

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER– VII EXAMINATION – SUMMER 2026

Subject Code:2170105

Date:29-05-2026

Subject Name: Advanced Avionics

Time: 02:30 PM TO 05:00 PM

Total Marks:70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) Explain an importance of avionics system in aviation industry. **07**
(b) What do you mean by keeping avionics cool? **07**
- Q.2** (a) Enumerate Autopilot flight director system. **07**
(b) Explain Selective calling in brief. **07**
- OR**
- (b) What are the types of Emergency Locator Transmitter? **07**
- Q.3** (a) Explain Fault Tolerance system with suitable block diagram. **07**
(b) Compare Digital Avionics System Design Architectures with Analog Avionics system. **07**
- OR**
- Q.3** (a) Explain integration of Autopilot and flight director system in brief. **07**
(b) Explain difference between GPWS and EGPWS. **07**
- Q.4** (a) Write a note on cockpit voice recorder. **07**
(b) Enumerate BITE and CFDS. **07**
- OR**
- Q.4** (a) Explain how the Aircraft mission drives the avionics system design. **07**
(b) What are different methods of Keeping the avionics cool? **07**
- Q.5** (a) What is SSB modulation? **07**
(b) What is autopilot flight director system? **07**
- OR**
- Q.5** (a) List out types of Emergency locator transmitter **07**
(b) What do you understand by “maintenance by WHO, WHEN and WHERE”? **07**
