

CBCS SCHEME

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BAE306C

Third Semester B.E./B.Tech. Degree Examination, June/July 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.	Discuss about the working of welding equipment used in aircraft maintenance industry.	10	L2	CO2
	b.	State the characteristics of good weld and discuss how welded patch repair carried out.	10	L2	CO2
OR					
Q.2	a.	Explain the various techniques of NDT in sheet metal inspection.	10	L2	CO3
	b.	Write short note on soldering and brazing methods.	10	L2	CO2
Module – 2					
Q.3	a.	Write the characteristics of plastics and discuss about types of plastics used in aircraft.	10	L2	CO2
	b.	Describe about the inspection methods and repair of composites.	10	L2	CO2
OR					
Q.4	a.	Write about the special precautions to be followed in inspecting composites in aircraft.	10	L2	CO2
	b.	Write a short note on repair of cracks and discuss about auto claves.	10	L2	CO2
Module – 3					
Q.5	a.	With neat sketch, explain in detail about the jacking procedure of an aircraft.	8	L2	CO3
	b.	How are aircraft control surfaces balanced? Explain briefly.	6	L2	CO3
	c.	Write short note on helicopter flight controls.	6	L2	CO2
OR					
Q.6	a.	Explain in detail the inspection and maintenance of landing gear systems.	10	L2	CO2
	b.	Discuss briefly about maintenance of pressurization and air-conditioning systems.	10	L2	CO2

Module – 4

Q.7	a.	Discuss the requirements, inspection methods and maintenance of auxillary systems.	10	L2	CO3
	b.	With a neat sketch, explain the windshield rain wiper system of an aircraft.	10	L2	CO3

OR

Q.8	a.	Explain the theory behind hazardous material storage handling in aircraft.	10	L2	CO3
	b.	Explain about the process of trouble shooting procedure with necessary charts in detail.	10	L2	CO3

Module – 5

Q.9	a.	Write a short note on manufacturers documentation and airplane maintenance manual.	10	L2	CO1
	b.	Discuss about Federal Aviation regulation and advisory circulars.	10	L2	CO1

OR

Q.10	a.	Describe briefly about types of maintenance and aviation industry certification requirements.	10	L2	CO1
	b.	Explain in detail about type certificate (FAA Form 8110.9) and airworthiness certificate (FAA form 8100-2).	10	L2	CO1
