

M.Code:74290

Date of Examination : 15-12-2022

Time: 3 Hrs.

Max. Marks: 100

INSTRUCTIONS TO CANDIDATES :

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries TWENTY marks.
- 1. Explain the different earthquake magnitude with suitable examples.
- 2. Design a shear wall of length of length 4.16m and thickness 250mm subject to the following forces. Assume fck = 25N/mm² and fy=415N/mm². (Design of boundary elements are not required)

Loading	Axial force (kN)	Moment (kNm)	Shear (kN)
DL+LL	1950	600	20
EL	250	4800	700

- 3. What are Ductility provisions in reinforced concrete construction?
- 4. Describe the mechanism of liquefaction and the measures to reduce liquefaction potential.
- 5. Explain the seismic behavior of masonry building during the past earthquakes several lessons learned.
- 6. What do you mean by center of mass and center of rigidity how they affect structural response?
- 7. Describe IS codal provision for seismic design of multi storied building.
- 8. Describe various IS-1893 codal provisions for submersible structures and dams.

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.

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