

**SUBJECT CODE NO:- P-8070**  
**FACULTY OF ENGINEERING AND TECHNOLOGY**  
**M.E. (Mechanical) Examination May/June 2017**  
**EI-1 Maintenance & Reliability Engg.**  
**(Revised)**

**[Time : Three Hours]**

**[Max Marks :80]**

Please check whether you have got the right question paper.

- N.B
- i) Q.No.1 and Q.No.6 are compulsory.
  - ii) Solve any two questions from remaining in each section.
  - iii) Assume suitable data if required.

**Section A**

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|-----|--|----------|
| Q.1 | Solve any two.<br>a) Explain the reliability management.<br>b) Explain the pattern of failure.<br>c) Explain the reliability for system effectiveness. | 12       |
| Q.2 | Explain the normal, log normal & Gamma distribution.   | 14       |
| Q.3 | Explain the system reliability analysis methods with help of suitable examples.  | 14       |
| Q.4 | a) Explain the exponential distribution.<br>b) Explain the reliability function & Failure density function.  | 07<br>07 |
| Q.5 | a) Explain the design for reliability.<br>b) Explain the reliability improvement.  | 07<br>07 |

**Section-B**

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|------|--|----------|
| Q.6  | Solve any two.<br>a) Explain the basic rules of success.<br>b) Explain the application of terotechnology .<br>c) Explain the Maintenance planning. | 12       |
| Q.7  | a) Explain the maintenance procedure for machine.<br>b) Explain the maintenance planning & requirement for production, Machine & equipments.       | 07<br>07 |
| Q.8  | a) Explain the objective of the maintenance.<br>b) Explain the corrective and preventive maintenance.  | 07<br>07 |
| Q.9  | a) Explain the role of computer based management information system for maintenance.<br>b) Explain the Maintenance Organization.                   | 07<br>07 |
| Q.10 | a) Explain the concept of Life cycle profit.<br>b) Explain the challenges maintenance engineers  | 07<br>07 |