Reg.No. \_\_\_\_\_\_\_\_\_\_\_\_



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec– 2017**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **14EE2028** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BUILDING AUTOMATION** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Justify the characteristics of building automation system | CO1 | 15 |
| b. | Draw and explain the operation of a Solenoid Valve. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Discuss in detail the seven salient functions provided by BAS. | CO1 | 15 |
|  | b. | Compare sensors, Transducers and Actuators. | CO1 | 5 |
|  |  |  |  |  |
| 3. |  | Discuss about reactive power and power quality issues and its effect on energy consumption. | CO3 | 20 |
| (OR) | | | | |
| 4. |  | Discuss with a neat sketch about the Electromechanical type energy meter. | CO3 | 20 |
|  |  |  |  |  |
| 5. |  | Explain in detail about fire extinguishing principles and its classification. | CO3 | 20 |
| (OR) | | | | |
| 6. | a. | Define antipass back control and the various types of control strategies adopted under this access control system. | CO2 | 10 |
|  | b. | Differentiate standalone access system and computer control access system. | CO3 | 10 |
|  |  |  |  |  |
| 7. |  | Elaborate on CCTV basics, Video Door Phone and its special features. | CO2 | 20 |
| (OR) | | | | |
| 8. |  | Sketch and propose a digital video management system for a commercial building. | CO2 | 20 |
|  | |  |  |  |
|  | | **Compulsory:** |  |  |
| 9. |  | Illustrate about the Centerlized and decentralized networking adopted in building automation. Classify LAN topologies. | CO2 | 20 |

ALL THE BEST