

M.Tech. Structural Engineering & Construction (CBCS Pattern) Sem-I
PSES14 - Building Services

P. Pages : 1

Time : Three Hours



GUG/W/22/10964

Max. Marks : 70

Note : Solve **any five** questions.

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| 1. | a) | Discuss significance of building services in hospital and discuss role of building service engineering? | 7 |
| | b) | Enumerate municipal bye laws and regulation of rain water harvesting for commercial building with neat sketch. | 7 |
| 2. | a) | What are special features required for physically handicapped in building services. | 7 |
| | b) | How refuse is collected from building and also discuss about refuse bin and sacks. | 7 |
| 3. | | Explain electricity distribution in multi – storeyed building. | 14 |
| 4. | a) | What are different types of air conditioners? How will you design capacity of it for different structures? | 7 |
| | b) | Explain design for cooling water plant for the industrial unit where around 200 workers are employed in each shift. | 7 |
| 5. | a) | Explain fire detection system. | 7 |
| | b) | Explain in brief planning consideration in building using non combustible material. | 7 |
| 6. | | Write a note on any three : | 14 |
| | a) | Fire extinguishing system | |
| | b) | Protection of opening from fire | |
| | c) | Automatic sprinkler | |
| | d) | Safety against fire in theatres and cinemas. | |
