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**Question Paper Code : 57423**



**B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016**

**Sixth Semester**

**Industrial Engineering and Management**

**GE 6757 – TOTAL QUALITY MANAGEMENT**

**(Common to Computer Science and Engineering / Mechatronics Engineering Information Technology / Pharmaceutical Technology)**

**(Regulations 2013)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. How can Quality be quantified ?
2. What do you mean by service quality ?
3. List out any four benefits of Employee involvement.
4. What are the functions of Quality circles ?
5. What are the types of check sheets commonly used ?
6. Write down the various stages of FMEA.
7. What is meant by process capability ?
8. What are the benefits of TPM ?
9. List down the main elements of ISO 14000.
10. Write down the benefits of ISO 9000 certification.

**PART – B (5 × 16 = 80 Marks)**

11. (a) What are the barriers while implementing TQM ? Also explain evolution of Quality.

**OR**

- (b) Discuss Juran's principle of Quality improvement.

12. (a) Discuss how Quality council is structured in (i) University Academic Department and (ii) Manufacturing facility.

**OR**

- (b) (i) Explain the phases of PDSA cycle and its illustration.  
(ii) What is 5s and why does the organization adopt this technique ?

13. (a) Explain any three new management tools.

**OR**

- (b) Perform an FMEA to anticipate various problem faced and method to eliminate the problem of getting up from bed in the morning and going to school.

14. (a) Explain with an example of any three control charts.

**OR**

- (b) Devise a QFD methodology for design and development of cups used in vending machine for dispersing hot and cold beverages.

15. (a) Discuss the need for standardization procedures for quality assurance. Explain the requirements of ISO system to documentation.

**OR**

- (b) What are the requirements, objectives and benefits of ISO 14000 system ?