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10ME758

**Seventh Semester B.E. Degree Examination, Dec.2016/Jan.2017**

**Total Quality Management**

Time: 3 hrs.

Max. Marks: 100

**Note:** Answer any FIVE full questions, selecting atleast TWO questions from each part.

**PART – A**

- 1 a. Define Total Quality Management and discuss briefly the various dimensions of Quality. (10 Marks)  
b. Explain briefly the historical review of quality control. (04 Marks)  
c. With a neat block diagram, briefly explain TQM frame work. (06 Marks)
- 2 a. Define Leadership and briefly explain 12 behaviours or characteristics of a successful quality leader. (13 Marks)  
b. Elaborate the seven basic steps to strategic quality planning. (07 Marks)
- 3 a. Who is a Customer? Classify it. (08 Marks)  
b. With a neat sketch, enumerate how a KANO MODEL helps in translating needs in to requirement. (12 Marks)
- 4 a. Explain Juran's Trilogy and with a neat sketch elaborate chronic waste and sporadic waste of quality control. (10 Marks)  
b. Write short notes on the following :  
i) PDCA cycle                      ii) Kaizen. (10 Marks)

**PART – B**

- 5 a. What is Why Why analysis? Briefly explain how it is used to analyse root cause of a problem on the process, with an example. (08 Marks)  
b. With a neat sketch, explain the team generating creative ideas using an affinity diagram for scrambled ideas. (12 Marks)
- 6 a. Who developed Fish bone diagram? With a neat sketch, explain how cause and effect diagram are used to investigate the bad effect on the right side and root causes on the left of quality characteristics. (10 Marks)  
b. Explain chance cause and assignable cause with a neat diagram. Elaborate control chart for process with control limits. (10 Marks)
- 7 a. List out the problems associated by the organization in making the commitment towards Total Quality. (10 Marks)  
b. Write short notes on the following :  
i) Change Management                      ii) Six sigma. (10 Marks)
- 8 a. What is Concept Development? Explain QFD with a neat sketch using a case study. (12 Marks)  
b. List out the tools used for Design verification and explain any one of it. (08 Marks)

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