



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

AERONAUTICAL ENGINEERING

ASSIGNMENT QUESTIONS

Course Name	:	AIRCRAFT MAINTENANCE ENGINEERING
Course Code	:	R-15 A72117
Class	:	IV B. Tech I Semester
Branch	:	Aeronautical Engineering
Year	:	2018 – 2019
Course Coordinator	:	Ms D Anitha, Assistant Professor, Department of AE
Course Faculty	:	Ms D Anitha, Assistant Professor, Department of AE

OBJECTIVES

The Aircraft Maintenance Engineering course will give the knowledge and skills required to enter a career as an Aircraft Maintenance Engineer. An understanding of the maintenance practices of a commercial aircraft operator, especially in the context of legal and commercial requirements. To provide students with an understanding of the maintenance allowed to be conducted by Commercial pilots on aircraft. Providing awareness about the regulatory standards on aircraft maintenance and airworthiness.

S. No	Question	Blooms Taxonomy Level	Course Outcome
UNIT-I NECESSITY TO DO MAINTENANCE			
1	Explain the terms a. Reliability b. Redesign	Understand	1
2	Discussion of the five objectives and Explain the Organization of maintenance and engineering.	Understand	1
3	Explain about the organization structure and TPPM.	Understand	1
4	Write a few words on a. Organization of maintenance and engineering, b. Organization structure, c. M&E organization chart.	Understand	1
5	Write a few words on a. Airworthiness responsibility, b. Maintenance manual.	Remember	1
6	What are the Objectives of a maintenance program & What is Outline of aviation maintenance program?	Understand	2
7	Explain managerial level functions of directors a. Technical Services, b. Aircraft Maintenance, c. Overhaul Shops, d. Material, e. Maintenance Program Evaluation.	Understand	3
8	Explain the Organization of maintenance and engineering	Understand	3
9	Write a few words on a. Maintenance organisation, b. Maintenance record keeping.	Understand	2

S. No	Question	Blooms Taxonomy Level	Course Outcome
10	Explain about the a. Role of the Engineer, b. Role of the Mechanic, c. Two types of maintenance.	Understand	1
UNIT-II DEVELOPMENT OF MAINTENANCE PROGRAMS			
1	Explain maintenance steering group MSG approach?	Understand	3
2	Write a few words on task oriented maintenance?	Remember	4
3	Explain the flow chart in current MSG process MSG-3, level I?	Understand	3
4	Explain the flow chart in current MSG process MSG-3, level II?	Understand	1
5	Justify why maintenance programs are needed in airline industry.	Understand	4
6	Explain about the basic changes in maintenance intervals,	Remember	3
7	Explain about the Process-Oriented maintenance with neat sketch.	Understand	3
8	Explain basic maintenance intervals with block diagram.	Understand	4
9	List out maintenance program documents and explain briefly.	Remember	2
10	What is the difference between Process-Oriented maintenance and task oriented maintenance?	Understand	3
UNIT-III TECHNICAL SERVICES			
1	Explain engineering department functions	Remember	5
2	a. What are technical publications? b. What are their functions and how are they controlled?	Understand	5
3	Explain airframe manufacturer's training courses. Explain Engineering: makeup of engineering.	Understand	6
4	Difference between "A" check, "B" check, "C" check,	Understand	7
5	Explain engineering department functions and Explain in detail about the role of engineers and mechanics	Understand	6
ASSIGNMENT – II UNIT-III TECHNICAL SERVICES			
1	Write briefly about a. Production planning b. Production control c. Feedback for planning	Understand	5
2	What are the Airframe manufacturers's training courses and the other Airline training courses?	Understand	5
3	Explain the functions of technical publications	Remember	6
4	Discuss maintenance resources management.	Remember	7
5	a. What is formal training? b. Explain steps of selecting a computer system.	Understand	5
UNIT-IV MAINTENANCE AND MATERIAL SUPPORT			
1	Problem of parts availability in hangar maintenance	Understand	8
2	Discuss in brief about Parts issue in M&E support functions of material?	Understand	10
3	a. What is morning meeting? b. State the responsibilities of maintenance control centre.	Understand	9
4	What are the functions that control maintenance? and Discuss in brief about types of shops in hangar maintenance organization.	Remember	8

S. No	Question	Blooms Taxonomy Level	Course Outcome
5	Discuss about the maintenance crew skill requirements.	Understand	10
6	Discuss in brief about Parts handling in M&E support functions of material?	Understand	8
7	Discuss the Organizational chart for maintenance and material.	Understand	11
8	Discuss about stock level adjustments and budgeting efforts.	Understand	8
9	What are line station activities?	Understand	10
10	Discuss in brief about Parts storage in M&E support functions of material?	Understand	9
UNIT-V			
OVERSIGHT FUNCTIONS			
1	List the types of certificates .Explain briefly about type certificate?	Understand	13
2	Differentiate between production certificate and airworthiness certificate?	Understand	12
3	Discuss the process how to achieve the airworthiness certificate?	Understand	14
4	Explain briefly about delivery inspection?	Understand	12
5	Differentiate between operator certificate and production certificate?	Understand	15
6	Discuss the manufacturer's documentation?	Understand	12
7	Explain briefly about regulatory documentation?	Understand	14
8	Which documents involved in airline generated documentation?	Remember	12
9	List the ATA document standards?	Remember	12
10	Briefly explain the basic inspection policies?	Remember	15

Prepared By: Ms D.Anitha, Assistant Professor

HOD, AE