PAPER ID-421757

Roll No:

MTECH
(SEM II) THEORY EXAMINATION 2021-22
TOTAL QUALITY MANAGEMENT

Time: 3 Hours   *Total Marks: 70*

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1.   **Attempt *all* questions in brief.**   **2*7 = 14**

a.	Explain Quality circle and its function.
b.	Define continuous process improvement in quality.
c.	Explain Kaizen philosophy.
d.	Explain statistical process control.
e.	List the name of various control charts.
f.	Explain the formula for x bar and R chart.
g.	Explain the Quality function deployment.

SECTION B

2.   **Attempt any *three* of the following:**   **7*3 = 21**

a.	Discuss the different quality cost measurement.
b.	Differentiate between variable and attribute control chart.
c.	Explain the system reliability and their effects.
d.	Illustrate the steps implementing TQM in manufacturing industry.
e.	Explain the features of ISO 9000 quality system.

SECTION C

3.   **Attempt any *one* part of the following:**   **7*1 = 7**

a.	Discuss how the cause and effect (Ishikawa) diagram prepared? Explain with an example.
b.	Explain Deming 14 key points of quality.

4.   **Attempt any *one* part of the following:**   **7*1 = 7**

a.	Discuss the concept of Acceptance sampling plan. Write their benefits.		
b.			

	Time 1	Time 2	Time 3
Observation 1	15.8	16.1	16.0
Observation 2	16.0	16.0	15.9
Observation 3	15.8	15.8	15.9
Observation 4	15.9	15.9	15.8

A quality control inspector at the Cocoa Fizz soft drink company has taken three

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	samples with four observations each of the volume of bottles filled. If the standard deviation of the bottling operation is 0.2 ounces, use the data below to develop control charts with limits of 3 standard deviations for the 16 oz. bottling operation.

5. **Attempt any *one* part of the following:**   7*1 = 7

a.	Illustrate the different failure system. Also explain MTBF and MTTR.
b.	Discuss the role of management in TQM. Also make hierarchy diagram.

6. **Attempt any *one* part of the following:**   7*1 = 7

a.	Illustrate the barriers to TQM implementation? How are they overcome?
b.	Justify the following statement. "Quality is a new competitive weapon." Give examples.

7. **Attempt any *one* part of the following:**   7*1 = 7

a.	Illustrate the steps for registration process of ISO 9000 quality system.
b.	Discuss the concept of Quality assurance and work inspection.