Seat No.: Enrolment N	No
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GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER-V • EXAMINATION - SUMMER • 2015

		oject Code: 150105 Date: 19-0 oject Name: Operation and Maintenance of Aircraft	5-2015
	Tin	ne: 02.30 pm - 05.00 pm ructions: 1. Attempt all questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.	rks: 70
0.1	()		0.7
Q.1	(a)	With the help of a suitable line diagram explain the Engine Fuel System of a twin engine light aircraft.	07
	(b)	State the purpose of Storage Batteries in aircraft. Tabulate the chemical reactions of both Lead Acid and Alkaline Battery during charging and discharging.	07
Q.2	(a)	What is meant by Rigging of an aircraft? Write down the occasion and explain the procedure of rigging in brief.	07
	(b)	Briefly explain the engine overhauling procedure. OR	07
	(b)	What are the occasions when aircraft engine is to be stored? Mention the procedure of engine storage in details.	07
Q.3	(a)	List the various electrical power supplies needed in a passenger jet airliner like Airbus A-320. Mention the salient features of installation of storage batteries in any aircraft with neat sketches.	07
	(b)	•	07
		OR	.=
Q.3	(a)	List the various communication systems necessary in a modern passenger airliner giving suitable justification.	07
	(b)	What are abnormal occurrences and how do they influence performance of aircraft?	07
Q.4	(a)	Mention the purpose of using plastic materials in the aircraft. Explain the procedure of handling such materials.	07
	(b)	Write short notates on (any two): (i) EFIS (ii) ECAM (iii) Tachometer	07
0.4	()	OR	07
Q.4	(a)	of King Air Radio Corporation.	07
Q.4	(b)	What are Hazardous materials? Explain their handling procedure associated with aircraft maintenance.	07

Q.5	(a)	Discuss the purpose and occasions of Painting and Marking of aircraft. Mention various materials used for aircraft painting.	07
	(b)	Mention the purpose of Antenna Tuning Unit in an aircraft	07
	` ′	communication system. Also explain its working principle.	
		OR	
Q.5	(a)	Explain the various types of landing gears used in aircraft and discuss their merits and demerits.	07
	(b)	What is Auxiliary Power Unit in an aircraft? Mention its purpose and working principle.	07
