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MS-057

**MANAGEMENT PROGRAMME**

**Term-End Examination, 2019**

**MS-057 : MAINTENANCE MANAGEMENT**

**Time : 3 Hours]**

**[Maximum Marks : 100**

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

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1. (a) What do you understand by preventive predictive maintenance ? How can it be implemented in any plant ?  
(b) Discuss the objectives and benefits of maintenance planning and scheduling.
2. (a) Briefly describe the concept of reliability, maintainability and availability. Explain the procedure that might improve the reliability of a system.  
(b) What is TPM ? What are the objectives of TPM ? Discuss the methods, tools and techniques to achieve the TPM.

3. (a) What parameters are used for machine vibration monitoring ? Mention the conditions under which they are used for machine condition monitoring.
- (b) Why should the maintenance function be audited ? Explain the steps involved in a "maintenance audit".
4. (a) Describe the methodology adopted to improve safety and environmental performance through maintenance management.
- (b) What do you understand by Failure Modes and Effects Analysis (FMEA) ? What are the objectives of this process ?
5. (a) When does an organisation opt for contractual maintenance ? Explain with examples. What are its merits and demerits ? On what type of machines do you suggest this policy ?
- (b) Discuss the role of plant manager as safety manager in maintaining safety of the equipment, humans, assets and environment.

6. Write short notes on **any four** of the following :

- (a) Terotechnology
- (b) Breakdown maintenance
- (c) Buffer stock
- (d) Just in time (JIT)
- (e) Time based maintenance
- (f) Zero based budgeting for maintenance

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