

**CERTIFICATE IN CONDITION
MONITORING (CCOMO)
Term-End Examination
December, 2025**

**MET-003 : CONDITION MONITORING AND
MAINTENANCE**

Time : 3 Hours

Maximum Marks : 70

***Note :** Answer any **seven** questions. All
questions carry equal marks.*

1. Classify various planned and unplanned maintenance strategies and describe central themes of any *two* of them. 10
2. Explain why Condition Based Maintenance (CBM) is called Dynamic Predictive Maintenance (DPM). Describe the four pillars of Dynamic Predictive Maintenance.

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3. Describe the step-by-step general procedure in Reliability-centered Maintenance Modeling and Analysis. 10
4. Distinguish between TQM and TPM. What are the barriers in implementing the TPM ? 10
5. What are breakdown maintenance and emergency maintenance ? How do you differentiate these two ? 10
6. What are FMEA and FMECA ? Explain the applications and merits of FMEA and FMECA. 10
7. When does an organisation opt for contractual maintenance ? Explain with examples. What are its merits and demerits ? 10
8. List out various methods of classifying the inventory of spare parts and explain any *one* of them in detail with illustration. 10

9. What is Standardisation ? Explain its significance in maintenance of spare parts management. 10
- 10.(a) Explain in brief machine life cycle-bath tub curve. 5
- (b) Explain the different costs involved in machine failure analysis. 5

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