Assignment - 06

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

Due on 2018-09-19, 23:59 IST.

1) Which of the following control charts should be used first in an actual statistical quality control program?  

- x-bar chart  
- c chart  
- x chart  
- s chart

No, the answer is incorrect.
Score: 0
Accepted Answers:
s chart

2) Which Chart is necessary in the following situations:

I. Where automation allows inspection of each unit, so rational subgrouping has less benefit.
II. Where production is slow so that waiting for enough samples to make a rational subgroup unacceptably delays monitoring.
III. For processes that produce homogeneous batches (e.g., chemical) where repeat measurements vary primarily because of measurement error.

- S-square Chart  
- Moving Range Control Chart  
- S Chart  
- X-bar Chart

No, the answer is incorrect.
Score: 0
Accepted Answers:
Moving Range Control Chart

Use the following DATA to answer questions 03 - 05:
A manufacturer of light bulbs randomly samples 40 bulbs at the end of each shift to test for defective bulbs. The number of defectives in 12 shifts is as follows: 3, 5, 2, 0, 4, 5, 1, 2, 8, 12, 0, and 2.

Compute p-bar for the p chart.
44
3.75
0.0917
None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
0.0917

4) Compute the standard error of p-bar.  

0.0456
0.0841
0.09375
None of These

No, the answer is incorrect.
Score: 0
Accepted Answers:
0.0456

5) Based on the p chart, is this process in control?  

- No, two sample proportions are outside the limits
- No, exactly one sample proportion is outside the limits
- Yes, it is in control
- Insufficient information to determine

No, the answer is incorrect.
Score: 0
Accepted Answers:
No, exactly one sample proportion is outside the limits

6) Which control chart makes use of the Poisson distribution?  

- x-bar chart
- s chart
- R chart
- c chart

No, the answer is incorrect.
Score: 0
Accepted Answers:
c chart

7) One type of control chart for attributes is a  

- x-bar chart.
- p-chart.
- CPK chart.
- R-chart.

No, the answer is incorrect.
Score: 0
8) Twenty samples of size 100 are taken. The total number of defective items is 75. What is the UCL of the 3-sigma (z = 3) p-chart?

- 0.165
- 0.094
- 0.793
- 0.0375

**No, the answer is incorrect.**
**Score: 0**

Accepted Answers:
- 0.094

9) A customer service hotline has received an average of 7 complaints a day for the last 25 days. What type of control chart should be used to monitor this hotline?

- c-chart
- p-chart
- X-bar chart
- R-chart

**No, the answer is incorrect.**
**Score: 0**

Accepted Answers:
- c-chart

10) For the last 30 days, the number of mistakes on the daily report has averaged 4.5. What would the UCL be if a 3-sigma c-chart was constructed?

- 7.5
- 10.86
- 18
- 2.12

**No, the answer is incorrect.**
**Score: 0**

Accepted Answers:
- 10.86