

BACHELOR OF ARCHITECTURE (B.Arch.)**Term-End Examination****December, 2015****BARE-079 : INTELLIGENT BUILDING SYSTEMS
(ELECTIVE – 2)***Time : 3 hours**Maximum Marks : 70*

Note : Question no. 1 is **compulsory**. Attempt **four** more questions from the remaining. Illustrate your answers with neat sketches wherever possible.

1. Write short notes on any **four** of the following :

$$4 \times 3 \frac{1}{2} = 14$$

- (a) Green Buildings
- (b) Intelligent Buildings
- (c) Safety Control Aspects in Automated Buildings
- (d) Energy Efficiency
- (e) Biometrics in Buildings

2. What are the benefits of Building Management Systems for the following ? 14
 - (a) Tenants/Occupants
 - (b) Owners
 - (c) Maintenance Companies

 3. What is the application of internet in different aspects of building systems ? Give special emphasis on security systems and lighting control systems. 14

 4. Discuss building efficiency studies with respect to life cycle costs and its impact on building design. 14

 5. Discuss various technologically induced adaptations that are incorporated in building facades to adapt to varying external climatic conditions. 14

 6. Discuss in detail about the sensory and auto-operational devices with respect to building services that make a building intelligent. 14

 7. In the context of Building Automation Systems, explain the functioning of the following : 14
 - (a) VAV hybrid system
 - (b) Constant volume AHU
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