

M.Tech. Structural Engineering & Construction (CBCS Pattern) Semester-I
PSES151 / 1(A) - Structural Instrumentation & Material Science

P. Pages : 1

Time : Three Hours



GUG/S/25/10966

Max. Marks : 70

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- Notes : 1. All questions carry equal marks.
2. Solve **any five** questions.

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| 1. | A) | Explain with neat sketch Linear Displacement Transducer (LDT). | 7 |
| | B) | Explain Active Transducer and Passive Transducer. Enlist types of each. | 7 |
| 2. | A) | Explain in detail photo electric strain gauge. | 7 |
| | B) | How to prevent corrosion of concrete. Explain | 7 |
| 3. | A) | Explain in detail Steel Fibre Reinforced Concrete (SFRC). | 7 |
| | B) | Explain Model analysis of concrete by petrographic procedure. | 7 |
| 4. | A) | Explain Ultrasonic method of NDT in detail. | 7 |
| | B) | Explain the Pull-Out test on concrete. | 7 |
| 5. | A) | Explain different factors affecting carbonation of concrete. | 7 |
| | B) | Explain various types of admixture with its effect on concrete. | 7 |
| 6. | A) | How special type of concrete improve performance of concrete. Explain in detail. | 7 |
| | B) | Explain Underwater concrete and sprayed concrete. | 7 |
