(10 Marks)

(20 Marks)

(10 Marks)

(10 Marks)

(10 Marks)

(10 Marks)

(20 Marks)

(20 Marks)

## USN

## Fifth Semester B.Arch. Degree Examination, Dec.2017/Jan.2018 Building Services – III

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any TWO full questions each from Part-A and Part-B.

- 2. Answer any one from Part-C.
- 3. Draw sketches whenever necessary.

P	A	R	T	_	A

- a. Explain DX-Air conditioning system with sketch.
  - b. Explain split air conditioners, with neat sketches. (10 Marks)
- 2 a. What is psychrometric process and explain various psychrometric terms. (10 Marks)
- b. Explain different systems of mechanical / ventilation. (10 Marks)
- 3 Briefly explain with sketches any four of the following:
  - a. Refrigeration cycle
  - b. Air Handling Unit (AHU)
  - c. Window Air Conditioners
  - d. Humidifier & Dehumidifier
  - e. Clear room concept.

## PART-B

- 4 a. Explain hydraulic lift with help of neat sketch.
  - b. What are advantages and disadvantages of over escalator?
- 5 a. Explain with help of a neat sketch the working of escalator.
  - b. Explain how handling capacity of lift is determined.
- 6 Write short notes on any four:
  - a. Capsule Lift
  - b. Double Decker Lift
  - c. Dumb waiter
  - d. Travelator
  - e. Machine room.

## PART – C

- 7 Explain various types of fire extinguishers with illustrations.
- 8 Write short notes with sketches (Any four):
  - a. Fire Lift
  - b. Fire protection systems
  - c. Fire Load
  - d. Fire zones
  - e. Pressurisation and compartmentation

(20 Marks)

\* \* \* \* \*