

2013

**Building Services-III**

Paper : 5.6

Full Marks : 100

Time – 3(Three hours)

*The figures in the margin indicate full marks for the questions***PART-A**

Answer the following questions (any four)

(Each question contains equal marks)

4×10=40

1. What are the chief requirements of an air-conditioning duct system? Give some general rules for Duct design. 10
2. What are the different parts of a refrigerator? Explain the refrigeration cycle with proper diagram. 10
3. Explain briefly the following : 10
  - a) Summer AC
  - b) Winter AC
  - c) All year round AC
  - d) Zoning of ACs
4. What are the different methods of Refrigeration? 10
5. What is Psychrometrics? What are the factors used in preparing a psychrometric chart. List out with diagrams 10

**PART-B**

Answer any three of the following questions: 3×20=60

6. What is a Hydraulic Elevator? Explain its components with detailed plan and section through a building with such a system. 20
7. What are the various building Bye-laws for fire safety in multistory structure. 20

P.T.O.

(2)

8. Write short notes on the following :

4×5=20

- a) Fire Towers
- b) Fire Lifts
- c) Pressurization of Staircases
- d) Wet Riser and Dry Riser

9. What are the minimum angles of Incline in Escalators, give some basic planning and design factors of Escalators.

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