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



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

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| **Code :** | **16CE1001** | **Duration :** | **3hrs** |
| **Sub. Name :** | **EVOLUTION OF CIVIL INFRASTRUCTURE** | **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. | | Write a brief note on evolution of construction of shelters and building. | CO1 | 10 |
| b. | | Summarize the step by step methods of manufacturing of bricks. | CO1 | 10 |
| **(OR)** | | | | | |
| 2. | a. | | Explain the types of water distribution system. | CO2 | 10 |
| b. | | Differentiate between conventional steel and pre-engineered buildings. | CO2 | 10 |
|  |  | |  |  |  |
| 3. | a. | | What do you mean by a “Green Building”? State its concepts. | CO3 | 10 |
| b. | | Mention the components of airport with neat sketch. | CO5 | 10 |
| **(OR)** | | | | | |
| 4. | | a. | Explain the importance of ITS and its applications. | CO2 | 10 |
| b. | Briefly explain the factors governing highway alignment. | CO2 | 10 |
|  | |  |  |  |  |
| 5. | | a. | Write short note note on Harbour layout . | CO3 | 10 |
| b. | Explain about water retaining structures. | CO3 | 10 |
| **(OR)** | | | | | |
| 6. | a. | | List out the various building materials used in construction and explain the properties of any two materials. | CO4 | 10 |
| b. | | Explain the process involved in manufacturing of cement. | CO4 | 10 |
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| 7. | a. | | Formulate the general layout of airport and its classification. | CO5 | 10 |
| b. | | Draw the cross section of WBM roads and explain its components. | CO4 | 10 |
| **(OR)** | | | | | |
| 8. | a. | | Sketch the various components of permanent way and explain it. | CO2 | 10 |
| b. | | Enumerate the classification of Highway. | CO4 | 10 |
|  | | | **Compulsory:** |  |  |
| 9. | a. | | Explain about various pavement failures. | CO3 | 10 |
| b. | | Illustrate the case study on any two marvelous structures. | CO3 | 10 |