10ME758

Seventh Semester B.E. Degree Examination, Dec.2019/Jan.2020
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. Explain six basic approaches to TQM.   (08 Marks)
    b. Define Quality. List the dimensions of quality and explain its meaning.   (06 Marks)
    c. Explain the obstacles in the implementation of TQM.   (06 Marks)

2   a. Discuss the characteristics of highly effective people.   (08 Marks)
    b. Mention the general duties of quality council.   (05 Marks)
    c. Discuss seven steps to strategic planning.   (07 Marks)

3   a. Write a note on customer perception of quality.   (05 Marks)
    b. With a neat sketch, explain the Kano model of translating needs into requirements.
                                                                                      (10 Marks)
    c. Explain Maslow's Hierarchy of needs.   (05 Marks)

4   a. With a neat sketch, explain PDSA cycle.   (06 Marks)
    b. Write a note on Kaizen and mention the benefits of FMEA.   (09 Marks)
    c. Explain Total Productive maintenance.   (05 Marks)

PART - B

5   a. List any 7 Quality Management Tools and explain Process Decision Program Chart (PDPC).
                                                                                      (08 Marks)
    b. Discuss Nominal Group Technique and mention its advantages and disadvantages. (08 Marks)
    c. Write a note on Affinity diagram.   (04 Marks)

6   a. Explain i) Process Flow diagram   ii) Cause and effect diagram.   (08 Marks)
    b. Explain Control charts for variables and control charts for attributes.   (08 Marks)
    c. Write a note on State of Control.   (04 Marks)

7   a. Explain the steps involved in the implementation of Quality Management System.
                                                                                      (10 Marks)
    b. Explain ISO – 9000 series of standards.   (06 Marks)
    c. Write a note on six sigma.   (04 Marks)

8   a. Explain the various signal – to – noise ratios.   (08 Marks)
    b. Write short notes on :
       i)   Design of Experiments.
       ii) Quality loss function.
       iii) Orthogonal arrays.
       iv) Parameter design.
                                                                                      (12 Marks)

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