

No. of Printed Pages : 2

**BARE-079**

**BACHELOR OF ARCHITECTURE (B.Arch.)**

**Term-End Examination, 2019**

**BARE-079 : INTELLIGENT BUILDING  
SYSTEMS (ELECTIVE-2)**

**Time : 3 Hours]**

**[Maximum Marks : 70**

---

**Note :** Attempt **any five** questions in total. **All** questions carry **equal** marks. Supplement your answers with neat sketches wherever necessary.

---

---

1. "Complex buildings are often victims of technological obsolescence and changing standards." Explain the interdependence of building intelligence and facility management for the success of an intelligent building.[14]
2. Explain the role of lighting simulation and air flow simulation in the design stage of a building in enhancing the value of the design output. [14]
3. Explain the terms : [14]
  - (a) Building Management System
  - (b) Building Information Modelling (BIM)

4. What is 'Sickbuilding Syndrome' ? Describe how building intelligence can be applied to basic workplace infrastructure to achieve healthy environments. [14]
5. Trace the timeline of evolution of Intelligent building concept throughout history. [14]
6. Explain the terms and give examples of : [14]
  - (a) Biomimetics
  - (b) Smart materials

----- x -----