TDC Odd Semester Exam., 2020
held in July, 2021

STATISTICS

(Pass)

(5th Semester)

Course No. : STSP–501

(Applied Statistics—II)

Full Marks : 35
Pass Marks : 12

Time : 2 hours

The figures in the margin indicate full marks
for the questions

Answer **five** questions, selecting **one**
from each Unit

UNIT—I

1. *(a)* Define the terms 'process control' and 'product control'. 3

   (b) Write the criterion for detecting lack of control in $\bar{X}$ and R charts. 4

(2)

2. *(a)* Write the limitations for control chart for variables. 2

   (b) Define the control chart for number of defects per unit. 3

   (c) Give the interpretation of p-chart. 2

UNIT—II

3. *(a)* What do you understand by acceptance sampling procedure? 3

   (b) Describe the sampling inspection plan. 4

4. *(a)* Distinguish between producer's risk and consumer's risk. 3

   (b) What is average sample number (ASN)? Why is it calculated? 2+1=3

   (c) Under what circumstance would you advocate the use of an AOQL sampling plan? 1

UNIT—III

5. *(a)* Describe the methods of obtaining vital statistics. 3

   (b) Explain the difference between crude death rate and standardised death rate. 4

(3)

6. *(a)* Explain why the mortality situations of two places should not be compared on the basis of 'crude death rates'. 3

(b) Define the following : 4

    (i) Gross reproduction rate

    (ii) Net reproduction rate

UNIT—IV

7. *(a)* Define the following : 4

    (i) Life table

    (ii) Complete life table

    (iii) Abridged life table

    (iv) Radix of a life table

(b) Mention the uses of a life table. 3

8. *(a)* Explain the structure of a complete life table. 3

(b) Why is an abridged life table prepared? Enumerate the columns of an abridged life table. 2+2=4

UNIT—V

9. Discuss the methods of collection of official statistics in India. 7

(4)

10. Write notes on the following : 3½+3½=7

(a) National Statistical Commission (NSC)

(b) Central Statistical Organization (CSO)

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