

M.Tech. Structural Engineering & Construction (CBCS Pattern) Semester-I
PSES13 - New Construction Materials

P. Pages : 1

Time : Three Hours



GUG/S/25/10963

Max. Marks : 70

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- Notes :
1. All questions carry equal marks.
 2. Assume suitable data wherever necessary.
 3. Illustrate your answers wherever necessary with the help of neat sketches.
 4. Solve **any five** questions.

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| 1. | a) | Write advantages and applications of High Density Concrete. | 7 |
| | b) | Explain in brief comparison between High performance concrete and ordinary concrete based on Durability. | 7 |
| 2. | a) | Write note on type of structured steel, special steel. Also distinguish between Alloy steel and stainless steel. | 7 |
| | b) | Explain important factors that influence the corrosion of metal. | 7 |
| 3. | a) | Explain any three types of fibres used in Composite. | 7 |
| | b) | Explain in detail fibre reinforced composites Sandwich panel. | 7 |
| 4. | a) | What are the factors to be considered for selecting water proofing material. | 7 |
| | b) | Explain in detail various Facade Material for commercial building. | 7 |
| 5. | | Explain in detail various material used in the construction of Smart Buildings. | 14 |
| 6. | a) | Explain thermal and Mechanical Properties of Glass Wool. | 7 |
| | b) | Explain in detail different fire resistance material used in building. | 7 |
