

Unit 2 - Week - 0

Course outline

How does an NPTEL online course work?

Week - 0

Quiz : Assignment 0

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Assignment 0

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

Due on 2020-01-27, 23:59 IST.

- 1) Quality can be defined in many ways. From the engineering perspective, the quality of a product is defined as:
 - (a) Conformance to specifications.
 - (b) Fitness for use.
 - (c) Satisfaction of needs and wants.
 - (d) Loss to the society.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (b)
- 2) Quality of Design is essential for ensuring:
 - (a) Manufacturing performance.
 - (b) Product performance.
 - (c) Both (a) and (b).
 - (d) None of the above.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
- 3) The main objective of 'total quality management' is:
 - (a) Excellent product performance.
 - (b) Excellent manufacturing performance.
 - (c) Employee empowerment.
 - (d) Application of quality-related tools and techniques.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
- 4) Use of 'quality system standards' in an organization may mean:
 - (a) Performance of the organization is excellent.
 - (b) Performance of the organization is moderate.
 - (c) Management of the organization does not have adequate support and knowledge.
 - (d) Management takes a short-cut to achieve quality.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (d)
- 5) 'Quality is as good as the measuring instrument'. A measuring instrument is assessed by:
 - (a) By its precision.
 - (b) By its accuracy.
 - (c) By its resolution.
 - (d) By its precision, accuracy and resolution.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (d)
- 6) Name two persons, referred to as 'quality guru', who taught Japan quality:
 - (a) Genichi Taguchi and Walter A. Shewhart
 - (b) Walter A. Shewhart and W. Edwards Deming
 - (c) W. Edwards Deming and Joseph M. Juran
 - (d) None of the above.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
- 7) Name two specific quality-related standards that are universally accepted and followed:
 - (a) ANSI/ASQC/Z1.4 and ANSI/ASQC/Z1.9
 - (b) ISO-9001 and ISO-14001
 - (c) Dodge-Romig systems and Handbook-108
 - (d) All of the above.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (a)
- 8) Cite two examples of a 'discrete' random variable:
 - (a) Number of defects on a metal sheet and the length of a shaft.
 - (b) Colour density of television screen and weight of an object.
 - (c) Surface finish of a metal sheet and number of persons waiting at an ATM counter.
 - (d) Number of nonconforming containers and number of persons appearing in NPTEL course examination.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (d)
- 9) Cite two examples of 'continuous' random variable:
 - (a) Amount of butter fat in milk and number of bags for shipment.
 - (b) Thickness of silicon wafers and number of defective items.
 - (c) Sulphur content in a drug and tensile strength in mild steel.
 - (d) None of the above.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
- 10) A product is defined as a 'robust' product when:
 - (a) It performs very good.
 - (b) It can be maintained easily.
 - (c) It never fails.
 - (d) It performs very good in extreme environmental condition.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (d)
- 11) Product development means:
 - (a) Product design.
 - (b) Process design.
 - (c) Manufacturing.
 - (d) All of the above.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (d)
- 12) Inspection and quality control are two important quality-related activities in an organization. Out of the four statements given, two are true. Identify them:
 - (a) Inspection drives quality control.
 - (b) Inspection is an online real-time activity.
 - (c) Quality control is an online real-time activity.
 - (d) Inspection results in detection of defects and defectives.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
 (d)
- 13) Quality planning, quality control, and quality improvement are three main activities of quality department in an organization. Out of these four statements, two are true. Identify them:
 - (a) Quality control is ultimate objective in any quality related project.
 - (b) Quality planning will definitely result in quality improvement.
 - (c) Quality improvement is ultimate goal of any organization.
 - (d) Quality improvement follows quality control.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
 (d)
- 14) Any exercise on quality is basically an exercise on variability reduction. A few measures are used for variability assessment. Identify the correct statement:
 - (a) Range and standard deviation.
 - (b) Range, standard deviation and inter quartile range.
 - (c) Mode, median and standard deviation.
 - (d) Mean and standard deviation.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (b)
- 15) Quality assurance is considered the best possible outcome of any quality-related endeavor. Quality assurance means:
 - (a) Producing products as per the capacity consistently.
 - (b) Producing and inspecting products on a regular basis.
 - (c) Producing consistently the products without inspecting them.
 - (d) Producing products at a very fast rate.

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
- 16) The kinds of problems we deal with in the field of quality design and control may be of
 - (a) Problem under certainty
 - (b) Problem under risk
 - (c) Problem under uncertainty
 - (d) All of the above

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (d)
- 17) Reliability of a component can be improved by several means. Out of the following means mentioned which one is correct?
 - (a) The quality control of the process where the component is manufactured
 - (b) Improvement in the quality of the material with which the component is made
 - (c) By changing the design of the component
 - (d) All of the above

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
- 18) The variability as we find in the distribution of a random variable is due to
 - (a) Assignable or special causes
 - (b) Random or chance Causes
 - (c) External noise factors
 - (d) None of the above

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (b)
- 19) Inferential statistics deals with a topic called
 - (a) Hypothesis testing
 - (b) Distribution of random variables
 - (c) Variance and IQR (Inter Quartile Range)
 - (d) All of the above

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (a)
- 20) Capability of process, say a machine tool, while it manufactures a particular components in multiple units depends on a number of factors. Among the following factors stated, there are two factors contributing to its capability. Identify those
 - (a) State of the process
 - (b) Variability of the process
 - (c) Specifications/standards of the components
 - (d) Actual process spread

(a)
 (b)
 (c)
 (d)

No, the answer is incorrect.
 Score: 0
 Accepted Answers: (c)
 (d)