Reg. No. :

Question Paper Code : 50035

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2017

Seventh Semester

Aeronautical Engineering

AE 6701 – AVIONICS

(Regulations 2013)

Time : Three Hours   Maximum : 100 Marks

Answer ALL questions.

PART – A   (10×2=20 Marks)

1. Define Avionics.

2. Define Dead reckoning.

3. Differentiate 1553B and ARINC 629 data bus.

4. Define MFDS.

5. Differentiate LED and LCD.

6. Write the working principle of Touch screen display.

7. State the working principle of DME.

8. Differentiate ILS and MLS.

9. Define autopilot.

10. Define TAT.

PART – B   (5×16=80 Marks)

11. a) Sketch and explain in detail about various avionics subsystem.   (16)

(OR)

    b) Explain in detail about the design procedure of avionics subsystems in civil
        aircraft.   (16)

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12. a) Draw the architecture and explain in detail about MIL-STD-1553B digital data bus. (16)

(OR)

b) Explain in detail about ARINC-429 Civil avionics digital data bus. (16)

13. a) Explain in detail about working principle of CRT. (16)

(OR)

b) Write short notes on :
   i) HUD. (8)
   ii) HMD. (8)

14. a) Explain in detail about inertial navigation system and its various advantages and disadvantages. (16)

(OR)

b) Sketch and explain in detail about Global Positioning System. (16)

15. a) Explain in detail about :
   i) Airspeed indicator. (8)
   ii) Mach hold autopilot. (8)

(OR)

b) Sketch and explain in detail about various lateral autopilot system. (16)