GUJARAT TECHNOLOGICAL UNIVERSITY BE – SEMESTER – VI (OLD).EXAMINATION – WINTER 2016

Subject Code: 160106		Code: 160106 Date: 25/10/2	Date: 25/10/2016	
Subject Name: AvionicsTime: 10:30 AM to 01:00 PMTotal Marks:Instructions				
			: 70	
Instr	1. 2. 3.	as: Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.		
Q-1	А	Plot screen of airborne weather radar. And explain color coding of the screen.	07	
	В	Explain function of GPWS with block diagram.	07	
Q-2	А	What types of information a pilot can get from GPS? How GPS navigation is different than VOR Navigation?	07	
	В	Explain Quadrantal error, Site error and Coastal error of NDB wave propagation with neat sketch.	07	
	В	Draw dial of ILS system and explain how a pilot judges about position of aircraft while approaching for landing?	07	
Q-3	А	Explain wave propagation of VOR subject to reference signal and variable signal. How is it different than DVOR?	07	
	В	What is the role of Radio altimeter in Ground Proximity Warning System?	07	
		OR		
	Α	Differentiate between VOR and VORTAC.	07	
	В	Differentiate between VOR and NDB Navigation.	07	
Q-4	А	What is the need of head up display? How does it improve cockpit architecture?	07	
	В	How head up display is different than Helmet mounted display? What type of work can be performed by a fighter pilot by helmet mounted display?	07	
		OR		
	A	Shortly explain SATCOM.	07	
	В	Shortly explain Long Range Navigation system.	7	
Q-5	А	Explain Gyro based Navigation system of aircraft with neat sketches.	07	
	В	Explain the system which prevents head on collision of aircrafts. OR	07	
	Α	Explain Flight Management System with suitable block diagram.	07	
	В	Explain normal and reverse sensing of avionics navigation systems.	07	