



USN

--	--	--	--	--	--	--	--	--	--

10AE82

Eighth Semester B.E. Degree Examination, June/July 2019

Avionics

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART – A

- 1 Describe about the Bus Bar system and Split Bus Bar system, with neat diagrams. (20 Marks)
- 2 a. Write short note on Stable Platform. (03 Marks)
b. Explain about the Inertial Navigation System. (10 Marks)
c. Describe about the Compass Swing and its importance. (07 Marks)
- 3 a. With suitable diagram, explain about the Pitch and Roll rate command FBW system. (14 Marks)
b. Write notes on : i) Cooper – Harper scale ii) Common mode failures. (06 Marks)
- 4 a. Give detail notes on Annunciation. (06 Marks)
b. Discuss about the display of air data, with suitable diagrams. (14 Marks)

PART – B

- 5 a. Discuss about the avionics subsystems, with neat block diagram. (10 Marks)
b. Give explanation about the aircraft communication system and its components. (10 Marks)
- 6 a. Explain about the 8085 Microprocessor architecture and its working principle. (14 Marks)
b. Describe about the types of memories. (06 Marks)
- 7 a. Compare and contrast the display technologies like CRT , LED , LCD , EL and plasma panel. (10 Marks)
b. Explain the basic principle of HUD. (05 Marks)
c. Discuss the features of DVI. (05 Marks)
- 8 a. Describe about the avionics equipment fit. (06 Marks)
b. Explain the three components of Electronic Warfare. (04 Marks)
c. Describe in detail towards the MIL – STD – 1553B data bus with suitable diagrams. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.