Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination –Nov / Dec – 2019**

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| **Code :** | **14AE2035** | **Duration :** | **3hrs** |
| **Sub. Name :** | **AIRCRAFT SYSTEMS** | **Max. Marks :** | **100** |

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

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| **Q. No.** |  | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Explain the working principle and operations of hydraulic and pneumatic systems. | CO1 | 20 |
| **(OR)** | | | | |
| 2. |  | Explain in detail with the neat sketch of power assisted and fully powered flight control. | CO2 | 20 |
|  |  |  |  |  |
| 3. |  | Explain in detail the components of multi engine fuel systems of jet engine. | CO2 | 20 |
| **(OR)** | | | | |
| 4. |  | Explain in detail the modern control system and digital fly by wire system. | CO2 | 20 |
|  |  |  |  |  |
| 5. |  | Briefly explain the following:   1. Fire protection system. 2. De-icing and anti icing systems. | CO1 | 20 |
| **(OR)** | | | | |
| 6. |  | Illustrate with neat sketch, air cycle and vapour cycle machines. | CO2 | 20 |
|  |  |  |  |  |
| 7. |  | Explain in detail the important component of FADE and write its advantages. | CO2 | 20 |
| **(OR)** | | | | |
| 8. |  | Write in detail all the components and its functions associated with the lubrication system in Gas Turbine Aircraft engines. | CO1 | 20 |
|  | | **Compulsory:** |  |  |
| 9. |  | Explain in detail the starting and ignition system of piston and jet engines with neat sketches. | CO1 | 20 |