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**10ME758**

## Seventh Semester B.E. Degree Examination, Dec.2017/Jan.2018
## Total Quality Management

Time: 3 hrs.                                                                Max. Marks:100

**Note:** *Answer FIVE full questions, selecting*
*at least TWO questions from each part.*

### PART – A

1   a.   Briefly explain the six basic concepts of TQM.                         (10 Marks)
    b.   Write in brief of any two Guru's of TQM                                 (10 Marks)

2   a.   Explain briefly the characteristic of Quality leaders.                 (10 Marks)
    b.   Enumerate the seven steps to strategic planning.                       (10 Marks)

3   a.   Explain briefly the customer perception towards quality.               (10 Marks)
    b.   Discuss any one motivational theory with example.                      (10 Marks)

4   a.   Sketch and explain Juran's trilogy                                     (10 Marks)
    b.   With neat diagram, explain the continuous process improvement cycle.   (10 Marks)

### PART – B

5   a.   Explain briefly Affinity diagram and interrelationship diagram.        (10 Marks)
    b.   Explain briefly Tree diagram and activity network diagram.             (10 Marks)

6   a.   With example, explain briefly pareto diagram and cause and effect diagram.  (10 Marks)
    b.   Explain with examples control chart and histogram.                     (10 Marks)

7   a.   Explain the steps to implement a quality management system.            (10 Marks)
    b.   Explain change in culture to implement TQM.                            (10 Marks)

8   a.   Explain the following :
         i)   Life history curve
         ii)  OC curve
         iii) Mean time to failure
         iv)  Mean time between failure
         v)   Maintainability                                                   (10 Marks)
    b.   A system has four components A, B, C and D with reliability values of 0.98, 0.87, 0.96 and
         0.92 arranged in series, if component B is changed to three parallel components and each
         has the same reliability, then what is the new system reliability?      (10 Marks)

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