Lesson Plan

Name of the Faculty	**:**		**Discipline**	**:**	**Civil Engineering**	**L**	**T**	**P**
Subject	**:**	**FLUID MECHANICS (PRACTICALS)**	**Semester**	**:**	**3rd**	**-**	**-**	**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 verify Bernoulli's Theorem			
2nd	To verify Bernoulli's Theorem			
3rd	To determine coefficient of velocity (C_v), Coefficient of discharge (C_d) Coefficient of contraction (C_c) of an orifice and verify the relation between them			
4th	To determine coefficient of velocity (C_v), Coefficient of discharge (C_d) Coefficient of contraction (C_c) of an orifice and verify the relation between them			
5th	**Internal Viva Voce – 1**			
6th	To perform Reynold's experiment			
7th	To perform Reynold's experiment			
8th	To verify loss of head in pipe flow due to a. Sudden enlargement b. Sudden contraction c. Sudden bend			
9th	To verify loss of head in pipe flow due to a. Sudden enlargement b. Sudden contraction c. Sudden bend			
10th	**Internal Viva Voce – 2**			
11th	Demonstration of use of current meter and pitot tube			
12th	Demonstration of use of current meter and pitot tube			
13th	To determine coefficient of discharge of a rectangular notch and triangular notch			
14th	To determine coefficient of discharge of a rectangular notch and triangular notch			
15th	**Internal Viva Voce – 3**			

Lesson Plan

Name of the Faculty	**:**		**Discipline**	**:**	**Civil Engineering**	**L**	**T**	**P**
Subject	**:**	**APPLIED MECHANICS (PRACTICALS)**	**Semester**	**:**	**3rd**	**-**	**-**	**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	Verification of the polygon law of forces using Gravesand's apparatus.			
2nd	Verification of the polygon law of forces using Gravesand's apparatus.			
3rd	To verify the forces in different members of jib crane.			
4th	To verify the reaction at the supports of a simply supported beam.			
5th	**Internal Viva Voce – 1**			
6th	To find the mechanical advantage, velocity ratio and efficiency in case of an inclined plane.			
7th	To find the mechanical advantage, velocity ratio and efficiency of a screw jack.			
8th	To find the mechanical advantage, velocity ratio and efficiency of worm and worm wheel.			
9th	To find mechanical advantage, velocity ratio and efficiency of single purchase crab.			
10th	**Internal Viva Voce – 2**			
11th	To find out center of gravity of regular lamina.			
12th	To find out center of gravity of irregular lamina			
13th	To determine coefficient of friction between three pairs of given surface.			
14th	To determine coefficient of friction between three pairs of given surface.			
15th	**Internal Viva Voce – 3**			

Lesson Plan

Name of the Faculty : **Discipline :** **Civil Engineering** **L T P**

Subject : **SURVEYING – I (PRACTICALS)** **Semester :** **3rd** **- - 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	Chain surveying: i) a) Ranging a line b) Chaining a line and recording in the field book c) Taking offsets - perpendicular and oblique (with a tape only) d) Setting out right angle with a tape			
2nd	Chain surveying: ii) Chaining of a line involving reciprocal ranging iii) Chaining a line involving obstacles to ranging iv) Chain Survey of a small area.			
3rd	Compass Surveying: i) a) Study of prismatic compass b) Setting the compass and taking observations c) Measuring angles between the lines meeting at a point			
4th	Compass Surveying: i) a) Study of prismatic compass b) Setting the compass and taking observations c) Measuring angles between the lines meeting at a point			
5th	**Internal Viva Voce – 1**			
6th	Levelling: i) a) Study of dumpy level and levelling staff b) Temporary adjustments of various levels c) Taking staff readings on different stations from the single setting and finding differences of level between them			
7th	Levelling: ii) a) To find out difference of level between two distant points by shifting the instrument			

8th	Levelling: iii) Longitudinal and cross sectioning of a road/railway/canal			
9th	Levelling: iv) Setting a gradient by dumpy and auto-level			
10th	**Internal Viva Voce – 2**			
11th	Plane Table Surveying: i) a) Study of the plane table survey equipment b) Setting the plane table c) Marking the North direction d) Plotting a few points by radiation method			
12th	Plane Table Surveying: ii) a) Orientation by - Trough compass - Back sighting b) Plotting few points by intersection, radiation and resection method			
13th	Plane Table Surveying: iii) Traversing an area with a plane table (at least five lines)			
14th	Layout of Buildings (from given drawing of two room residential building) by use of surveying instruments.			
15th	**Internal Viva Voce – 3**			

Lesson Plan

Name of the Faculty	**:**		**Semester**	**:**	**3rd**	**L**	**T**	**P**
Subject	**:**	**CM (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 identify the stones used in building works by visual examination			
2nd	To identify the stones used in building works by visual examination			
3rd	To determine the crushing strength of bricks			
4th	To determine the crushing strength of bricks			
5th	**Internal Viva Voce – 1**			
6th	To determine the water absorption of bricks and efflorescence of bricks			
7th	To determine the water absorption of bricks and efflorescence of bricks			
8th	To identify various types of timbers such as: Teak, Sal, Chir, Shisham, Deodar, Kail & Hollock by visual examination only			
9th	To identify various types of timbers such as: Teak, Sal, Chir, Shisham, Deodar, Kail & Hollock by visual examination only			
10th	To identify various types of timbers such as: Teak, Sal, Chir, Shisham, Deodar, Kail & Hollock by visual examination only			
11th	**Internal Viva Voce – 2**			
12th	The students should submit a report work on the construction materials, covering water proofing material, cements, steel, paints and timber products available in the local market. They will also show the competitive study based upon the cost, brand name, sizes available in the local market.			
13th	The students should submit a report work on the construction materials, covering water proofing material, cements, steel, paints and timber products available in the local market. They will also show the competitive study based upon the cost, brand name, sizes available in the local market.			
14th	The students should submit a report work on the construction materials, covering water proofing material, cements, steel, paints and timber products available in the local market. They will also show the competitive study based upon the cost, brand name, sizes available in the local market.			
15th	**Internal Viva Voce – 3**			

Lesson Plan

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

Subject : **BC (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	Demonstration of tools and plants used in building construction			
2nd	Demonstration of tools and plants used in building construction			
3rd	Demonstration of tools and plants used in building construction			
4th	To prepare Layout of a building: two rooms building with front verandah			
5th	To prepare Layout of a building: two rooms building with front verandah			
6th	**Internal Viva Voce – 1**			
7th	To construct brick bonds (English bond only) in one, one and half and two brick thick: (a) Walls for L, T and cross junction (b) Columns			
8th	To construct brick bonds (English bond only) in one, one and half and two brick thick: (a) Walls for L, T and cross junction (b) Columns			
9th	Demonstration of following items of work at construction site by: a) Timbering of excavated trenching b) Laying damp proof courses			
10th	Demonstration of following items of work at construction site by: c) Construction of masonry walls **Internal Viva Voce – 2**			
11th	Demonstration of following items of work at construction site by: d) Laying of tile flooring on an already prepared lime concrete base			
12th	Demonstration of following items of work at construction site by: e) Plastering and pointing exercise f) Constructing RCC work			
13th	Demonstration of following items of work at construction site by: g) Pre-construction and post construction termite treatment of building and woodwork			
14th	Demonstration of following items of work at construction site by: h) Interlocking tiles			
15th	**Internal Viva Voce – 3**			

Lesson Plan

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

Subject : **BUILDING 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	**Drawing No. 1** (2 sheets) Details of spread footing foundations, load bearing and non-load bearing wall for given thickness of walls with the help of given data or rule of the thumb, showing offsets, position of DPC. The details of the concrete and brick apron have to be shown in the drawing.			
2nd	**Drawing No. 2** (one sheet) Plans of 'T' and Corner junction of walls of 1 Brick, 1-1/2 Brick and 2 brick thick in English bond			
3rd	**Drawing No. 3** (one sheet) Drawing plan, elevation of arches: circular arch, segmental arch			
4th	**Drawing No. 4** (3 sheets) Elevation, sectional plan and sectional side elevation of flush door, glazed door, panelled door with wire gauge shutter.			
5th	**Internal Viva Voce – 1**			
6th	**Drawing No. 5** (2 sheet) Drawing plan, elevation of a small building by measurement and foundation detail and sectional elevation.			
7th	**Drawing No. 6**: (4 sheets) Drawing detailed plan, elevation and section of a two room residential building from a given line plan, showing details of foundations, roof and parapet			
8th	**Drawing No. 6**: (4 sheets) Drawing detailed plan, elevation and section of a two room residential building from a given line plan, showing details of foundations, roof and parapet			
9th	**Drawing No. 7** (one sheet) Drawings of following floors Cement concrete floors on ground and at first floor i) Wooden flooring ii) Bonded cement concrete flooring			

	iii) Ceramic/vitrified tile flooring			
10th	**Drawing No. 8** (one sheet) Drawing of flat roof, showing the heat/thermal insulation provisions.			
11th	**Internal Viva Voce – 2**			
12th	**Drawing No. 9** (one sheet) Drawing details of damp proofing arrangement of roofs and walls as per BIS Code. Show the rain water drainage arrangement also.			
13th	**Drawing No 10** Drawing Damp Proofing details in basement of buildings**.**			
14th	**Drawing No.11** Drawing Damp proofing details in water/soil retaining structures**.**			
15th	**Internal Viva Voce – 3**			

Lesson Plan

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

Subject : **SOFT 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	Soft Skills - Concept and Importance			
2nd	Soft Skills - Concept and Importance			
3rd	Communication Skills- Improving verbal communication			
4th	Communication Skills- Improving verbal communication			
5th	Communication Skills- Improving verbal communication			
6th	**Internal Viva Voce – 1**			
7th	Report Writing			
8th	Report Writing			
9th	Method to enhance memory and concentration			
10th	Method to enhance memory and concentration			
11th	**Internal Viva Voce – 2**			
12th	Component of overall personality- Dressing sense/etiquettes/body language etc.			
13th	Component of overall personality- Dressing sense/etiquettes/body language etc.			
14th	Component of overall personality- Dressing sense/etiquettes/body language etc.			
15th	**Internal Viva Voce – 3**			