

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

P. Pages : 1

Time : Three Hours



**GUG/S/25/10964**

Max. Marks : 70

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- Notes :
1. All questions carry equal marks.
  2. Answer **any five** questions.
  3. Due credit will be given to neatness and adequate dimensions.
  4. Diagrams and Chemical equation should be given wherever necessary.

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 modern theory of light and colour. 14
4. a) Explain P-H diagram of vapour compression cycle. 7  
b) Explain various system of air conditioning. 7
5. a) Explain fire detection system. 7  
b) Explain in brief planning consideration in building using non combustible material. 7
6. Explain **any three** 14
  - a) Fire extinguishing system.
  - b) Automatic sprinkler.
  - c) Protection of opening from force
  - d) Safety against fire in theatre and cinemas.

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