

SATHYABAMA UNIVERSITY

(Established under section 3 of UGC Act, 1956)

Course & Branch: B.E – Aeronautical

Title of the paper: Avionics

Semester: VII

Sub.Code: 526E10

Date: 26-09-2008

Max. Marks: 80

Time: 3 Hours

Session: FN

PART – A

(10 x 2 = 20)

Answer All the Questions

1. What do you mean by system integration?
2. What is neat for a data bus?
3. What is software package?
4. What is data word structure in mil-500-1553?
5. What is flow chart?
6. What is ARNIC-629?
7. MFDS Vs MFK.
8. LED Vs LCD
9. OMECA Vs DECCA navigation system
10. GPS Vs GPWS

PART – B
Answer All the Questions

(5 x 12 = 60)

11. Explain briefly the factors, which have, an impact on the digital avionics system design.
(or)
12. Briefly explain in follows
 - (a) engine control and management
 - (b) display systems for-CML aircraft.
13. Explain the basic element of a computer in detail.
(or)
14. “TYPE OF MEMORIES” in computer. – Briefly explain.
15. Explain in detail the salient features of MIL – 588-155BB Data bus used in modern military aircraft.
(or)
16. Matching the avionics to the AIRNIC 629 – Discuss the Problem briefly.
17. What is MAP display? Explain its principle of operation.
(or)
18. Explain with necessary diagram the following
 - (a) Reflective optical system of HUD system
 - (b) Refractive optical system of HUD system
19. Explain in detail the units and operation of aircraft Transponder system.
(or)
20. Sort notes on:
 - (a) Reliability
 - (b) Virtual qualification
 - (c) Redundancy
 - (d) Accelerated testing