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 – April/May– 2017**

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| **Sub. Code:** | **14CE1001** | **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 series of offsets were taken from a chain line to a curved boundary line at an interval of 5m in the following order: 0, 3.25, 4.50, 8.45, 9.50, 6.10, and 5.75,0. Calculate the area between the chain line and the boundary line. | CO1 | 20 |
| (OR) | | | | |
| 2. | a. | Explain the scope of Civil Engineering. | CO1 | 10 |
| b. | List out the characteristics of timber and concrete. | CO2 | 10 |
| 3. | a. | Define the terms : 1. Valuation 2. Plinth area 3. Carpet area. | CO2 | 10 |
|  | b. | Find the value of a 60 year old building of 110 m2 plinth area if the life of the building is 100 years. The plinth area rate of the building is Rs. 2400 per m2 and the cost of the land is 3 lakhs. | CO2 | 10 |
| (OR) | | | | |
| 4. |  | Summarize the different types of bonds used in brick masonry. | CO3 | 20 |
| 5. |  | Illustrate the working principle of septic tank. | CO3 | 20 |
| (OR) | | | | |
| 6. |  | Draw the layout of the water treatment plant and briefly explain the steps involved in the treatment of water. | CO3 | 20 |
| 7. |  | Enumerate the classification of highways. | CO1 | 20 |
| (OR) | | | | |
| 8. |  | Sketch the various components of permanent way and explain it. | CO1 | 20 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Explain any one type of the dam with neat sketches. | CO1 | 10 |
|  | b. | Define irrigation and its benefits. | CO2 | 10 |

ALL THE BEST