

**Name.....**

**Branch.....**

**Enrol No.....**

**MADHAV INSTITUTE OF TECHNOLOGY AND SCIENCE,  
GWALIOR (MP)**

**DEPARTMENT OF MECHANICAL ENGINEERING**

**Assignment – VI [NDT]**

**COURSE NAME: Maintenance Engineering [OC-3]**

**COURSE CODE: 900215**

**BRANCH: ME Year: Final**

**Maxi. Marks: 20**

**Last Date for the submission: 15/11/2022**

**Date of Assignment: 01/11/2022**

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**Note:** 1. All questions carry equal marks. All questions are compulsory. Please upload on Moodle platform.  
2. Please submit your assignment sheet with roll number/registration/Name/Course Code/Branch/DATE.

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Q.1 What is NDT? Prepare a list of the different types of NDT methods.

Q.2 What are some uses of NDT methods? When are NDT methods used?

Q.3 Discuss on visual inspection test.

Q.4 Explain the Radiography test.

Q.5 How to find the minor cracks at the welded joint of the pressure vessels (Stainless Steel)?  
Which test is suitable for detecting the crack? Explain that test with proper diagram.

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# Department of Mechanical Engineering

## Assignment -V

### UNIT - V

Date of submission: 16/10/2022

Max Marks: 20

Date of Submission: 21/10/2022

- Q.1 What is equipment health monitoring? List down the factors for increasing the demand condition monitoring
- Q2 Write down the basic steps in condition monitoring. What are two main types of infrared themography?
- Q3 What is non-destructive testing? Name the various types of non-destructive tests.
- Q.4 Describe briefly the following non-destructive tests:
- (a) Ultrasonic test (b) Liquid penetrant test (c) Magnetic particle test
- Q5 Describe the eddy current test. Also, describe the limitation of eddy current test.
- Also explain the role of IOT in maintenance Engineering.

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