(i)	Printed Pag	es:3	Roll No								
(ii)	Questions	: 9	Sub. Code:	4	6	2	9	1			
			Exam. Code:		1	3	0	5			

B.Voc. (Retail Management) 5th Semester (2124)

CRITICAL THINKING AND ELEMENTARY STATISTICS

(Common for all B.Voc.)

Paper: GEN-501

Time Allowed: Three Hours] [Maximum Marks: 80

Note: — Attempt FIVE questions in all, including Question No. 1

(which is compulsory) and selecting ONE question from each Unit.

- 1. Attempt any four from the following:
 - (a) Define Statistics in singular and plural sense.
 - (b) Rounding of data.
 - (c) What do you mean by the measure of central tendency?
 State its purpose.
 - (d) Explain briefly components of Time Series.
 - (e) What is meant by Mean Deviation? What are the various formulae to calculate Mean Deviation?
 - (f) What are the various types of Index Number?

 $4 \times 4 = 16$

Turn over

UNIT-I

How primary data is collected through Direct Personal Investigation and Local correspondents? Discuss their merits and demerits.

16

 What are the various types of Statistical diagrams? Discuss in detail.

UNIT-II

4. How is a frequency polygon different from a frequency curve?
Draw the two diagrams taking an imaginary set of data. 16

5. <u>Calculate Mode from the following:</u>

Size	4-8	8-12	12-16	16-20	20-24	24-28	28-32	32-36	36-40
Frequency		12	16	14	10	8	10	5	4

16

UNIT-III

6. Calculate coefficient of variation of the following data:

X (More than) 0 10 20 30 40 50 60 70 No. of Students 150 140 100 80 80 70 30 14				the following data.						
No. of Students 150 140 100 80 80 70 80	X (More than)	0	10	20	30	40	50	60	70	80
130 140 100 80 70 30 14	No. of Students	150	140	100	80	80	70	30	14	0

16

7. Fit a straight line trend by the method of least squares. Estimate the value for the years 1997 and 1999.

Year	1990	1991	1992	1993	1994	1995	1996
Production			133	135	140	141	143

16

UNIT-IV

8. What is meant by Index number ? Point out its utility. What points should be taken into consideration in the construction of Index Number ?

 Calculate Fisher's Ideal Index Number from the following data and show that it satisfies Time Reversal Test.

Commodity		Year	Current Year			
	Price	Quantity	Price	Quantity		
A	6	50	10	56		
В	2	100	2	120		
C	4	60	6	60		
D	10	30	12	24		
Е	8	40	12	36		