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



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

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| **Code :** | **17CE1002** | **Duration :** | **3hrs** |
| **Sub. Name :** | **BASIC CIVIL ENGINEERING** | **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. | | Draw and label the simple building plan. | CO1 | 10 |
| b. | | Explain the scope and function of Civil engineers in detail. | CO1 | 10 |
| **(OR)** | | | | | |
| 2. | a. | | Draw the cross section of building and discuss the different levels of building . | CO2 | 10 |
| b. | | List out the characteristics of the following building materials:  i) Bricks ii) Timber. | CO2 | 10 |
|  |  | |  |  |  |
| 3. | a. | | Explain with neat diagram the Mat foundation, Pile foundation and spread footing. | CO2 | 10 |
| b. | | Explain different bonds in brick masonry with sketch. | CO3 | 10 |
| **(OR)** | | | | | |
| 4. | | a. | Explain the classification of beams and columns with neat sketch. | CO4 | 10 |
| b. | A building with plinth area of 100 m2 was constructed over a plot area of 200 m2, about 10 years ago. Plinth area rate at the time of construction was Rs 900 per m2. Find the value of the building taking the life of the building as 50 years. Also find the value of the total property, if the cost of the land is Rs 300 per m2. Assume suitable data if needed. | CO4 | 10 |
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| 5. | | a. | Illustratethe oxidation pond with a neat diagram. | CO3 | 10 |
| b. | Explain with a neat sketch, “the rain water harvesting”. | CO4 | 10 |
| **(OR)** | | | | | |
| 6. | a. | | Summarize the process involved in purification of water. | CO5 | 10 |
| b. | | Explain the process involved in collection and disposal of solid wastes. | CO5 | 10 |
|  |  | |  |  |  |
| 7. | a. | | Formulate the general layout of harbour and its classification. | CO2 | 10 |
| b. | | Draw the cross section of WBM roads and explain its components. | CO2 | 10 |
| **(OR)** | | | | | |
| 8. | a. | | Sketch the various components of permanent way and explain it. | CO4 | 10 |
| b. | | Enumerate the classification of Highway. | CO1 | 10 |
|  | | | **Compulsory:** |  |  |
| 9. | a. | | Briefly describe the points to be considered in the selection of a site for a dam and write notes on Arch dam. | CO3 | 10 |
| b. | | Define irrigation and discuss about its benefits. | CO2 | 10 |