

Structural Engineering & Construction (CBCS Pattern)
M. Tech. First Semester CBCS / Old CBS Pattern
PSES14 / STC104 – Building Services

P. Pages : 1

Time : Three Hours



GUG/W/18/10964

Max. Marks : 70

- Notes :
1. All questions carry equal marks.
 2. Answer **five** questions.
 3. Assume suitable data wherever necessary.

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| 1. | a) | Explain the importance of rain water harvesting, also discuss with neat sketch its application. | 7 |
| | b) | What are the various types of pressure pipes. | 4 |
| | c) | What are the advantages and disadvantages of Cast Iron Pipes. | 3 |
| 2. | a) | How the corrosion of metal pipes is reduced. | 5 |
| | b) | Explain the bye laws and regulations of water supply scheme in case of | 6 |
| | | i) Village | |
| | | ii) Municipal Corporation | |
| | c) | Give some qualities of good newer pipes. | 3 |
| 3. | a) | What are the test conducted in sewer pipes after laying. | 6 |
| | b) | What are the various method of ventilation for sewers. | 5 |
| | c) | What are the different types of sewage treatment. | 3 |
| 4. | a) | What are the various factors will you consider while selecting wiring system in high ripe buildings. | 7 |
| | b) | Explain in brief modern theory of light. | 3 |
| | c) | What are the advantages of planning electrical system. | 4 |
| 5. | a) | What are the different measures to be taken against fire caused by A.C. system. | 7 |
| | b) | Explain the different safety regulations, NBC planning considerations in public buildings. | 7 |
| 6. | a) | Explain in brief wet risers. | 4 |
| | b) | Classify and narrate briefly building according to | 6 |
| | | i) Fire loud | |
| | | ii) Structural components | |
| | | iii) Material used in building | |
| | c) | Explain installation and working of automatic sprinklers. | 4 |
| 7. | a) | What are the various key technologies available for smart buildings. | 7 |
| | b) | Explain the concept of smart building. | 4 |
| | c) | Explain in brief building management systems. | 3 |
