LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION –**STATISTICS**

SIXTH SEMESTER – **APRIL 2018**

ST 6608– STATISTICAL QUALITY CONTROL

Date: 21-04-2018 Dept. No. Max. : 100 Marks

Time: 09:00-12:00

SECTION - A

Answer ALL the questions: (10x2=20 Marks)

1. What is meant by total quality management?
2. Define quality of design and conformance.
3. When do you use Histogram?
4. Write a note on qq plot.
5. Specify the purpose of the p chart.
6. Write down the control limits of c chart.
7. Define CUSUM chart.
8. Define process capability ratio.
9. Define double sampling plan.
10. Define consumer's and producer's risk.

SECTION - B

Answer any FIVE questions: (5x8=40 Marks)

11. Explain the management aspects of quality improvement.
12. Write any eight Deming's points for implementing quality and productivity improvement.
13. Write short notes on stem and leaf plot.
14. Explain the need for management of product quality.
15. Explain the interpretation of X bar and R chart.
16. Explain the single sampling plan for attributes.
17. Explain in detail about acceptance sampling plan.
18. Describe the procedure for construction of X bar and R chart.

SECTION - C

Answer any TWO questions: (2x20=40 Marks)

19. a. Explain the construction of u chart with variable sample size.
    b. What are the benefits of statistical quality control?
20. a. Discuss about Box Plot technique with an example.
    b. Explain in detail about the procedure of c chart and write down the applications of c chart
21. a. Distinguish between shewhart control charts and cusum control.
    b. Write down the merits and demerits of acceptance sampling.
22. a. Explain the sequential sampling plan.
    b. Explain the construction of p chart using
        (i) Variable width control limits
        (ii) control limits based on an average sample size.

****