

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

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- 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**
