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 :** | **14EE2018** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ENERGY SYSTEMS** | **Max. marks :** | **100** |

**ANSWER ALL QUESTIONS (5 x 20 = 100 Marks)**

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| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | Marks |
| 1. |  | Explain effect of distributed generation on power system operation. | CO1 | 20 |
| (OR) | | | | |
| 2. |  | Explain economic aspects of power generation in detail. | CO1 | 20 |
| 3. |  | Discuss the energy efficient equipments elaborately. | CO2 | 20 |
| (OR) | | | | |
| 4. |  | Give the importance of load and load duration curve and also explain the methodology of meeting load duration cuve using various power sources. | CO2 | 20 |
| 5. | a. | Give importance of enery audit. | CO2 | 5 |
|  | b. | Elaborate the various factors of enegy auditing. | CO2 | 15 |
| (OR) | | | | |
| 6. | a. | Reproduce the laws of illumination shortly. | CO1 | 5 |
|  | b. | Discuss the lightining calculation shortly. | CO1 | 10 |
|  | c. | Give short note on photometry. | CO1 | 5 |
| 7. |  | Explain the role of electric heating for industrial applications. | CO2 | 20 |
| (OR) | | | | |
| 8. | a. | Analyse the properties of good lightining scheme. | CO2 | 10 |
|  | b. | Why power factor should be improved? Explain any three methods of power factor improvement. | CO1 | 10 |
|  | | **Compulsory:** |  |  |
| 9. | a. | Discuss the welding generator and welding transformer with neat diagram. | CO1 | 10 |
|  | b. | Update the recent trends in electrical traction. | CO1 | 10 |

ALL THE BEST