

**Assignment -1**  
(To be done **after** studying the course material)

**Course Code: MET003**  
**Course Title: Condition Monitoring and Maintenance**  
**Assignment Code: MET-003/TMA/2025**  
**Maximum Marks: 100**  
**Last Date of Submission: April 30, 2025**

**Note:**

**1. Attempt all questions.**

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Q.1	List the various functions of maintenance department. Briefly explain each one of them.	10
Q.2	Distinguish between: a) Productive maintenance and predictive maintenance b) Planned maintenance and scheduled maintenance	5+5
Q.3	What is ABC Analysis? Explain the step by step method to conduct the ABC analysis. Give some examples of ABC class materials of any Industry.	10
Q.4	What is Condition Based Maintenance (CBM)? What benefits are obtained by implementing a CBM system in any plant?	10
Q.5	Define the term maintainability. List out the factors affecting the maintainability.	10
Q.6	What is codification? What is its significance in maintenance spare parts management? What are the advantages of codification.	10
Q.7	Classify various planned and unplanned maintenance strategies. Describe central themes of at least five of them.	10
Q.8	Define and explain Non Destructive Test (NDT). List of the NDTs to estimate the condition of the equipment and explain any two of them in detail.	10
Q.9	Distinguish between TQM and TPM. What are the barriers in implementing the TPM?	10
Q.10	Write short notes on the following: c) VED Analysis d) Overall Equipment Effectiveness (OEE) e) Maintenance Information System (MIS) f) Reliability Centered Maintenance (RCM)	2.5X4=10