Pycnometer method

EXP-II- Gradation analysis by mechanical sieve analysis

EXP-III- Determination of Atterberg limits (liquid limit and plastic limit)

EXP-IV- Determination of field unit weight by core cutter method

EXP-V- Determination of field unit weight by sand replacement method

EXP-VI- IS - Light compaction test

CYCLE-II

DATE	B-1	B-2	B-3	B-4	B-5	B-6
28-02-17	EXP-VII	EXP-VIII	EXP-IX	EXP-X	EXP-XI	EXP-XII
14-03-17	EXP-VIII	EXP-IX	EXP-X	EXP-XI	EXP-XII	EXP-VII
21-03-17	EXP-IX	EXP-X	EXP-XI	EXP-XII	EXP-VII	EXP-VIII
28-03-17	EXP-X	EXP-XI	EXP-XII	EXP-VII	EXP-VIII	EXP-IX
04-04-17	EXP-XI	EXP-XII	EXP-VII	EXP-VIII	EXP-IX	EXP-X
11-04-17	EXP-XII	EXP-VII	EXP-VIII	EXP-IX	EXP-X	EXP-XI
18-04-17	REPEAT	REPEAT	REPEAT	REPEAT	REPEAT	REPEAT
25-04-17	INTERNAL	INTERNAL	INTERNAL	INTERNAL	INTERNAL	INTERNAL

DATE	B-7	B-8	B-9	B-10	B-11	B-12
09-03-17	EXP-VII	EXP-VIII	EXP-IX	EXP-X	EXP-XI	EXP-XII
16-03-17	EXP-VIII	EXP-IX	EXP-X	EXP-XI	EXP-XII	EXP-VII
30-03-17	EXP-IX	EXP-X	EXP-XI	EXP-XII	EXP-VII	EXP-VIII
06-04-17	EXP-X	EXP-XI	EXP-XII	EXP-VII	EXP-VIII	EXP-IX
13-04-17	EXP-XI	EXP-XII	EXP-VII	EXP-VIII	EXP-IX	EXP-X
20-04-17	EXP-XII	EXP-VII	EXP-VIII	EXP-IX	EXP-X	EXP-XI
27-04-17	INTERNAL	INTERNAL	INTERNAL	INTERNAL	INTERNAL	INTERNAL

EXP-VII- IS - Heavy compaction test

EXP-VIII- Determination of co-efficient of permeability by Constant head permeameter

EXP-IX- Direct shear test.

EXP-X- Vane shear test.

EXP-XI- Unconfined compression test

EXP-XII- CBR test

BATECHES**ROLL NO:**

B-1	14761A0101 to 14761AO106
B-2	14761A0107 to 14761AO113
B-3	14761A0114 to 14761AO120
B-4	14761A0121 to 14761AO126
B-5	14761A0127 to 14761AO133
B-6	14761A0134 to 14761AO138
B-7	14761A0139 to 14761AO144
B-8	14761A0145 to 14761AO150
B-9	14761A0151 to 14761AO156
B-10	14761A0157 to 15765AO102
B-11	15765A0103 to 15765AO108
B-12	15765A0109 to 15765AO113