

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

P. Pages : 1

Time : Three Hours



GUG/W/23/10963

Max. Marks : 70

-
- Notes :
1. All questions carry equal marks.
 2. Solve **any five** questions.
 3. Due credit will be given to neatness and adequate dimensions.
 4. Illustrate your answers wherever necessary with the help of neat sketches.

- | | | | |
|-----------|----|---|-----------|
| 1. | a) | Explain in detail comparison between mechanical properties of self-compacting concrete and the corresponding properties of normal concrete. | 7 |
| | b) | Explain in detail various factor affecting workability of concrete in relation to High Performance concrete. | 7 |
| 2. | | Explain in detail properties of all steel in details special steel, alloy steel, stainless steel, light gauge steel. | 14 |
| 3. | a) | Explain in detail Fiber reinforced composites sandwich panels with web reinforced wood core for building floor applications. | 7 |
| | b) | Explain in detail Structural behaviour of ferrocement-brick composite floor slab panel. | 7 |
| 4. | | Explain in detail various Facade Material for commercial building. | 14 |
| 5. | | Explain in detail various Materials used in the construction of Smart Buildings. | 14 |
| 6. | | Define Refractories and explain in detail Classification of Refractories. | 14 |
