

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER– VII (New) EXAMINATION – WINTER 2019****Subject Code: 2170105****Date: 30/11/2019****Subject Name: Advance Avionics****Time: 10:30 AM TO 01:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) What the importance of avionics system in aviation industry?	03
	(b) Explain HF radio equipment with suitable block diagram.	04
	(c) Explain IRNSS in brief.	07
Q.2	(a) What are the different applications of HF wave?	03
	(b) Write a note on cockpit voice recorder	04
	(c) Explain Microwave landing system with suitable sketch.	07
	OR	
	(c) Explain Fault Tolerance software in brief.	07
Q.3	(a) Enlist basic avionics instruments which are located in conventional cockpit.	03
	(b) Explain the ILITIES which governs the digital avionics system.	04
	(c) Explain Emergency locator transmitter in brief.	07
	OR	
Q.3	(a) List out types of Emergency locator transmitter	03
	(b) Write a short note on Central Fault Display System.	04
	(c) Explain Flight management system with suitable diagram.	07
Q.4	(a) Explain difference between GPWS and EGPWS.	03
	(b) Explain Selective calling in brief.	04
	(c) Explain Inertial reference system in brief.	07
	OR	
Q.4	(a) Explain relation between life cycle cost and Mean Time Between Failure.	03
	(b) Write a short note on Autopilot flight director system.	04
	(c) Explain Electronic flight instrument system with suitable sketch.	07
Q.5	(a) Write down types of Flight interphone system.	03
	(b) What do you understand by "Maintenance by WHO, WHEN and WHERE"?	04
	(c) Explain Fault tolerance methodology with block diagram.	07
	OR	
Q.5	(a) Explain Built-in-test equipment in brief.	03
	(b) Explain Multifunction display with suitable sketch.	04
	(c) Explain how Aircraft and its mission drive the Design of digital avionics system.	07
