SP-36

Total No. of Pages : 2

Seat No.	

S.Y.B.Tech. (Civil Engineering) (Semester - III)
(CBCS) Examination, January - 2024
PCC-CV-305 : BUILDING CONSTRUCTION AND MATERIALS
Sub. Code: 73201

Day and Date : Thursday, 11- 01 - 2024 **Total Marks : 70**

Time : 10.30 a.m. to 1.00 p.m.

Instructions :
1) **Section I : Solve any three questions.**
2) **Section II : Q.5 and Q.6 compulsory. Solve any one question from Q.7 & Q.8.**
3) **Figures to the right indicate full marks.**
4) **Assume data wherever necessary & mention it neatly.**

SECTION-I

Q1) a) What are the characteristics of good timber? What are the common uses of timber in building industry'? **[6]**

b) List out types of bricks and write specific engineering properties of each brick. **[5]**

Q2) a) List the requirement of a building as a whole and explain any three in details. **[6]**

b) If one of the column lies just at the edge of property line (plot boundary) then which foundation is more suitable? Explain with neat sketch. **[6]**

Q3) a) Enlist different types of bonds in brick masonry. Draw neat sketches of any two bond types. **[6]**

b) What are factors to be considered for the selection of stone for stone masonry? **[5]**

Q4) Write short note on: **[12]**

a) Composite Masonry

b) Seasoning of Timber

c) Dressing of Stone

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SECTION-II

Q5) Draw sectional plan and Elevation for a T.W. Framed Paneled door with following data: **[12]**

a) Clear opening : 900 × 2100 mm :

b) frame size : 75 × 125 mm :

c) No of shutters : 2 Nos

d) No Panels : 4

Assume suitable data (12)

Q6) Design and draw the plan and sectional elevation of R.C.C. Dog legged stair case for public building for following data- **[18]**

a) Story height - 3.60 m

b) width of stair - 1.50m

Q7) Differentiate between king post truss and queen post truss. **[5]**

Q8) State different types of lintels, Explain any one. **[5]**

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