D.Y. PATIL COLLEGE OF ENGINEERING & TECHNOLOGY
KASABA BAWADA KOLHAPUR - 416006
(An Autonomous Institute)
S. Y. B. Tech
END SEMESTER EXAMINATION, Dec. – 2022

Q. Paper Code: 22SYCE2013205
Set-: II

Course Name: Building Construction and Materials Course Code: 201CEL205

Seat No:

Day and Date: …….day, …/…/2022
Time: 2hr. 30min. **Max. Marks- 50**

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

BT	CO's	Q. No.		Marks
		Q.1	**All Questions are compulsory**	**20 M**
2	**CO1**	**a**	Enlist different types of bond in Brick masonry. Explain English Bond with neat sketch of 1½ brick thick wall. List of bonds **1m;** English bond explanation **2m;** Sketch **3m**	6M
1	**CO2**	**b**	Write a short note on i) Concrete flooring Suitability and construction **2m**; Advantages **1m**; Disadvantages **1m** ii) Column formwork Explanation **3m**; Sketch **1m**	8 M
3	**CO3**	**c**	Draw neat sketch of Paneled door with single shutter and two panels and label various parts. (Proportionate sketch) Appropriate sketch of any one section and elevation with label of panel, rails, frame **6m**	6 M
		Q.2	**Question is compulsory**	**15 M**
4	**CO4**		Design and draw plan and sectional elevation of RCC quarter turn staircase for residential building having floor height 3.3m. Assume suitable data as per requirement. Use scale 1:25. Design steps **5m**; plan **4m**; sectional elevation **6m** **OR** Design and draw plan and section of RCC dog legged staircase for the following data: Storey height = 3m; Stair width = 1m; Staircase size = 2m X 4.5m Scale 1:25. Assume suitable data wherever necessary. Design steps **5m**; plan **4m**; sectional elevation **6m**	15 15
		Q.3	**Attempt any one out of two questions**	**8 M**
2	**CO3**	**a**	Explain various methods and systems used for water proofing. **4 methods** with appropriate explanation **2m each**	8
2	**CO3**	**b**	What are various methods of plastering? **4 methods** with appropriate explanation **2m each**	8
		Q.4	**Attempt any one out of two questions**	**7 M**
1	**CO3**	**a**	Write short note on Air conditioning. Use **1m**; Any **4 types 1m** each, Advantages **1m**; disadvantages **1m**	7
1	**CO3**	**b**	What are general principles in acoustical design? **7** principles **1m each**	7

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