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BAE306C

## Third Semester B.E./B.Tech. Degree Examination, Dec.2023/Jan.2024 Aircraft Maintenance, Repair and Overhaul

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M: Marks, L: Bloom's level, C: Course outcomes.

		Module 1	M	L	C
Q.1	a.	Describe about the equipments used in welding shop and mention the type of welding used in Hangar maintenance.	10	L2	CO2
	h	How do you ensure the quality welding? Discuss the weld repair for	10	L3	CO <sub>2</sub>
	b.	exhaust parts.			
		OR			
0.2	•	Define Margin of safety. Explain in detail about sheet metal repair.	10	L1	CO2
Q.2	a. b.	What is the philosophy of non-destructive testing? Describe the basics of	10	L2	CO2
	υ.	fluorescent penetrant inspection.			
		Module – 2			
0.3	a.	What is thermosetting plastic? Explain the procedure for maintenance and	10	L2	CO2
Q.3	a.	repair of plastic components in aircraft.			
	b.	How is a hole in a plastic wind shield repaired? What is the effect of	10	L3	CO
	ν.	annealing a plastic?			
		OR			
Q.4	a.	How do you characterize the strength of composite materials? Explain	10	L3	CO
۳۰,۷	a.	about ultrasonic inspection method.			
	b.	Describe the repair steps for a bolted repair of a composite structure.	10	L2	CO
		Module – 3			
Q.5	a.	Describe the step by step procedure for Jacking the Cessna skyhawk	10	L2	CO
Q.S		aircraft.			
	b.	Describe the step by step procedure for Rigging the Cessna skyhawk	10	L2	CO
		aircraft.			
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Q.6	a.	Explain the service and inspection of landing gear systems in A380 aircraft.	10	L2	CO
	b.	Explain the service and inspection of air conditioning systems in Boeing	10	L2	CO
		777 airplane.			
		Module – 4			
Q.7	a.	Explain in detail about Rain Removal System. What is the purpose of	10	L2	CO
•		converter in a windshield wiper system?	-		-
8	b.	Explain in detail about APU operation. What is the purpose of Take off	10	L2	CO
		warning system?			
		OR		1	T = 0
Q.8	a.	List the steps in troubleshooting process. What is the major weakness of	10	L2	CO
-		troubleshooting charts?		T.0	600
	b.	Explain about OSHA's Hazardous communication standards.	10	L2	CO
		Module – 5			T = 0
Q.9	a.	Describe about the documentation for maintenance.	10	L2	CO
	b.	Describe the ATA format for maintenance manuals.	10	L2	CO
	-	OR		T	1
Q.10	a.	With a sample, explain the Type certificate.	10	L2	CC
2,10	b.	1 1 1 1	10	L2	CC

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