Register Number

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E – Aeronautical

Title of the Paper: Avionics   Max. Marks: 80
Sub. Code: 526E10-AEE09(2007)   Time: 3 Hours
Date: 09/03/2011   Session: FN

PART - A   (10 X 2 = 20)
Answer ALL the Questions

1. Explain the advantage of using avionics in military aircraft.

2. What is avionics?

3. What is meant by "Language Compiler"?

4. What is "EPROM"?

5. Explain Federated architecture.

6. List out the MIL-STD 1553B hardware elements.

7. What do you mean by "All glass cockpit"?

8. What is "HOTAS"?

9. What is INS?

10. What is meant by jammers in electronic warfare?

Answer All the Questions

11. With a neat block diagram explain the integration of different avionics system.

(or)

12. Explain in detail about avionics and its categories.

13. Name the input and output devices of a Computer and explain them

(or)

14. Write short notes on the following:-   (4 mark each)
    i) Applications Software
    ii) Computer Memories
    iii) Microprocessors

15. Explain the ARINC 429 data bus in detail.

(or)

16. Explain MIL STD 1553 B data bus in detail bringing out clearly the protocol and conceptual description message formats and coupling methods.

17. Explain in detail the principle of operation of a head up display (HUD) system along with necessary diagrams.

(or)

18. Write short notes on the following   (4 marks each)
    i) LCD   ii) DVI   (iii) MFK

19. What is radar functions and its roles?

(or)

20. List out the Radar frequency bands Band Name Frequency Range Wavelength Range Notes.