

**End Semester Examinations - 2015-16 Even Semester - May 2016**

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**14AE2004 Elements of Avionics**

**Set A**

**Time : 3 hrs**  
**Total Marks: 100**

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1. What are the core avionics subsystems? Draw a neat sketch and explain the use of different subsystems. (20)

**OR**

2. Give short notes for the following.
- i. How are avionics systems different from ground equipment with similar function? (10)
  - ii. Comment on aircraft avionics requirements. (10)
3. i. Comment on Basic 6 and Basic T display layouts. (5)
- ii. How are the systems organized in centralized architecture? (5)
  - iii. What are pave pace & pave pillar? (10)

**OR**

4. Give a note on avionics architectures developed during different generations. (20)
5. What provides the medium for the exchange of data and information in various avionics subsystems of military aircrafts? Explain in detail. (20)

**OR**

6. What are microprocessors? Explain in detail. (20)
7. i. Comment on Head up displays. (15)
- ii. Give helmet mounted display - designing factors. (5)

**OR**

8. Explain the working principles of the following.
- i. HDD CRT types. (10)
  - ii. LCD & LED display (5)
  - iii. Plasma Display (3)
  - iv. Vacuum Display (2)
9. Write short notes on the following.
- i. Alphanumeric displays
  - ii. MFDs
  - iii. Panoramic/big picture display
  - iv. virtual cockpit

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**Wishing you All the Best**

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