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



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

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| **Code :** | **17CE2001** | Duration : | **3hrs** |
| **Sub. Name :** | **BUILDING MATERIALS AND GEOLOGY** | 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. | Define alluvial fan and alluvial cone. | CO1 | 2 |
| b. | List the kinds of metamorphism. | CO1 | 4 |
| c. | Explain the physical and chemical weathering process in detail. | CO1 | 14 |
| (OR) | | | | |
| 2. | a. | Explain Bar, Spit and Tombola with a neat sketch. | CO1 | 4 |
| b. | Elaborate the various physical properties that are used to identify the minerals. | CO1 | 16 |
|  |  |  |  |  |
| 3. | a. | Write the structure of igneous rocks. | CO3 | 4 |
|  | b. | Explain in detail the types, texture and structure of Metamorphic rock. | CO1 | 16 |
| (OR) | | | | |
| 4. | a. | Describe the hardness for the following minerals.   1. Diamond 2. Feldspar | CO2 | 2 |
|  | b. | Define hypabyssal rocks. | CO2 | 2 |
|  | c. | Give a detailed account on the mineralogical composition, engineering properties, behavior and uses of clay minerals. | CO1 | 16 |
|  |  |  |  |  |
| 5. | a. | Classify joints with a neat diagram. | CO1 | 4 |
|  | b. | Elaborate the geophysical methods applied for sub-surface investigation. | CO2 | 16 |
| (OR) | | | | |
| 6. | a. | Explain various types of faults with neat diagram. | CO2 | 10 |
|  | b. | Elaborate the geological consideration for the construction of tunnels. | CO2 | 10 |
|  |  |  |  |  |
| 7. | a. | Define annealing of steel. | CO3 | 4 |
|  | b. | Explain briefly the test conducted on cement to find its properties. | CO3 | 16 |
| (OR) | | | | |
| 8. | a. | List the characteristics to be considered in selection of stones. | CO1 | 4 |
|  | b. | Explain the following:   1. Seasoning of Timber. 2. Defects of Timber. | CO3 | 16 |
|  | |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. | a. | Describe Geomembrane and Geotextile for earth reinforcement with a case study. | CO3 | 20 |