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**Fifth Semester B. Arch. Degree Examination, Dec.2016/Jan.2017**  
**Building Services – III**

Time: 3 hrs.

Max. Marks:100

**Note:** 1. Answer any TWO questions each from Part – A and B.  
2. Answer any ONE question from Part – C.

**Part – A**

- 1 a. What is HVAC? What are the advantages and disadvantages of air – conditioning system? (10 Marks)  
b. Explain the different systems of mechanical/artificial ventilation with neat sketches. (10 Marks)
- 2 a. Explain window air –conditioning system with neat sketches. (10 Marks)  
b. Explain DX – air conditioning system with the help of a neat sketch. (10 Marks)
- 3 Write short notes on :  
a. Refrigeration cycle  
b. AHU  
c. Split air conditioning  
d. Dehumidifier. (20 Marks)

**Part – B**

- 4 Explain in brief the different parts of an elevator (lift). (20 Marks)
- 5 Explain with neat sketch, the various components of escalators and its application and location in buildings. (20 Marks)
- 6 Write short notes on any four :  
a. Sky lobby  
b. Elevator pit  
c. Machine room  
d. Grouping of elevators. (20 Marks)

**Part – C**

- 7 a. Discuss the role of an architect in ensuring the fire safety in buildings. (12 Marks)  
b. List out the various types of fire extinguishers. (08 Marks)
- 8 Write short notes on :  
a. Smoke detectors  
b. Fire resisting materials  
c. Fire escape staircase  
d. Sprinkler system. (20 Marks)

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1. This question paper consists of 10 pages, comprising of 10 questions. 2. Any revealing of identification, appeal to evaluator and/or equations written eg. 4.16.00, will be treated as malpractice.