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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| **Code :** | **14CE3025** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ENERGY EFFICIENT BUILDING** | **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. | How Energy Flows are linked in building? Explain in detail. | CO1 | 10 |
| b. | List out the 5 streams of green building programme. Elobrate about 5 streams. | CO2 | 10 |
| (OR) | | | | |
| 2. | a. | Write about the success of California’s energy efficiency buildings policy. | CO1 | 8 |
| b. | Outline the Steps to be followed in case the project team encounters any difficulty as per Credit Interpretation Ruling. | CO2 | 7 |
| c. | Write in details about the Project stages as per Green Building Program Guidelines. | CO2 | 5 |
| 3. | a. | Explain in detail about Energy Conservation - Workstation Operation and Plug loads. | CO1 | 8 |
| b. | Generalize the Intent, Requirement & potential Technologies & strategies for Building Reuse: Maintain 100% of Existing Walls, Floors and Roof as per LEED. | CO2 | 12 |
| (OR) | | | | |
| 4. | a. | How to determine a building’s energy performance? – Explain with neat sketch. | CO1 | 10 |
|  | b. | Observe and rephrase about effective strategies improving occupants’ comfort and control. | CO2 | 10 |
| 5. | a. | Explain in detail about system losses. | CO1 | 12 |
|  | b. | Compile and prioritize the documentations required for precertification of IGBC. | CO2 | 8 |
| (OR) | | | | |
| 6. | a. | Discuss in detail about the reduction methods of infiltration & exfiltration losses. | CO1 | 10 |
|  | b. | Mention the importance of High Resolution Digital Cameras in Construction. | CO3 | 10 |
| 7. | a. | Mention the measures for Reducing consumption of office equipment and appliances. | CO1 | 8 |
|  | b. | What is BREEAM? Write in detail about its principles. | CO3 | 7 |
|  | c. | Draw the relation between Linear Cost with Economies of Scale. | CO3 | 5 |
| (OR) | | | | |
| 8. | a. | Elaborate the measures for Reducing the energy requirements for ventilation. | CO1 | 10 |
|  | b. | Brief about MODEL HOME 2020. | CO3 | 10 |

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|  | | **Compulsory:** |  |  |
| 9. | a. | Illustrate Energy efficient in building methodology. | CO1 | 8 |
|  | b. | Mention the different Strategies for Reducing the Environmental Impacts of Construction, Explain in detail. | CO3 | 7 |
|  | c. | How will you choose the best materials forthe construction job? | CO2 | 5 |