

Model Question Paper-1 with effect from 2022-23 (CBCS 2022 Scheme)

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Third Semester B.E. Degree Examination**[Aircraft Maintenance, Repair and Overhaul]****TIME: 03 Hours****Max. Marks: 100**Note: 01. Answer any **FIVE** full questions, choosing at least **ONE** question from each **MODULE**.

Module -1			*Bloom's Taxonomy Level	COs	Marks
Q.01	a	Define Welding and with a neat sketch explain gas welding techniques highlighting its important elements.	L2	CO1	10
	b	Outline in detail about soldering and brazing process	L2	CO1	10
OR					
Q.02	a	List various Nondestructive testing methods (NDT) used for damage inspection of sheet metals, Outline any two methods in detail.	L2	CO1	10
	b	Outline in detail about various kinds of sheet metal damages.	L2	CO1	10
Module-2					
Q. 03	a	Distinguish between Thermoset and thermoplastic materials	L2	CO2	10
	b	Write a note on inspection of plastic components; also explain repair techniques for holes and cracks.	L1	CO2	10
OR					
Q.04	a	Define composite materials and list the advantages and disadvantages of composite materials	L2	CO2	10
	b	Write a note on manufacturing defects associated with composite materials	L1	CO2	10
Module-3					
Q. 05	a	Analyse in detail about importance of balancing of control surfaces in airplane	L4	CO4	10
	b	Brief the concept of rotor blade tracking and its importance in helicopter flight control.	L1	CO4	10
OR					
Q. 06	a	Analyze the inspection procedures for landing gear components in detail	L4	CO4	10
	b	Discuss the functions and importance of air-conditioning, pressurization, water, and waste systems in modern aircraft.	L1	CO4	10
Module-4					
Q. 07	a	Discuss the importance of regular inspection and maintenance of auxiliary systems for ensuring aircraft safety and reliability	L3	CO2	10
	b	Analyse in detail about the purpose of an ice protection system in aircraft operation.	L4	CO2	10
OR					
Q. 08	a	Discuss the importance of effective troubleshooting techniques in identifying and resolving aircraft systems issues.	L3	CO3	10
	b	Analyse the concept of trouble shooting in aviation	L4	CO3	10
Module-5					
Q. 09	a	Write a note on Manufacturer's documentation in maintenance field	L2	CO2	
	b	Make use of Regulatory documentation how maintenance activities are performed on aviation	L3	CO2	
OR					
Q. 10	a	Outline in detail about need of maintenance highlighting its types	L2	CO1	10
	b	Identify the failure rate patterns with a graphical representation	L3	CO2	10