

## DIPLOMA IN CIVIL ENGINEERING LAB FACILITIES

Sl. No	Course Code	Name of the Course
1	SLPC1007	PROFESSIONAL COMMUNICATION-I LAB
2	DPCS1008	COMPUTER FUNDAMENTALS LAB
3	CHEM1009	BASIC CHEMISTRY LAB
4	PHYE1015	APPLIED PHYSICS-II LAB
5	SLPC1016	PROFESSIONAL COMMUNICATION-II LAB
6	DPME1017	WORKSHOP PRACTICE
7	DPCE1018	BUILDING MATERIALS LAB
8	DPME2006	APPLIED MECHANICS LAB
9	DPCE2007	PUBLIC HEALTH ENGINEERING. LAB
10	DPCE2008	SURVEYING-I LAB
11	DPCE2016	TRANSPORTATION ENGINEERING LAB
12	DPCE2012	SOIL MECHANICS AND FOUNDATION ENGINEERING LAB
13	DPME2021	HYDRAULIC LAB
14	DPCE2013	SURVEYING-II LAB
15	DPME2022	STRENGTH OF MATERIAL LAB
16	DPCE3015	CAD LAB
17	PDSS3008	PERSONALITY DEVELOPMENT & SOFT SKILLS
18	DPCE3008	CONCRETE TECHNOLOGY LAB
19	DPCE9998	PROJECT-I
20	DPCE3009	FIELD VISIT AND PRESENTATION
21	DPCE9999	PROJECT-II

### **DESCRIPTION OF IMPORTANT LABS**

#### **BUILDING MATERIALS LAB (DPCE1018)**

##### **1. Brief Description of the Lab-**

This lab is conducted for 1<sup>st</sup> year students of diploma in civil engineering discipline. In this lab the students are expected to learn different materials used in construction and their quality check. After the completion of this lab students will be able to choose correct material for construction.

##### **2. Equipment Used in the Lab-**

Different types of stones pieces, Different types of wood pieces, Vicat apparatus with needle, 90 micron sieve, Brain's air permeability test apparatus with fluid, Le chatterlier apparatus.

##### **3. Profile of the Lab In-charge**

#### **PUBLIC HEALTH ENGINEERING LAB (DPCE2007)**

##### **1. Brief Description of the Lab-**

Public Health Engineering is one of the important branches of Civil Engineering that deals with the process of converting the waste water of industries and domestic into usable water. It includes various processes of determining the impurities and their level by undergoing various tests and by knowing the amount of impurities,

various processes could be done to make that water usable. After Completing this lab students will be able to check the quality of water.

### 2. Equipment Used in the Lab-

PH meter, Jar test apparatus, Bod Incubator, COD Digester, turbidity meter, Oven, Test tube stand, desiccators, measuring cylinders, Electronic balance, Burette, Burette stand, visible spectrophotometer, Apparatus Water kit etc.

### 3. Photograph-



## SURVEYING LAB (DPCE2008 & DPCE2013)

### 1. Brief Description of the Lab-

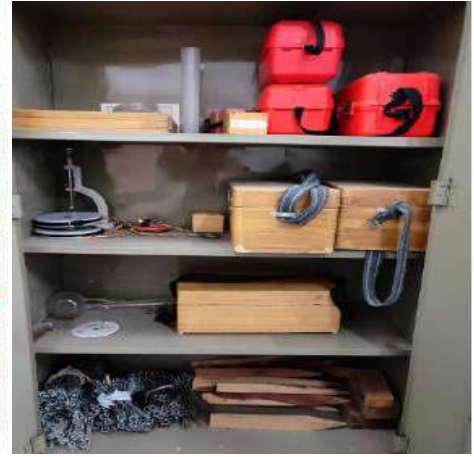
Surveying is the technique, profession, and science of accurately determining the terrestrial or three-dimensional position of points and the distances and angles between them, commonly practiced by surveyors, and members of various engineering professions. After completing this lab students will be able to use different equipments to collect ground data.

### 2. Equipment Used in the Lab-

Theodolite, Dumpy level, Minor instruments, Leveling staff, Prismatic compass, Metallic Tape, Plane table with tripod, Trough compass, Chains etc.

### 3. Photograph-





## TRANSPORTATION ENGINEERING LAB (DPCE2016)

### 1. Brief Description of the Lab-

This lab is conducted for 2<sup>nd</sup> year students of diploma in civil engineering discipline. In this lab the students are expected to learn different materials used in road construction and their quality check. After the completion of this lab students will be able to choose correct material for road construction.

### 2. Equipment Used in the Lab-

Los angles abrasion testing machine, Aggregate impact testing machine, CBR valve testing setup, aggregate crushing valve testing machine, Bitumen penetration set up, Bitumen ductility testing apparatus, Bitumen flash point study testing machine etc.

### 4. Profile of the Lab In-charge-

## SOIL MECHANICS AND FOUNDATION ENGINEERING LAB (DPCE2012)

### 1. Brief Description of the Lab-

This lab is conducted for 2<sup>nd</sup> year students of diploma in civil engineering discipline. In this lab the students are expected to learn and analyze about the quality of soil and its different properties. After the completion of this lab students will be able to analyze the quality of soil and to determine its different properties.

### 2. Equipment Used in the Lab-

Electric oven, Unconfined Compression Test Equipment, Standard Penetration Test, Specific Gravity by Pycnometer, Set of fine IS sieve, Set of coarse IS sieve, Standard Penetration Test, Proctor compaction test setup, Liquid limit device etc.

### 3. Photograph-





## HYDRAULICS LAB (DPCE2012)

### 1. Brief Description of the Lab-

This lab is conducted for 2<sup>nd</sup> year students of diploma in civil engineering discipline. In this lab the students is expected to study about different properties of fluid and to understand different types of flow. After the completion of this lab students will be able to verify different properties of fluid.

### 2. Equipment Used in the Lab-

Closed circuit Bernoulli's testing apparatus, Venturi meter test set up, Reynold's test set up, pipe friction set up, head loss study setup, Notch study apparatus etc.

### 3. Photograph-





## CONCRETE TECHNOLOGY LAB (DPCE3008)

### 1. Brief Description of the Lab-

This lab is conducted for 3rd year students of diploma in civil engineering discipline. In this lab the students is expected to check and understand the different properties of concrete. After the completion of this lab students will be able to analyze the quality and properties of concrete.

### 2. Equipment Used in the Lab-

Flakiness index gauge set up, Metal container of 3 l capacity, Metal container 15 L, Slump test set up , compression testing machine, compacting factor test set up , consist meter etc.

### 3. Photograph-

