

BACHELOR OF ARCHITECTURE (B.Arch.)**Term-End Examination****December, 2015****BAR-059 : ARCHITECTURAL SCIENCES &
SERVICES – IV (ENERGY SYSTEMS AND HVAC)***Time : 3 hours**Maximum Marks : 70*

Note : Attempt any **five** questions. All questions carry equal marks. Draw neat sketches wherever necessary.

1. (a) Write short notes on any **four** of the following : 4
- (i) Safety Gear
 - (ii) Hydraulic Lifts
 - (iii) Lift Well
 - (iv) Travelators
 - (v) Escalators
- (b) Describe in brief the parameters affecting lift performance. 10
2. (a) Draw a schematic diagram explaining the functioning of Air Handling Unit. 7
- (b) Describe the types of packaged air-conditioning systems. 7

3. (a) Write in detail about the sprinkler head design and its activation mechanism. 7
 - (b) Write about the types of sprinkler systems and their advantages and disadvantages. 7
 4. Write about the installation requirements in building layouts for different types of air-conditioning systems. 14
 5. Discuss in detail about the recommendations made by National Building Code, 2005 regarding fire prevention, life safety and fire protection. 14
 6. Write about the considerations regarding protection devices for electrical installations from current overload. 14
 7. Discuss with neat sketches various methods of earthing in a building in accordance to letter coding classification. 14
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