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School of Engineering**M.Tech Structural Engineering
Mid Term Examination - Nov 2023****Duration : 90 Minutes
Max Marks : 50****Sem I - G1PC101T - Structural Dynamics**General Instructions*Answer to the specific question asked**Draw neat, labelled diagrams wherever necessary**Approved data hand books are allowed subject to verification by the Invigilator*

- 1) Explain Degrees of freedom? K2 (2)
- 2) Show the equation of motion for SDOF system damped free vibration K1 (3)
- 3) Explain in detail about the free vibration of undamped system. K2 (4)
- 4) Explain plate tectonics theory with neat sketch. K2 (6)
- 5) Develop the formula for finding out the base shear using seismic coefficient method? K3 (6)
- 6) Identify the methods of dynamic analysis of multi-storeyed structure as per IS 1893 code K3 (9)
- 7) How to analyze free damped single degree of freedom system. K4 (8)
- 8) Analyse the response of structure to sine Impulsive loading . K4 (12)

OR

- Analyse response of structures to rectangular impulsive loading K4 (12)