चौधरी रणबीर सिंह राजकीय अभियांत्रिकी एवं तकनीकी संस्थान, झज्जर
Ch. Ranbir Singh State Institute of Engineering and Technology
Silani Kesho, Jhajjar, Haryana 124103

Department of Civil Engineering

1st Year 2nd Semester (Civil Engineering)

LESSON PLAN

Program	:	**B.Tech**
Year & Sem.	:	**1st & 2nd Sem**
Course No/code	:	**25ESC-CE-101-H**
Course Title	:	**Basics of Civil Engg.**
Max Marks	:	**75 Class Work: 25 & Exam:50**
No.of Total Lecture	:	**33 Lecture/ 11 week Plan**
Schedule	:	**03 Lecture per week** (As per Guidelines of Head of Deptt.)
Name of Faculty	:	**Dr.Sandeep Malik**

RecommendedBooks:

- Basic Civil Engineering by S.S. Bhavikatti, Publisher: New Age International (P) Limited
- Elements of Civil Engineering by S.C. Rangwala, Publisher: Charotar Publishing House
- Surveying and Levelling by N.N. Basak, Publisher: Tata McGraw-Hill Education (now McGraw Hill)
- Building Construction by B.C. Punmia, Ashok Kumar Jain, and Arun Kumar Jain, Publisher: Laxmi Publications
- Estimating and Costing in Civil Engineering by B.N. Dutta, Publisher: UBS Publishers' Distributors

Lesson Plan:

LESSON PLAN (As per Guidelines of Head of Deptt.)		
Deptt: Civil Engg.		**Name of Faculty: Dr. Sandeep Malik**
Semester :2nd		**Subject: Basics of Civil Engg.(25ESC-CE-101-H)**
Total Duration:11week		**Work load of subject: 03 Lecture per week** (As per Guidelines of Head of Deptt.)
Week	**Lecture Day**	**Name of Topic**
1st	1st	**Introduction:** Branches of Civil Engineering, scope of Civil Engineering, role of Civil Engineer in society.
	2nd	Impact of infrastructural development on economy of country
	3rd	**Surveying:** Definition of Surveying, Aims and applications
2nd	4th	Fundamental principles of surveying, Classification of surveying
	5th	basic introduction to Instruments used in chain surveying and leveling, Contour a nd its Characteristics.
	6th	Revision and Problems of Unit-1

3rd	7th	**Building Materials and Construction:** Introduction to construction materials, Classification of buildings
	8th	Types of loads acting on buildings, Building components and their functions and nominal dimensions.
	9th	**Estimating and valuation:** Purpose of estimating and valuation, Principle of estimation,
4th	10th	unit of measurement, item work,Estimation of quantity of load bearing structure with single room
	11th	Tenders and Contracts, Purpose of valuation
	12th	Revision and Problems of Unit-II
5th	13th	**Fluid Mechanics:** Distinction between a fluid and a solid
	14th	Fluid properties
	15th	Fluid properties
6th	16th	Fluid Statics: Pressure density height relationship, Buoyancy and stability of floating bodies
	17th	Fluid Kinematics: types of flows
	18th	Basics of open channel flow
7th	19th	**Soil Mechanics:** Types of Soil, Three Phase System,
	20th	Index Properties, Sieve Analysis, Compaction and Consolidation Process,
	21st	Types of Lateral Earth Pressure, soil exploration
8th	22nd	basic introduction to types of foundations.
	23rd	Revision and Problems of Unit-III
	24th	**Environmental Engineering:** Sources of water, water demand, water and waste water characteristics
9th	25th	basic introduction to water treatment, sewage, sewerage system
	26th	types of sewers, sludge and its disposal
	27th	**Transportation Engineering:** Modes of transportation, History of road development,
10th	28th	Road development Plans in India,
	29th	Classification of highways
	30th	road patterns, Introduction to road traffic and traffic control.
11th	31st	Revision
	32nd	Revision
	33th	Revision

Dr. Sandeep Malik
Assistant Professor (Guest Faculty)
Civil Engg. Deptt.

Approved by:
HOD
Civil Engg. Deptt.