PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2017
(Fifth Semester)

Branch - **STATISTICS**

STATISTICAL QUALITY CONTROL -1

Time : Three Hours   Maximum : 75 Marks

SECTION-A (20 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks   (1 0 x 2 = 20)

1   Define statistical quality control.
2   What is meant by product control?
3   What are the sampling inspection plans for attributes?
4   What is meant by single sampling plan?
5   What are the two types of variable sampling procedures?
6   What is meant by known sigma variables sampling plans?
7   What are sequential sampling plans?
8   Define ASN under sequential sampling plans.
9   Define just - in - time production.
10   What is six signma?

SECTION - B (25 Marks)
Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a   Explain the techniques of SQC.
                              OR
    b W'rite short notes on process capability.

12 a Explain producer's risk and consumer's risk.
                              OR
    b What are the characteristics of OC- Curve?

13 a List out the advantages of acceptance sampling by variables.
                              OR
    b Explain the different types of acceptance sampling by variables.

14 a Explain the design of item by item sequential sampling plan.
                              OR
    b Explain OC of sequential sampling plan.

15 a Explain the goals of JIT.
                              OR
    b Explain the various elements of JIT.

SECTION - C (30 Marks)
Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 1 0 = 30)

16   Explain the benefits of statistical quality control.

17   Explain the procedure of double sampling plan.

18   Explain known sigma variable sampling plans.

19   Explain sequential probability ratio test.

20   Explain in details Kanban system.

Z-Z-Z   END