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



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

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| **Code :** | **14CE2033** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BUILDING SERVICES** | **Max. marks :** | **100** |

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

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| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Discuss different types of waste? | CO1 | 6 |
| b. | Define the following: i. sewage ii. sewerage iii.sullage | CO1 | 6 |
| c. | Classify different types of trap with the help of neat sketches? | CO1 | 8 |
| (OR) | | | | |
| 2. | a. | Write notes on plumbing systems in the building? | CO3 | 5 |
| b. | Discuss on different types of water distribution system? | CO3 | 10 |
| c. | Elaborate on the factors affecting consumption of water? | CO1 | 5 |
|  |  |  |  |  |
| 3. | a. | Classify different types of wiring system. | CO3 | 10 |
|  | b. | Discuss on design of modern lighting for school and hospitals | CO3 | 10 |
| (OR) | | | | |
| 4. |  | Classify different types of air-conditioning and explain in detail? | CO2 | 20 |
|  |  |  |  |  |
| 5. | a. | Write notes on special features required for physically handicapped and elderly person in buildings for fire safety? | CO3 | 10 |
|  | b. | Describe the fire safety installations in buildings? | CO3 | 10 |
| (OR) | | | | |
| 6. | a. | Explain the planning consideration in fire safety of buildings? | CO1 | 10 |
|  | b. | Enumerate on Intelligent buildings is the building of 21st century. | CO3 | 10 |
|  |  |  |  |  |
| 7. | a. | Explain the five aspects of intelligent buildings? | CO3 | 12 |
|  | b. | Discuss on Three dimensions of intelligent buildings. | CO1 | 8 |
| (OR) | | | | |
| 8. | a. | Elaborate on different types of smart materials. | CO1 | 10 |
|  | b. | Compare and contrast analog and digital CCTV. | CO3 | 10 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Write notes on LEED certification of buildings? | CO3 | 10 |
|  | b. | Assess Green and Intelligent building by taking case studies? | CO3 | 10 |

ALL THE BEST