

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-IV (NEW) EXAMINATION – SUMMER 2024

Subject Code:3140111

Date:05-07-2024

Subject Name: 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.
4. Simple and non-programmable scientific calculators are allowed.

	MARKS
Q.1 (a) What is purpose of avionics?	03
(b) Differentiate between primary and secondary radar	04
(c) How does radio altimeter work?	07
Q.2 (a) What is ELT?	03
(b) Explain in short about transponder.	04
(c) How does primary ground radar works?	07
OR	
(c) How does secondary surveillance radar works?	07
Q.3 (a) What is EFIS?	03
(b) Draw federated avionics architecture system.	04
(c) With neat sketch explain ILS.	07
OR	
Q.3 (a) Explain about satellite communication system.	03
(b) What is the need of avionics in civil and military aircrafts?	04
(c) With neat sketch explain MLS.	07
Q.4 (a) List out 5 different mode of GPWS.	03
(b) Draw integrated avionics architecture system.	04
(c) Enumerate selective calling system.	07
OR	
Q.4 (a) List out different types of ELT.	03
(b) What is IRNSS?	04
(c) Explain ground proximity warning system with suitable diagram.	07
Q.5 (a) What is NDB?	03
(b) Explain HF wave propagation.	04
(c) Explain airborne weather radar.	07
OR	
Q.5 (a) Differentiate between precision and non precision approach.	03
(b) Explain about distance measuring equipment.	04
(c) Explain traffic collision avoidance system.	07
