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 :** | **14AE2035** | **Duration :** | **3hrs** |
| **Sub. Name :** | **Aircraft Systems** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. | a. | Mention some of the characteristics and properties to be possessed by the fluid used in hydraulic systems. | CO1 | **10** |
| b. | Write a short notes on the types of hydraulic fluids currently being used in civil Aircrafts. | CO1 | **10** |
| **(OR)** | | | | |
| 2. |  | Explain about the flight control systems in detail. | CO2 | **20** |
| 3. |  | Explain about the components and working principle of pump feed fuel system with a neat sketch. | CO2 | **20** |
| **(OR)** | | | | |
| 4. |  | Explain about the methods of environmental cooling in Aircrafts in detail. | CO2 | **20** |
| 5. |  | What is icing of an aircraft? Explain in detail about location of icing, Method of control, icing effects and prevention methods. | CO1 | **20** |
| **(OR)** | | | | |
| 6. |  | Explain about the thermal anti icing system in detail with a neat sketch. | CO2 | **20** |
| 7. |  | Write in detail about oxygen and fire protection systems in aircrafts. | CO2 | **20** |
| **(OR)** | | | | |
| 8. |  | Write about the all the components and its functions associated with the lubrication system in Gas Turbine Aircraft engines. | CO1 | **20** |
|  | | **Compulsory:** |  |  |
| 9. |  | Write notes on the starting and secondary power units in Aircrafts. | CO1 | **20** |

ALL THE BEST