

Course Name: Building Construction and Materials

Course Code: 201CEL205

Day and Date:day, .../.../2022

Time: 2hr. 30min.

Seat No:

Max. Marks- 50

Instructions:

- Question No. 1&2 is compulsory.
- Figure to the right indicate full marks.
- Solve only **Q.2** onto **drawing sheet** to the appropriate scale.
- Draw neat sketches supporting your answers.

BT	CO's	Q. No.		Marks
		Q.1	All Questions are compulsory	20 M
3	CO1	a	Draw plan and sectional elevation of an Isolated column footing with RCC details. Plan 2m; Sectional elevation 2m; Reinforcement 2m	6M
1	CO2	b	Write a short note on Queen post roof truss Truss details 4m; Sketch with proper labels 3m	7 M
3	CO3	c	Enlist the types of Lintels. Briefly explain any three types. Types of lintel 1m; 3 types explained briefly 2m each	7 M
		Q.2	Question is compulsory	15 M
4	CO4		Design a RCC Dog legged staircase for residential building in which a distance between floors is 3m and a stair hall measures 2.2m X 4.5m internally. Draw plan and sectional elevation with scale 1:25. Assume suitable data wherever necessary. Design steps 5m; plan 4m; sectional elevation 6m OR Design and draw plan and section of RCC open well staircase for residential apartment using the following data: Floor height = 3.2m; Stair width = 1.2m; Staircase size = 4.2m X 3.6m Scale 1:25. Assume suitable data wherever necessary. Design steps 5m; plan 4m; sectional elevation 6m	15M 15M
		Q.3	Attempt any one out of two questions	7 M
2	CO3	a	What are the characteristics of good paint? 7 characteristics 1m each	7M
2	CO3	b	Explain the defects in plastering. List of defects 1m; 3 defects in detail 2m each	7M
		Q.4	Attempt any one out of two questions	8 M
1	CO3	a	What are the functional requirements of ventilation system? Any 4 requirements 1m each	4M
1	CO3	b	Write a short note on 'Purpose of Air conditioning'. 4 purposes 1m each	4M
1	CO3	c	What are the constructional measures of noise control? 4 measures 1m each	4M
