**BAR-059** 

## **BACHELOR OF ARCHITECTURE (B ARCH)**

00415 Term-End Examination

## June, 2013

## **BAR-059 : ARCHITECTURAL SCIENCES &** SERVICES - IV (ENERGY SYSTEMS AND HVAC)

Time : 3 hours

Maximum Marks · 70

All questions carry equal marks. Question No. 1 is Note : compulsory. Answer any four from the remaining questions.

- Define the following with neat sketches. 1. 4x3.5=14(Any Four)
  - (a) **MCB**
  - (b) Earthing
  - (c) Various types of circuits
  - (d) **Fire Extinguishers**
  - Fire Exists and Escapes (e)
- 2. What are the various distribution systems for 14 electric supply in any building? How does the electric load of any building govern the type of electric distribution system ?
- 3. Write in detail about the five resisting properties 14 of building materials with respect to.
  - (a) roofs ceiling (b) (c) and floors.

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P.T.O.

- Discuss in detail about the various components 14 of Air Conditioning Systems.
- 5. Explain the following : 4x3.5=14
  - (a) Return travel time
  - (b) Carrying Capacity
  - (c) Installation Requirements of lifts
  - (d) Escalators
- Explain with sketches the design of Central Air 14 Conditioning system for a multi-storeyed buildings in Delhi.
- Detail out the wiring diagram for a typical 14 distribution board scheme in a residential building flat.