Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

, ,			Date: 14/06/2017	
		xs: 70		
 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 				
Q.1	(a)	What is the purpose of hydraulic system in the aircraft? How and where is it used? What are the different elements of a hydraulic system? Explain with the help of a simple diagram.	07	
	(b)	What is a tachometer? How is it used in the measuring instruments? Explain with simple diagram.	07	
Q.2	(a) (b)	Explain working principle of altimeter with neat sketch. Explain Pitot Static System of an aircraft. OR	07 07	
	(b)	Explain cabin pressurization system of an aircraft.	07	
Q.3	(a)	In which all the locations in the aircraft fire detection system are installed? What is the principle of their working? With the help of a diagram explain any fire protection system.	07	
	(b)	With neat sketch explain magneto ignition system of reciprocating engine. OR	07	
Q.3	(a) (b)	Explain induction & exhaust system of an aircraft. Explain working principle of vacuum system for heading & attitude indicator.	07 07	
Q.4	(a) (b)	Classify the various selector valves & explain working of piston selector valves. Explain working principle of turn & bank indicator. OR	07 07	
Q.4	(a) (b)	With the help of neat sketch explain working principle of gear & vane pump. What is flight management system? What are its advantages?	07 07	
Q.5	(a)	Describe icing effect on aircraft flight with figure and suggest different methods used for prevention.	07	
	(b)	With the help of neat sketch explain working principle of hydraulic reservoirs. OR	07	
Q.5	(a)	With the help of neat sketch explain working of Turbo-fan engine.	07	

(b) Write a short note on black box recorder.

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