

FACULTY OF ENGINEERING**B.E. 3/4 (Civil) I – Semester (New) (Main) Examination, Nov. / Dec. 2012****Subject : Building Technology and Services****Time : 3 hours****Max. Marks : 75****Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.****PART – A (2.5 x 10 = 25 Marks)**

1. List out different factors affecting the selection of site.
2. What are the common errors find in planning a building?
3. Define Acoustics.
4. What is meant by reverberation? And give the equation to calculate reverberation time?
5. What are the basic physical laws considered while installing water supply in houses?
6. What are the different precautionary measures taken to fire resistance in houses?
7. State the importance of green buildings.
8. List out some low energy materials.
9. What are the Boolean commands?
10. Explain the command 'slice'.

PART – B (5 x 10 = 50 Marks)

- 11.a) As per buildings bye-laws, state different provisions for lighting and ventilation in buildings.
b) List out different principles of planning of buildings. And explain any two in detail.
- 12.a) Explain in detail the classification of sound absorbent materials.
b) What is meant by frequency of sound? And explain in detail the process of measurement of sound.
13. Draw telephone supply arrangement inside the house? Show supply cable arrangements clearly with all features indicating in diagram.
- 14.a) What are the different principles of green buildings? And explain the factors considered in selecting a site for green building.
b) Explain the technology of green buildings through a certification system 'GRIHA'.
15. Plan a residential building, given the sizes of different rooms. Building faces East.
 - i) Master bed room = 12 m²
 - ii) Living room = 16 m²
 - iii) Dining area = 6 m²
 - iv) Kitchen = 8 m²
 - v) Verandah = 6 m²
 Sketch the plan, sectional elevation passing through kitchen and verandah.
- 16.a) Explain the importance of circulation diagrams.
b) Explain different requirements for good acoustical building.
17. Write short notes on the following :
 - a) Fire safety measures in houses
 - b) Different views in Auto CAD-3D.
