Assignment - 04

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

Due on 2018-09-12, 23:59 IST.

1) Identify the CORRECT statement about Accepting Sampling

- The purpose of acceptance sampling is to accept or reject product lots (also known as lot disposition), based on a random sample of the product, rather than to estimate the quality of a lot.
- Acceptance sampling plans directly improves quality.
- The nature of sampling is such that acceptance sampling will reject product lots if they don’t match the same the same quality.
- The most cannot be used as an auditing tool because it cannot ensure that the output of a process meets requirements.

No, the answer is incorrect.
Score: 0
Accepted Answers:
The purpose of acceptance sampling is to accept or reject product lots (also known as lot disposition), based on a random sample of the product, rather than to estimate the quality of a lot.

2) Situations where acceptance sampling is likely to be useful

- when testing is destructive.
- when the cost of 100% inspection is extremely high.
- when 100% inspection is not technologically feasible or would require so much calendar time that production scheduling would be seriously impacted.
- when the supplier has an excellent quality history, and some reduction in inspection from 100% is desired, but the supplier’s process capability is sufficiently low as to make no inspection an unsatisfactory alternative.

- I and II
- II, III and IV
- I, III and IV

No, the answer is incorrect.
Score: 0
Accepted Answers:
All of these
if the quality is not really good, is called
- Consumer’s risk
- Producer’s risk
- Operator’s risk
- Owner’s risk

No, the answer is incorrect.
Score: 0
Accepted Answers:
Consumer’s risk

4) In acceptance sampling, when there is a finite probability that the lot may be rejected even if the quality is actually good, is called
- Consumer’s risk
- Producer’s risk
- Operator’s risk
- Owner’s risk

No, the answer is incorrect.
Score: 0
Accepted Answers:
Producer’s risk

5) Which of the following is NOT an important consideration in forming lots for inspection?
- Lots should be homogeneous.
- The probability of accepting a bad lot needs to be more than probability of accepting a good lot.
- Larger lots are preferred over smaller ones.
- Lots should be conformable to materials-handling systems used in both supplier and consumer facilities.

No, the answer is incorrect.
Score: 0
Accepted Answers:
The probability of accepting a bad lot needs to be more than probability of accepting a good lot.

6) OC Curve is typically used to represent the four parameters of a sampling plan. They are:
- Producer’s Risk, Consumer’s Risk and LQL (Limiting Quality Level)
- Acceptable Quality Level (AQL) and Lot Tolerance Percent Defective (LTPD) (or Rejectable Quality Level (RQL)) of the sampling plan
- Producer’s Risk, Consumer’s Risk, Acceptable Quality Level (AQL) and Lot Tolerance Percent Defective (LTPD) (or Rejectable Quality Level (RQL)) of the sampling plan.
- Producer’s Risk and Consumer’s Risk

No, the answer is incorrect.
Score: 0
Accepted Answers:
Producer’s Risk, Consumer’s Risk, Acceptable Quality Level (AQL) and Lot Tolerance Percent Defective (LTPD) (or Rejectable Quality Level (RQL)) of the sampling plan.

7) Upper limit on the percentage of defects a customer is willing to accept (a property of the consumer) is known as _______________________.

1 point
8) Assertion: The principal advantage of the double sampling plan over the single sample plan is that for the same degree of protection (i.e., the same probability of accepting a lot of a given quality), the double sampling plan may have a smaller average sample number (ASN) than that corresponding to the single sampling plan.

Reason: The underlying reason is that the size (n1) of the first sample in the double sampling plan is always smaller than the sample size (n) of an equivalent single sampling plan. Thus, if a decision is taken on the basis of the first sample, ASN will be lower for the double sampling plan or if a decision is taken after the second sample, the ASN will be reduced.

- Reason is the correct explanation for the above Assertion.
- Reason is NOT the correct explanation for the above Assertion.
- The Assertion is incorrect; hence, it is immaterial to justify it with adequate reasons.
- None of these.

No, the answer is incorrect.
Score: 0
Accepted Answers:
- Reason is the correct explanation for the above Assertion.

9) In double sampling plan, if the numbers of defects are in between the two cut off numbers \( C_1 \) and \( C_2 \) then

- Accept the lot
- Reject the lot
- Take another sample
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
- Take another sample

10) In sequential sampling plan

- Maximum 02 samples are taken
- Maximum 03 samples are taken
- Maximum 04 samples are taken
- Samples are accumulated at each stage till the decision of accepting or rejecting a lot is taken

No, the answer is incorrect.
Score: 0
Accepted Answers:
- Samples are accumulated at each stage till the decision of accepting or rejecting a lot is taken