

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-VII (NEW) EXAMINATION – WINTER 2020****Subject Code:2170105****Date:28/01/2021****Subject Name:Advance Avionics****Time:10:30 AM TO 12:30 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

		MARKS
Q.1	(a) Explain EGPWS in brief.	03
	(b) Explain Microwave Landing System (MLS) with suitable diagram.	04
	(c) Write a short note on: (i) SELCAL (ii) SSB Modulation.	07
Q.2	(a) How Inertial guidance system is differs than other navigation systems.	03
	(b) What is IMU? Explain with help of block diagram.	04
	(c) Explain Emergency Locator Transmitter (ELT) in brief. Explain the types of ELT in brief.	07
Q.3	(a) What do you mean by Black Box systems?	03
	(b) What do you understand by “maintenance by WHO, WHEN and WHERE”?	04
	(c) Write a short note on: (i) BITE and CFDS (ii) ILITIES and ATLAS.	07
Q.4	(a) Explain EFIS in brief.	03
	(b) Explain Fault Tolerance system with suitable block diagram.	04
	(c) Differentiate between Flight Data Recorder (FDR) and cockpit voice Recorder (CVR) systems.	07
Q.5	(a) List of GPS satellite systems around the world.	03
	(b) Differentiate between GPWS and EGPWS.	04
	(c) Explain IRNSS in brief and its application.	07
Q.6	(a) What do you mean by HF radio wave propagation?	03
	(b) Define different modes of propagation.	04
	(c) Explain HF radio equipment with suitable block diagram.	07
Q.7	(a) What are the causes of errors in INS system?	03
	(b) What are the function of gyroscope and accelerometer in INS system?	04
	(c) What is IMU? Explain with help of block diagram.	07
Q.8	(a) Explain the types of ELT in brief.	03
	(b) Explain Emergency Locator Transmitter (ELT) in brief.	04
	(c) Explain typical ELT .What is the system operations and Specification in ELT?	07
