

Unit 5 - Week 3

Course outline

How does an NPTEL online course work?

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Week 1

Week 2

Week 3

● Lecture 11: Management of Quality-II

● Lecture 12: Management of Quality-II

○ Lecture 13: Management of Quality-II

● Lecture 14: Management of Quality-II

● Lecture 15: Management of Quality-II

● Week 3 : Lecture Material

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Assignment 3

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-02-19, 23:59 IST.

1) As per Crosby's philosophy, an organization may evolve through a number of maturity stages. These stages is:

2 points

- a. 5
- b. 4
- c. 3
- d. 2

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

a.

2) Out of the following four probability distributions of quality characteristics, which one is symmetric?

2 points

- a. Poison
- b. Exponential
- c. Weibull
- d. None of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

d.

3) A random sample of 50 observations of the waiting times (in minutes) of the customers before being served in a local post office is shown below:

2 points

2.1	0.5	3.6	1.4	2.0
0.8	0.4	4.2	3.5	2.5
4.8	2.8	1.9	1.2	3.2
1.6	2.5	2.4	1.9	2.0
3.5	5.2	3.1	1.6	1.5
1.9	2.4	2.7	2.1	1.8
4.6	3.8	1.5	4.5	3.9
5.5	2.5	3.8	5.0	4.6
2.1	2.8	1.6	3.8	4.2
3.5	5.2	4.8	3.9	2.6

On constructing the frequency histogram, a number of conclusions can be drawn. Which conclusion among the following is true?

- a. The Mean and the Standard Deviation are 2.906 and 1.327 respectively. And in 80% of the cases waiting time is less than 4 minutes
- b. The Mean and the Standard Deviation are 2.906 and 1.688 respectively. And in 60% of the cases waiting time is less than 4 minutes
- c. The Mean and the Standard Deviation are 1.206 and 1.327 respectively. And in 70% of the cases waiting time is less than 4 minutes
- d. The Mean and the Standard Deviation are 1.206 and 1.688 respectively. And in 50% of the cases waiting time is less than 4 minutes

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

a.

4) The time to failure in hours of an electronic component subjected to an accelerated life test is shown here. Constructing a run chart what conclusion can you draw?

2 points

127	124	121	118
125	123	146	141
131	120	150	145
124	119	137	133
129	128	125	141
121	133	144	150
142	137	158	140
151	124	149	141
160	142	130	151
125	123	122	146

- a. Time to failure seems to decrease at an increasing rate.
- b. Time to failure seems to increase at an increasing rate.
- c. Time to failure seems to increase at a decreasing rate.
- d. Time to failure seems to decrease at a decreasing rate.

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

c.

5) In copper plating operation at a printed circuit board fabrication facility, controller failure data is as follows

2 points

Causes of Controller Downtime	Frequency
Reagent replenish	24
Tubing maintenance	12
Concentration variation	36
Par pump failure	9
Rec pump failure	6

Constructing a Pareto diagram, problems that cause almost 75% of the downtime associated with controller failure are:

- a. Tubing maintenance and Concentration variation
- b. Par pump failure and Reagent replenish
- c. Concentration variation and Reagent replenish
- d. Par pump failure and Rec pump failure

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

c.

6) Juran has highlighted three aspects of Quality Management. These aspects are as follows:

2 points

- a. Quality Control, Quality Assurance and Quality Improvement
- b. Quality Planning, Quality Control and Quality Improvement
- c. Quality Control, Quality Assurance and Total Quality Management
- d. Inspection, Quality Planning and Quality Control

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

b.

7) Benchmarking is an important way of improving quality of a product. Which one among the following prerequisites is a must for successful product benchmarking?

2 points

- a. Will and commitment
- b. Product design knowledge
- c. Design of 'benchmarking' product
- d. All of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

d.

8) ISO-9001 registration process requires meeting two conditions: necessary and sufficient. The necessary condition is satisfied with

2 points

- a. compliance audit
- b. adequacy audit
- c. both to be done simultaneously
- d. any one of the two

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

b.

9) The number of elements in the ISO 9002 standards

2 points

- a. 20
- b. 16
- c. 12
- d. 10

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

b.

10) When design/development and servicing are included in the quality system of an organization, the corresponding ISO standard that is to be opted for is:

2 points

- a. ISO-9001
- b. ISO-9002
- c. ISO-9003
- d. None of the above

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

a.

11) There are three objectives of a Cause-and-Effect diagram. These objectives are

2 points

- a. Quality Control, Quality Assurance, Cause Enumeration
- b. Quality Assurance, and Dispersion Analysis, Cause Enumeration
- c. Dispersion Analysis, Effect Analysis, Cause Enumeration
- d. Cause enumeration, Dispersion Analysis, and Process Analysis

- a.
- b.
- c.
- d.

No, the answer is incorrect.
Score: 0

Accepted Answers:

d.