PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Sixth Semester)

Branch - STATISTICS

STATISTICAL QUALITY CONTROL - II

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 Total Quality Management.
2   Write the basic elements of total quality.
3   What are the two types of Control Charts?
4   Define Statistical process control.
5   Write the control limits of 'P' chart.
6   What is meant by attribute control chart?
7   What is process capability?
8   Write the statistical measures of process capability.
9   What do you mean by Hazard rate?
10   Define DFR.

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

11 a Briefly explain the evolution of total quality.
                        OR
    b Explain the various needs for quality improvement.

12 a Explain the concept of statistical process control in brief.
                        OR
    b Explain the procedure of construction of 'o' chart.

13 a Compare attribute and variable control chart techniques.
                        OR
    b Ten pieces of cloth out of different rolls of equal length contained the
        following number of defects:
        3,0,2,8,4,2,1,3,7,1.
        Construct 'C' chart and comment the state of statistical control.

14 a Write a brief note on various tools used for improving the quality.
                        OR
    b Explain the concept of process capability index.

15 a Define reliability. Explain its various needs.
                        OR
    ' b Write a brief note on IFR and DFR distributions.

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

16   Write a detailed note on various models associated with total quality
       management(TQM).

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