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 - 2017**

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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. | List the qualities of a good building stone. | CO2 | 5 |
| b. | What are the uses of cement? | CO2 | 5 |
| c. | Enlist and detail about any five building materials. | CO2 | 10 |
| (OR) | | | | |
| 2. | a. | Sketch the flow chart of manufacturing of concrete and explain the processes involved. | CO1 | 10 |
| b. | How are rocks classified? Discuss in detail. | CO2 | 10 |
|  | | | | |
| 3. | a. | List the different types of cement. | CO2 | 5 |
| b. | Distinguish between super structure and sub structure. | CO3 | 5 |
| c. | Discuss in detail about the different types of buildings. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Categories the different types of mortar. | CO2 | 5 |
|  | b. | Appraise the functions of foundation of a building. | CO3 | 5 |
|  | c. | Describe in detail about loads acting on buildings. | CO3 | 10 |
|  | | | | |
| 5. | a. | Contrast between pre cast and cast insitu constructions. | CO4 | 5 |
| b. | Write short note on i. Header ii. Strecher iii. King closer iv. Queen closer v. Frog | CO1 | 5 |
| c. | Order out the type of bonds in stone masonry with neat sketches. | CO1 | 10 |
| (OR) | | | | |
| 6. | a. | With neat sketch write in detail about the components of the building | CO1 | 15 |
|  | b. | Classify and detail about the different types of bridges. | CO4 | 5 |
|  | |  |  |  |
| 7. | a. | Detail about the classification of roads in India. | CO4 | 5 |
|  | b. | Point out the unique features of Expressways when compared to other types of roads? | CO4 | 5 |
|  | c. | Differentiate between road and rail transport. | CO3 | 10 |
| (OR) | | | | |
| 8. | a. | Explain the characteristics of road transport. | CO3 | 5 |
|  | b. | What are traps? Discuss about the different types of traps with neat sketches. | CO3 | 5 |
|  | c. | Cite the different facilities required in a railway station. | CO4 | 10 |
|  | | **Compulsory**: |  |  |
| 9. | a. | Elaborate on classification of harbours based on formation. | CO4 | 5 |
|  | b. | Define i. Entrance channel ii. Pier head iii. Wharves. | CO3 | 5 |
|  | c. | Break down and detail the different parts of a dam, with the help of a neat sketch. | CO3 | 10 |

ALL THE BEST