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



**End Semester Examination – Nov / Dec – 2019**

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

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Differentiate between waste water and drinking water and bring about the feasibility of using waste water for irrigation purpose. | CO1 | 10 |
| b. | Enumerate on the building bye laws. | CO1 | 10 |
| **(OR)** | | | | |
| 2. | a. | Explain the need for good sanitation and type of sewerage system and its suitability. | CO1 | 10 |
| b. | Explain the different steps involved in sewage treatment available before letting it into river water. | CO3 | 10 |
|  |  |  |  |  |
| 3. | a. | Draw a septic tank and explain its function. | CO3 | 10 |
| b. | Illustrate the rain water harvesting used for residential buildings. | CO3 | 10 |
| **(OR)** | | | | |
| 4. | a. | Examine the different types of wiring used for houses. | CO1 | 10 |
| b. | Sketch the transformer and explain its parts. | CO1 | 10 |
|  |  |  |  |  |
| 5. | a. | State the purpose of airconditioner and explain the different types of air conditioning systems. | CO2 | 10 |
| b. | Describe the natural and artificial ventilation used in industry. | CO2 | 10 |
| **(OR)** | | | | |
| 6. | a. | Discuss the protection against fire caused by A.C. Systems. | CO2 | 10 |
| b. | Explain the causes of fire and types of materials used for construction. | CO3 | 10 |
|  |  |  |  |  |
| 7. | a. | Present the NBC regulation used for fire safety. | CO1 | 10 |
| b. | Examine fire safety and control measures. | CO3 | 10 |
| **(OR)** | | | | |
| 8. | a. | Interpret the various aspects of intelligent buildings. | CO3 | 10 |
| b. | Explain how the buildings can be automated to respond to its circumstances. | CO2 | 10 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Explain the concept and features of green building. | CO3 | 10 |
| b. | Investigate the Smart materials used in buildings. | CO3 | 10 |