Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–VII (NEW) - EXAMINATION – SUMMER 2017

Subject Code: 2170507 **Date: 09/05/2017**

Subject Name: Computer Aided Process Synthesis

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.**

Q.1	**(a)**	Explain Multifunction Display in brief with neat sketch.	**07**
	(b)	Explain how the Aircraft mission drives the avionics system design.	**07**
Q.2	**(a)**	What do you understand by Avionics Architecture? Discuss merits and demerits of various types of architecture involving Digital System Design.	**07**
	(b)	What do you understand by keeping avionics cool?	**07**
		OR	
	(b)	What do you understand by "maintenance by WHO, WHEN and WHERE"?	**07**
Q.3	**(a)**	Explain Indian satellite navigation system in brief.	**07**
	(b)	Explain Inertial reference system in brief.	**07**
		OR	
Q.3	**(a)**	Explain Flight management system with suitable diagram.	**07**
	(b)	Write a short note on SELCAL.	**07**
Q.4	**(a)**	Explain Fault Tolerance system with block diagram.	**07**
	(b)	Explain Life cycle cost of an avionics system in brief.	**07**
		OR	
Q.4	**(a)**	Explain Emergency locator transmitter in brief.	**07**
	(b)	Explain Enhanced Ground proximity warning system in brief with neat sketch.	**07**
Q.5	**(a)**	Explain Fault Detection methodology in brief with suitable sketch.	**07**
	(b)	Explain Flight interphone system with neat sketch.	**07**
		OR	
Q.5	**(a)**	Explain HF radio equipment with block diagram.	**07**
	(b)	How the maintenance of avionics system can be made easier using BIT And CFDS?	**07**

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