

MAY 2013

**P/ID 77531/PMER/
PMBR3**

Time : Three hours

Maximum : 100 marks

PART A — (5 × 6 = 30 marks)

Answer any FIVE questions.

All questions carry equal marks.

1. Define quality and explain quality control.
2. What are control charts? What are their uses?
3. When the inspection is comprehensive? Brief the features of different methods of inspection.
4. Explain the mechanism of value engineering.
5. What is standard tolerancing? How this level is determined?
6. What are the merits and limitations of motivation techniques?
7. 'Total participation of men and machines facilitates total quality control'. How?
8. What parameters usually determine the international standards?

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

All questions carry equal marks.

9. Both the variables 'quality' and 'cost' have direct relationship. Argue and counter-argue by citing examples.
10. How statistics play a vital role in quality control?
11. Explain the scientific sampling inspection procedure applicable to engineering manufacture.
12. 'Quality appraisal is spontaneous and continuous in nature' - Explain.
13. 'Reliability engineering is reliable only when certain conditions are fulfilled' – Explain those conditions.
14. 'Value analysis and total quality management are the two sides of a coin' - Elaborate.
15. 'Defect diagnosis and preventive maintenance are inter-related'. Establish by giving practical examples.
16. 'HRD is the starting point of TQM' - Discuss.

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PART C — (1 × 20 = 20 marks)

Compulsory.

17. Case Study :

Draft a Total Quality Management Programme for a business unit engaged in rendering services to motor cars.

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