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

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**End Semester Examination – Nov/Dec– 2018**

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|  |  |  |  |
| **Code :** | **14AE2004** | **Duration :** | **3hrs** |
| **Sub. Name :** | **ELEMENTS OF AVIONICS** | **Max. marks :** | **100** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Sub Div.** | **Questions** | **Course**  **Outcome** | **Marks** |
| 1. |  | Describe the various core avionics subsystems with a neat sketch. | CO1 | 20 |
| (OR) | | | | |
| 2. | a. | How are avionics systems different from ground equipment with similar function? | CO1 | 10 |
| b. | Comment on aircraft avionics requirements. | CO1 | 10 |
|  |  |  |  |  |
| 3. | a. | Mention the different mode codes of Mil-Std-1553B and their functions. | CO2 | 10 |
| b. | Discuss your observations on the data words of Mil-Std-1553B. | CO2 | 10 |
| (OR) | | | | |
| 4. | a. | Classify the centralized architecture. | CO2 | 10 |
| b. | What are pave pace & pave pillar? | CO2 | 10 |
|  |  |  |  |  |
| 5. |  | Explain in detail about the display that is considered as the major development in the Man-Machine Interaction. | CO2 | 20 |
| (OR) | | | | |
| 6. |  | Mention the different methods a pilot could provide data to the display systems. Explain. | CO2 | 20 |
|  |  |  |  |  |
| 7. | a. | List out the different helmet mounted display - designing factors. | CO2 | 10 |
| b. | Describe in detail the tracking systems present in HMD. | CO2 | 10 |
| (OR) | | | | |
| 8. |  | Explain the working principles of the following display technologies.   1. Shadow Mask CRT 2. LED 3. Plasma 4. Electroluminescent | CO2 | 5  5  5  5 |
|  |  |  |  |  |
|  | | **Compulsory**: |  |  |
| 9. |  | Describe microprocessors in detail. | CO3 | 20 |