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 :** | **14CE2036** | **Duration :** | **3hrs** |
| **Sub. Name :** | **Prefabricated Structures** | **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 in detail about materials of prefabrication. | CO1 | 10 |
| b. | Write in detail about the necessacity of prefabrication. | CO1 | 5 |
| c. | List four advantage and disadvantage of prefabrication. | CO1 | 5 |
| (OR) | | | | |
| 2. | a. | Explain in detail the general principles of prefabrication techniques. | CO1 | 10 |
| b. | What is meant by modular coordination? Explain about it. | CO1 | 10 |
| 3. | a. | Explain in detail the manufacturing or production techniques in prefabrication structures. | CO1 | 10 |
| b. | Briefly expain about transportation and erection. | CO1 | 10 |
| (OR) | | | | |
| 4. | a. | Classify the components of a building based on load distribution. | CO1 | 8 |
| b. | Write the test procedures on precast components in prefabrication system. | CO1 | 8 |
| c. | What is shear wall? and briefly explain its advantages. | CO1 | 4 |
| 5. | a. | Write the details about large panel construction in prefabrication components. | CO2 | 8 |
| b. | Write the details about frame system of construction in prefabrication components. | CO2 | 8 |
| c. | What do you understand by lift slab system? | CO2 | 4 |
| (OR) | | | | |
| 6. | a. | Explain the method of construction components column, beam anf floor slab. | CO2 | 8 |
| b. | What is the need of expansion joints in precast structures? | CO2 | 4 |
| c. | Give the guidelines recommended for expansion joint design and location. | CO2 | 8 |
| 7. | a. | Explain the steps involved in the process of disunity of prefabricated structures. | CO2 | 10 |
| b. | Write the advantages of disuniting of structures. | CO2 | 5 |
| c. | Write the disadvantages of disuniting of structures. | CO2 | 5 |
| (OR) | | | | |
| 8. | a. | Expalin the problems involved in design because of joint flexibility. | CO2 | 6 |
| b. | Why should we give allowances for joint deformation? | CO2 | 6 |
| c. | What is the difference between joint deformation and joint flexibility? | CO2 | 4 |
| d. | Mention important requirements of joint flexibility. | CO2 | 4 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Explain the codal provisions for progressive collapse. | CO2 | 8 |
| b. | Explain the methods to prevent disproportionate collapse. | CO2 | 8 |
| c. | Write four different classes of abnormal load. | CO2 | 4 |

ALL THE BEST