

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-VII (NEW) EXAMINATION – WINTER 2023****Subject Code:3170111****Date:19-12-2023****Subject Name: Aircraft General Engineering and Maintenance Practices****Time: 10:30 AM TO 01:00 PM****Total Marks:70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

		MARKS
<b>Q.1</b>	(a) Why is maintenance required in aircraft?	<b>03</b>
	(b) Write an Engine starting procedures.	<b>04</b>
	(c) Make a list of Aircraft Ground Handling and Support Equipment and explain in short.	<b>07</b>
<b>Q.2</b>	(a) Write a list “Types of maintenance”.	<b>03</b>
	(b) Explain pressurization system of fuselage.	<b>04</b>
	(c) Difference between Piston engine and Jet engine.	<b>07</b>
	<b>OR</b>	
	(c) How the Oxygen System and oil system works?	<b>07</b>
<b>Q.3</b>	(a) What is ground power unit.?	<b>03</b>
	(b) Write an Aircraft inspection process.	<b>04</b>
	(c) Write a note on “Maintenance of Safety”.	<b>07</b>
	<b>OR</b>	
<b>Q.3</b>	(a) What is the purpose of inspection? Shortly explain	<b>03</b>
	(b) Define ATA specifications.	<b>04</b>
	(c) Write a note on an Inspection Data Sheet?	<b>07</b>
<b>Q.4</b>	(a) What is manual inspection?	<b>03</b>
	(b) Make a list of Special tools and equipment in an airplane maintenance shop.	<b>04</b>
	(c) Explain FAR Air worthiness directives.	<b>07</b>
	<b>OR</b>	
<b>Q.4</b>	(a) 1. Aircraft maintenance is the overhaul, repair, inspection or modification of an aircraft or aircraft component.	<b>03</b>
	a) True	
	b) False	
	2. Which of the following is the most extensive maintenance check to be performed on an aircraft?	
	a) A-Check	
	b) D-Check	
	c) B-Check	
	d) C-Check	
	(b) What is the use of Engine fire extinguishing during ground operation?	<b>04</b>
	(c) Write a short note on air-conditioning system with diagram.	<b>07</b>

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|------------|------------|---|-----------|
| <b>Q.5</b> | <b>(a)</b> | What is leveling and towing operations?       | <b>03</b> |
|            | <b>(b)</b> | Shortly explain Environmental cleanliness.    | <b>04</b> |
|            | <b>(c)</b> | Explain Inspection Publications and bulletins | <b>07</b> |

**OR**

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|------------|------------|---|-----------|
| <b>Q.5</b> | <b>(a)</b> | Make a list of safeties Precautions during aircraft maintenance?                | <b>03</b> |
|            | <b>(b)</b> | Explain about Precision instruments used in aircraft maintenance in inspection. | <b>04</b> |
|            | <b>(c)</b> | Explain swaging over splicing?  | <b>07</b> |

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