Lesson Plan

Name of the Faculty : **Semester :** **3rd** **L T P**

Subject : **HE (PRACTICALS)** **Discipline :** **Civil Engineering** **- - 2**

Lesson Plan Duration : **15 Weeks (from Jul-2018 to Dec-2018)**

Week	Practical	Delivery Date of Practical		Whether the Lesson Plan Followed? Yes/No
		Expected	Actual	
1st	Determination of penetration value of bitumen			
2nd	Determination of penetration value of bitumen			
3rd	Determination of softening point of bitumen			
4th	Determination of ductility of bitumen			
5th	**Internal Viva Voce – 1**			
6th	Determination of impact value of the road aggregate			
7th	Determination of abrasion value (Los Angeles') of road aggregate			
8th	Determination of the California bearing ratio (CBR) for the sub-grade soil			
9th	Visit to Hot mix plant			
10th	Visit to highway construction site for demonstration of operation of: Tipper, tractors (wheel and crawler), scraper, bulldozer, dumpers, shovels, grader, roller, dragline, road pavers, JCB etc.			
11th	**Internal Viva Voce – 2**			
12th	Visit to highway construction site for demonstration of operation of: Tipper, tractors (wheel and crawler), scraper, bulldozer, dumpers, shovels, grader, roller, dragline, road pavers, JCB etc.			
13th	Mixing and spraying equipment			
14th	A compulsory visit to Ready Mix Concrete plant.			
15th	**Internal Viva Voce – 3**			

Lesson Plan

Name of the Faculty : **Semester :** **3rd** **L T P**

Subject : **CACE** **Discipline :** **Civil Engineering** **- - 5**

Lesson Plan Duration : **15 Weeks (from Jul-2018 to Dec-2018)**

Week	Practical	Delivery Date of Practical		Whether the Lesson Plan Followed? **Yes/No**
		Expected	Actual	
1st	Introduction and use of AutoCAD: different types of commands and their practices			
2nd	Introduction and use of AutoCAD: different types of commands and their practices			
3rd	Use of AutoCAD for making 2D Drawings and develop plan			
4th	Use of AutoCAD for making 2D Drawings and develop plan, section and elevation of 2 rooms building.			
5th	**Internal Viva Voce – 1**			
6th	Use of AutoCAD for making 2D Drawings and develop plan, section and elevation of 2 rooms building			
7th	Demonstration of various civil engineering softwares like STAAD-Pro			
8th	Demonstration of various civil engineering softwares like STAAD-Pro			
9th	Demonstration of various civil engineering softwares like STAAD-Pro			
10th	MS Project or Primavera Project Planner			
11th	**Internal Viva Voce – 2**			
12th	MS Project or Primavera Project Planner			
13th	Auto Civil			
14th	MX Road or any other equivalent software for above mentioned softwares			
15th	**Internal Viva Voce – 3**			

Lesson Plan

Name of the Faculty : **Semester :** **3rd** **L T P**

Subject : **SFE (PRACTICALS)** **Discipline :** **Civil Engineering** **- - 2**

Lesson Plan Duration : **15 Weeks (from Jul-2018 to Dec-2018)**

Week	Practical	Delivery Date of Practical		Whether the Lesson Plan Followed? **Yes/No**
		Expected	Actual	
1st	To determine the moisture content of a given sample of soil			
2nd	To determine the moisture content of a given sample of soil			
3rd	Auger Boring and Standard Penetration Test a) Identifying the equipment and accessories b) Conducting boring and SPT at a given location c) Collecting soil samples and their identification d) Preparation of boring log and SPT graphs e) Interpretation of test results			
4th	Extraction of Disturbed and Undistrubed Samples Extracting a block sample Extracting a tube sample Extracting a disturbed samples for mechanical analysis. Field identification of samples			
5th	**Internal Viva Voce – 1**			
6th	Field Density Measurement (Sand Replacement and Core Cutter Method) Calibration of sand Conducting field density test at a given location Determination of water content Computation and interpretation of results			
7th	Liquid Limit and Plastic Limit Determination: a) Identifying various grooving tools b) Preparation of sample c) Conducting the test d) Observing soil behaviour during tests e) Computation, plotting and interpretation of results			
8th	Mechanical Analysis a) Preparation of sample b) Conducting sieve analysis			

	c) Computation of results d) Plotting the grain size distribution curve e) Interpretation of the curve			
9th	Laboratory Compaction Tests (Standard Proctor Test) a) Preparation of sample b) Conducting the test c) Observing soil behaviour during test d) Computation of results and plotting e) Determination of optimum moisture content and maximum dry density			
10th	Laboratory Compaction Tests (Standard Proctor Test) a) Preparation of sample b) Conducting the test c) Observing soil behaviour during test d) Computation of results and plotting e) Determination of optimum moisture content and maximum dry density			
11th	**Internal Viva Voce – 2**			
12th	Demonstration of Unconfined Compression Test a) Specimen preparation b) Conducting the test c) Plotting the graph d) Interpretation of results and finding/bearing capacity			
13th	Demonstration of: a) Direct Shear and Vane Shear Test on sandy soil samples			
14th	Demonstration of: b) Permeability test apparatus			
15th	**Internal Viva Voce – 3**			

Lesson Plan

Name of the Faculty : **Semester :** **3rd** **L T P**

Subject : **Structural Drawing** **Discipline :** **Civil Engineering** **- - 5**

Lesson Plan Duration : **15 Weeks (from Jul-2018 to Dec-2018)**

Week	Practical	Delivery Date of Practical		Whether the Lesson Plan Followed? **Yes/No**
		Expected	Actual	
1st	RC Structures: Reinforcement details from the given data for the following structural elements with bar bending schedules Drawing No. 1: RC Slabs - One way slab, Two way slab and Cantilever Slab			
2nd	RC Structures: Reinforcement details from the given data for the following structural elements with bar bending schedules Drawing No. 1: RC Slabs - One way slab, Two way slab and Cantilever Slab			
3rd	Drawing No.2: Beams - Singly and doubly reinforced rectangular beams and Cantilever beam (All beams with vertical stirrups)			
4th	Drawing No.3 : Columns and Footings - Square, Rectangular and Circular Columns with lateral ties and their isolated sloped column footings.			
5th	**Internal Viva Voce – 1**			
6th	Drawing No. 4 : Portal Frame - Three bay two storey RC portal frame with blow up of column beam junctions.			
7th	Drawing No.5: Dog legged stairs for single storey building			
8th	Drawing No.6 : Draw atleast one sheet using CAD software			
9th	Steel Structures: Structural drawing from given data for following steel structural elements. Drawing No. 1: Roof Truss - Drawing of Fink Roof Truss with details of joints, fixing details of purlins and roof sheets.			
10th	Drawing No.2: Column and Column Bases - Drawing of splicing of steel columns. Drawings of slab base, gusseted base and grillage base for single section steel columns.			
11th	**Internal Viva Voce – 2**			
12th	Drawing No.3 : Column Beam Connections (a) Sealed and Framed Beam to Beam Connections (b) Sealed and Framed beam o Column Connections			

13th	Drawing No. 4 : Plate Girder Plan and Elevation of Plate Girder with details at supports and connection of stiffness, flange angles and cover plate with web highlighting curtailment of plates			
14th	Drawing No. 5 : Draw at least one sheet using CAD software			
15th	**Internal Viva Voce – 3**			

Lesson Plan

Name of the Faculty : **Semester :** **3rd** **L T P**

Subject : **Employability Skills** **Discipline :** **Civil Engineering** **- - 2**

Lesson Plan Duration : **15 Weeks (from Jul-2018 to Dec-2018)**

Week	Practical	Delivery Date of Practical		Whether the Lesson Plan Followed? **Yes/No**
		Expected	Actual	
1st	**Writing skills (08 hrs)** Official and business correspondence			
2nd	Official and business correspondence Job application - covering letter and resume			
3rd	Report writing - key features and kinds			
4th	**Oral Communication Skills (20 hrs)** Giving advice Making comparisons			
5th	**Internal Viva Voce – 1**			
6th	Giving advice Making comparisons			
7th	Agreeing and disagreeing			
8th	Agreeing and disagreeing			
9th	Taking turns in conversation			
10th	Taking turns in conversation			
11th	**Internal Viva Voce – 2**			
12th	Fixing and cancelling appointments			
13th	**Generic Skills (04 hrs)** Stress management Time management			
14th	Negotiations and conflict resolution Team work and leadership qualities			
15th	**Internal Viva Voce – 3**			