Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII(NEW) • EXAMINATION – WINTER 2016

Subject Code:2170105 **Date:29/11/2016**

Subject Name:Advance Avionics(Department Elective - II)

Time:10.30 AM to 1.00 PM **Total Marks: 70**

Instructions:

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

Q.1	**(a)**	Explain fault detection methodology with suitable block diagram.	**07**
	(b)	Explain Flight interphone system in brief with suitable block diagram.	**07**
Q.2	**(a)**	Explain HF radio equipment with suitable block diagram.	**07**
	(b)	How does Inertial system stabilize Inter Continental Ballistic Missile at the time of take off?	**07**
		OR	
	(b)	Explain the ILITIES which governs the digital avionics system.	**07**
Q.3	**(a)**	Explain IRNSS in brief and its application.	**07**
	(b)	Which Environmental tests are carried out after designing the avionics system?	**07**
		OR	
Q.3	**(a)**	Explain Enhanced ground proximity warning system and its modes in brief.	**07**
	(b)	Write a short note: (i) BITE and CFDS (ii) Life cycle cost for Digital avionics	**07**
Q.4	**(a)**	Explain principle of ELT. How does it help to locate air crash site? What happens if aircraft makes balk landing in the sea?	**07**
	(b)	Explain the types of avionics system architecture with advantages and disadvantages.	**07**
		OR	
Q.4	**(a)**	Explain a giant of a test language- ATLAS in brief.	**07**
	(b)	How the aircraft and its mission drive the digital avionics system design?	**07**
Q.5	**(a)**	Explain principle of Flight director system and its purpose in brief.	**07**
	(b)	Explain Multifunction display with suitable sketch.	**07**
		OR	
Q.5	**(a)**	Write a short note: (i) SELCAL (ii) Keeping the avionics cool	**07**
	(b)	Explain flight management system in brief.	**07**

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