

SEVENTH SEMESTER B.TECH DEGREE EXAMINATION, DECEMBER 2016

(2013 SCHEME)

13.701 AVIONICS(S)

Time: 3 Hours

Max.Marks:100

N.B: Answer all questions from PART- A and any one question from each module in PART-B.

PART – A

1. What are the steps involved in Avionic System Design.
2. What are the disadvantages of MIL-STD-1553 B.
3. What are the typical Avionics sub systems
4. Explain Multifunctional Display
5. Why MIL-STD-1553B is not used in Civil Aircraft
6. Explain briefly LED
7. What are the advantages of HUDs
8. Explain the need of Avionics in Civil and Military Aircraft
9. What is Mach Warning
10. What are the significance of Auto pilot system (2*10 = 20)

PART –B

MODULE -1

11. a) Explain few Integrated Avionics and Weapon Systems (10)
b) What are the major Design drivers for Avionic System (10)

OR

12. Explain the Design and Technologies involved in Avionic Systems and the standard used for it. (20)

MODULE -2

13. Explain the ARINC-420 (20)

OR

14. Discuss the various Avionics Architecture in details (20)

MODULE -3

15. Compare and contrast the display technologies CRT, LED, LCD, EL and Plasma panel (20)

OR

16. a) Describe the layout of a Cockpit (10)

b) Explain the basic principle of HUD and their limitation (10)

MODULE -4

17. Explain in details any 5 Air data quantities (20)

OR

18. a) Explain the basic principles of Autopilot (12)

b) Explain Longitudinal and Lateral Autopilot (8)