## III Year-II Semester (20CE6204) Foundation Engineering Lab

Int	Marks Ext. Marks Total Marks	L	Т	Р	С									
	- 50 50	1	-	2	2									
Pre	- Requisites: Fundamentals of Geotechnical Engineering													
Co	ırse Objectives:													
Stu	dents will have to													
•	Learn the design of Isolated Square footing (Axial)													
•	• Learn the design of Isolated Stepped Footing													
•	• Learn the design of Strap Footing													
•	Learn the design of eccentric footing													
•	• Learn the design of Combined Footing													
EX	ERCISES:													
•	Design of Isolated Square Footing- Sample-1													
•	Design of Isolated Square Footing-Sample-2													
•	Design of Stepped Footing-Sample-1													
•	Design of Stepped Footing-Sample-2													
•	Design of Strap Footing													
•	Design of Eccentric Footing													
•	Design of Combined Footing													
•	Design of Multistoried Building with Footing Design													
Sof	tware Tool:													
ST	AAD Foundation or Equivalent													

#### **Course Outcomes:**

S.No	COURSE OUTCOMES	BTL
1	Design Isolated Square footing (Axial)	L4
2	Design Isolated Stepped Footing	L4
3	Design Strap Footing	L4
4	Design Eccentric Footing	L4
5	Design Combined Footing	L4

# **Correlation of Cos with POs & PSOs:**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
CO1	3	2	2	-	3	-	-	-	-	-	-	1	2	-	2
CO2	3	2	2	-	3	-	-	-	-	-	-	1	2	-	2
CO3	3	2	2	-	3	-	-	-	-	-	-	1	2	-	2
CO4	3	2	2	-	3	-	-	-	-	-	-	1	2	-	2
CO5	3	2	2	-	3	-	-	-	-	-	-	1	2	-	2

# **Text Books:**

1. Reinforced Concrete Structures, S. Unnikrishna Pillai &DevdasMenon, Tata McGraw Hill, New Delhi.

### **Reference Books:**

- 1. R C C Design, B.C Punmia, A. K. Jain and A. K Jain. Lakshmi Publications
- 2. Reinforced Concrete Structures, N. Krishna Raju& R. N. Pranesh, New Age Publications.

## **IS Codes:**

- 1. IS -456-2000 Code of practice for Reinforced Concrete Structures (Permitted to use in examination hall)
- 2. IS 875, SP-16