(Following Paper ID and Roll No. to be filled in your Answer Books)

Paper ID : 181606

Roll No.

B. Arch.

Theory Examination (Semester-VI) 2015-16

BUILDING SERVICES (ME)

Time: 3 Hours Max. Mar: 100

Note: i. Secion A is compulsory.

ii. Attempt any 3 from Section B.

iii. Draw neat and labeled sketches wherever required.

Section-A

- (a) Discuss briefly the different types of cooling loads which have to be taken into account in order to estimate the total cooling load of a large restaurant for summer air conditioning.
 - (b) Explain the fire fighting equipments required for high rise buildings.

 $(2 \times 20 = 40)$

Section-B

2. Explain in detail the various types of lifts used in Hospital buildings with the help of neat sketches.

 $(1 \times 20 = 20)$

3. Explain the psychometric chart. How is it useful in Air Conditioning?

 $(1 \times 20 = 20)$

- 4. Write short notes on **any two** of the following.
 - (a) Location and arrangement of Escalators.
 - (b) Working of an Escalator.
 - (c) Advantages of an Escalator over other vertical circulation system.
 - (d) Structural provisions required for the installation of escalators in a R.C.C. framed structure.

 $(2\times10=20)$

5. Discuss the working of the different components of a Room Air Conditioner with the help of a neat sketch and describe its installation method.

 $(1 \times 20 = 20)$

6. Explain any two:

- (a) Differentiate between Natural Draft and Mechanical cooling towers
- (b) Dumb waiter and goods lift
- (c) Dry and Wet Riser
- (d) General provisions to reduce fire hazards

(2×10=20)