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**Fifth Semester B.Arch. Degree Examination, Dec.2015/Jan.2016**  
**Building Services - III**

Time: 3 hrs.

Max. Marks:100

**Note: Answer any TWO questions from Part – A, any TWO questions from Part B and any ONE question from Part - C.**

**PART - A**

- 1 a. Explain refrigeration cycle with the help of a schematic diagram. (10 Marks)  
b. Explain various components of cooling load. (10 Marks)
- 2 a. Explain window air – conditioning system, with sketches. (10 Marks)  
b. Discuss the various systems of mechanical ventilation with sketches. (10 Marks)
- 3 Write short notes with sketches (any four) :  
a. Clean room.  
b. Split A.C system.  
c. Air handling unit.  
d. Fan Coil Unit (FCU).  
e. Summer air – conditioning. (20 Marks)

**PART - B**

- 4 a. Sketch a typical section through a traction lift and explain various parts. (12 Marks)  
b. Explain the quality and quantity of lift services. (08 Marks)
- 5 a. Explain working of an escalator, with neat sketches. (10 Marks)  
b. What is Hydraulic lift? Explain with neat sketches. (10 Marks)
- 6 Write short notes on (any Four) :  
a. Double decker lift.  
b. Sky lobby.  
c. Travelators.  
d. Dumb waiter.  
e. Capsule lift.  
f. Paternoster. (20 Marks)

**PART - C**

- 7 a. Discuss the role of an architect in ensuring the fire safety in building. (10 Marks)  
b. What is fireload of a building? List and explain the causes of fire accidents in building. (10 Marks)
- 8 Write short notes (any four) :  
a. Sprinkler system.  
b. Fire escape stair.  
c. Fire detectors.  
d. Classes of fire.  
e. Fire resisting materials. (20 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.