

**PSG COLLEGE OF ARTS & SCIENCE**  
(AUTONOMOUS)  
**BSc DEGREE EXAMINATION MAY 2018**  
(Fifth Semester)

Branch - **STATISTICS**

**STATISTICAL QUALITY CONTROL - I**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10 x 2 = 20)

- 1 What are the factors of Quality control?
- 2 What is meant by Process control?
- 3 Define Producer's risk.
- 4 Define Average Sample Number(ASN.
- 5 What are the types of sampling plan by Variables?
- 6 What is meant by variable sampling plan?
- 7 What is Sequential Sampling Plan?
- 8 Define OC function of sequential sampling plan.
- 9 What are components of JIT?
- 10 What are the two types of Kanban system?

**SECTION - B (25 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a List out the benefits of Statistical Quality Control.  
OR  
b Explain the major parts of a Control chart.
- 12 a Describe about Single sampling plan.  
OR  
b Define ASN and ATI of double sampling plan.
- 13a What are the advantages of variable sampling plan?  
OR  
b What are the limitations of acceptance sampling by variables?
- 14 a Obtain the ASN function of sequential sampling plan.  
OR  
b Write short notes on Sequential sampling plan.
- 15 a Explain the characteristics of JIT.  
OR  
b List out the benefits of JIT.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Explain the importance of Statistical methods in industrial research.
- 17 Explain Double Sampling Plan.
- 18 Explain know sigma variables sampling plan.
- 19 Describe the operating characteristic of sequential sampling plan.
- 20 Explain the various components of JIT.