

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
SIXTH SEMESTER B.TECH DEGREE EXAMINATION, APRIL 2018

Course Code: ME376

Course Name: MAINTENANCE ENGINEERING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any three full questions, each carries 10 marks.

		Marks
1	a) Explain the maintenance functions.	(8)
	b) Compare quality and reliability.	(2)
2	a) What is maintainability and how the maintainability is improved?	(6)
	b) Illustrate failure mode with a Bath Tub curve.	(4)
3	a) Explain Reliability of series, parallel and standby systems with examples.	(6)
	b) Compare online and offline Condition Monitoring.	(4)
4	a) Explain the procedure of Preventive Maintenance.	(5)
	b) Illustrate the thickness measurement by using LVDT.	(5)

PART B

Answer any three full questions, each carries 10 marks.

5	a) Explain the causes of vibration in machines	(5)
	b) Illustrate the working of vibration holograph	(5)
6	a) Explain Radiography testing of cracks in solid materials	(6)
	b) Write short notes on infrared spectroscopy	(4)
7	a) Explain the lubricant monitoring by ferrography.	(5)
	b) Explain the process of Reliability Centred Maintenance.	(5)
8	a) Explain the process of Root Cause Analysis.	(6)
	b) Enumerate the causes of failure of machine elements	(4)

PART C

Answer any four full questions, each carries 10 marks.

9	a) Explain terotechnology process and it features.	(7)
	b) Enumerate the features of TPM.	(3)
10	a) Explain the zero maintenance concept.	(5)
	b) Explain how the performance of maintenance is measured.	(5)

- 11 a) Explain the important factors for the success of Business Centred Maintenance. (5)
b) Write short notes on Quality Assured Maintenance. (5)
- 12 a) Prepare a sample of maintenance plan and schedule of a work shop. (6)
b) Enumerate the objective of manpower planning. (4)
- 13 a) Describe the procedure of maintenance planning with a flow chart. (6)
b) Explain the applications of computer in maintenance planning. (4)
- 14 a) Explain the structure of Functional Maintenance Organisation. (5)
b) Explain Maintenance Cost Analysis. (5)
