Roll No.

Total No. of Pages: 2

7E1751

B. Tech. VII - Sem. (Main) Exam., Feb.- March - 2021 OE -I Open Elective-I Mechanical Engineering 7ME6 – 60.2 Quality Management

Time: 2 Hours

[To be converted as per scheme]

Max. Marks: 82

Min. Marks: 29

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Instructions to Candidates:

Attempt all ten questions from Part A, four questions out of seven questions from Part B and two questions out of five from Part C.

Schematic diagrams must be shown wherever necessary. Any data you feel missing may suitably be assumed and stated clearly. Units of quantities used /calculated must be stated clearly.

Use of following supporting material is permitted during examination. (Mentioned in form No. 205)

1. NIL

2. NIL

PART - A

(Answer should be given up to 25 words only)

[10×2=20]

All questions are compulsory

- Q.1 Define inspection and give its objectives.
- Q.2 What is the basic difference between Inspection and Quality Control?
- Q.3 What is JIT production? What are its aims?
- Q.4 Why is a multi-function worker required in JIT?
- Q.5 State the advantages of quality control.
- Q.6 What do you understand by Bench Marking?
- Q.7 What is Leadership?

- Q.8 Discuss the importance and requirement of the inspection department in a manufacturing concern.
- Q.9 What is the role of automation in JIT?
- Q.10 Define sampling distribution. ersahilkagyan.com

PART - B

(Analytical/Problem solving questions)

 $[4 \times 8 = 32]$

Attempt any four questions

- Q.1 Explain the basic elements of JIT.
- Q.2 Discuss the importance of quality control in an industry why is statistical quality control preferred. Explain.
- Q.3 Explain the process of Bench Marking. Is it effective in bringing organization changes?
- Q.4 What is TQM and explain Deming's approach to TQM?
- Q.5 What do you understand by product quality improvement? Explain Taguchi Method.
- Q:6 Explain the secrets and steps towards establishing a successful Quality Circle (QC) program in a firm.
- Q.7 Explain ISO 9000 in detail and also discuss their importance.

PART - C

(Descriptive/Analytical/Problem Solving/Design Questions)

 $[2 \times 15 = 30]$

Attempt any two questions

- Q.1 List out the seven new management tools. Explain them briefly.
- Q.2 Explain the customer perception of quality. Discuss about the dimensions of product and service quality.
- Q.3 What is reliability? Discuss reliability in series and parallel connection systems.
- Q.4 Narrate the process of conducting quality audit in a manufacturing firm and usage of various control charts.
- Q.5 Justify how Six Sigma can be used continuous quality improvement.