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



**UNIVERSITY**

(Karunya Institute of Technology & Sciences)

(Declared as Deemed-to-be University under Sec.3 of the UGC Act, 1956)

**End Semester Examination – Nov/Dec – 2016**

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|  |  | **Semester :** | **2016-17 ODD** |
| **Code :** | **14CE2015** | **Duration :** | **3hrs** |
| **Sub. Name :** | Construction Technology | **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 the principles involved in planning a building. | CO1 | 8 |
| b. | Suggest different methods to improve the bearing capacity of soil. | CO3 | 7 |
| c. | Discuss the energy consumption in a building. | CO2 | 5 |
| (OR) | | | | |
| 2. | a. | A new multistorey commercial apartment is to be constructed in Coimbatore. The soil exploration process is to be carried out for 30m. Suggest the method of soil investigation to be adopted with neat sketch. | CO3 | 12 |
| b. | Differentiate load bearing structure and Framed structure. | CO2 | 8 |
| 3. | a. | Discuss the methods of foundation in black cotton soil with neat sketch. | CO3 | 10 |
|  | b. | Suggest the timbering method adopted for trenching upto 10m depth in soft ground and explain with neat sketch. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Elaborate on different methods of timbering with neat sketches. | CO2 | 11 |
|  | b. | Discuss on foundation failures and preventive measures. | CO2 | 9 |
| 5. | a. | Discuss the formwork failures. | CO3 | 8 |
|  | b. | Discuss about the masonry construction and the materials used. | CO1 | 12 |
| (OR) | | | | |
| 6. | a. | Discuss the process involved in concrete work and the equipments used. | CO3 | 15 |
|  | b. | Describe the methods of termite proofing. | CO2 | 5 |
| 7. | a. | Describe the methods of underpinning. | CO3 | 7 |
|  | b. | Discuss the different types of shoring with neat sketches. | CO2 | 9 |
|  | c. | List out the types of scaffolding. | CO3 | 4 |
| (OR) | | | | |
| 8. | a. | Suggest the pitched roof for different spans ranging from 3m to 30m and explain with neat sketches. | CO3 | 12 |
|  | b. | Discuss the causes for dampness and its ill effects. | CO2 | 8 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Discuss the seasoning of timber methods. | CO2 | 8 |
|  | b. | Classify the construction materials. | CO1 | 5 |
|  | c. | Explain the use of an excavator and discuss its different types. | CO3 | 7 |

ALL THE BEST

**Course Outcome:**

Students at the end of the course will be able to:

CO1: Classify the different types of construction materials

CO 2: Select the construction methodology for different types of construction

CO3: Plan and execute construction projects