Roll No.	Total No. of Pages : 02
Total No. of Questions:08	
M.Tech. (Structural Design)	(Sem1)
DESIGN OF HIGH RISE STR	RUCTURES
Subject Code : MTSD-	104
M.Code: 74245	
Date of Examination : 20	-01-23
Time : 3 Hrs.	Max. Marks:100

INSTRUCTION TO CANDIDATES :

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries TWENTY marks.
- 1. What is shear wall building? Discuss shear wall frame interaction, how is load shared by two?
- 2. A tube 3mm which has shown in the figure. Find the shearing stress caused by a torque of 700Nm.



- 3. Explain in detail of elastic and inelastic behavior of shear wall.
- 4. Discuss perforated core and its behavior in bending and shear.
- 5. Design a shear wall of length 6m and thickness 250mm subjected to a force given below. Use M25 and fy415 grade of steel.

S.No.	Loading	Axial Load KN	Shear Force KN	Bending Moment KNM
1	DL + LL	2000	400	25
2	Seismic Load	300	4000	700

- 6. A building frame has 4 equal bay of 4m and four storey each of having 3m height. The column of first story are fixed at its base. DL is 20 KN/m² and LL is 15KN/m² using approximate method of analysis.
- 7. a) How tall building are structurally different than low rise building?
 - b) Write a short note on cross-bracing system of framed tube system.
- 8. Explain general planning consideration for high rise building.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.