

2014

**BUILDING SERVICES-III**

Paper : 5.6

Full Marks : 100

Time : 3 Hours

*The figures in the margin indicate full marks  
for the questions.*

1. Answer the following questions (any ten) : 2×10
- a) What is mechanical ventilation?
  - b) What is a diffuser?
  - c) Define Air Conditioning System.
  - d) What is a conveyor belt?
  - e) What is Pressurization?
  - f) What is compartmentalization?
  - g) What is meant by de-humidification of air?
  - h) Define Psychometrics
  - i) What is the need of artificial Ventilation?
  - j) What is Industrial air conditioning?
  - k) What is comfort air conditioning?
  - l) What is zoning in air conditioning system?
2. Answer the following (any six) : 10×6
- a) What are the components of an Air Conditioning System? Explain the function of each component.
  - b) What are the different types of ducts used in an air conditioning system? Draw the air flow diagram in the AC System.
  - c) Explain the working Principle of central System of air conditioning, with the help of sketches.
  - d) Discuss the working principle of Unitary system of Air conditioning with the help of sketches.

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(2)

- e) State the rules for fire protection and fire Fighting requirements for high rise buildings in India.
- f) Describe briefly the characteristics of combustible and non-combustible materials in case of fire in buildings.
- g) What are the different types of fire hazards? Discuss briefly the different types of classification of buildings for fire hazards mentioned in NBC.
- h) What are different types of lifts? Discuss with the help of diagrams.

3. Write short notes on the following (any five) : 4×5

- a) Air Handling Unit
- b) Air Conditioning Cycle
- c) Passive fire Protection System.
- d) Hydraulic Lifts
- e) Split Air Conditioner
- f) Refrigeration Cycle
- g) Fire alarms

