Roll No. $\square$

Total No. of Questions: 07
Total No. of Pages: 02
B.COM(Sem.2)

BUSINESS STATISTICS
Subject Code: BCOP-204
Paper ID: B-1120
Time: 3 Hrs.

Max. Marks: 60

## INSTRUCTIONS TO CANDIDATES:

1. Section $A$ is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. Section B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

## SECTION A

1. Write short notes on:
a) Statistical units
b) Raw data
c) Parts of a table
d) Relation between mean Median\& Mode
e) Bowley's Coefficient of Skewness
f) Low Degree of correlation
g) Regression Equations
h) Harmonic mean
i) Secular trend
j) Seasonal variations

## SECTION B

2. "Statistics is a method of decision making in the face of uncertainty on the basis of numerical data and calculated risks" Comment.
3. Calculate the made from the following

Marks
No. of student
Below 10 $\qquad$ 4
Below 20 $\qquad$ 6
Below 30 $\qquad$ 24
Below 40 $\qquad$
Below 50 $\qquad$ 67
Below 60 $\qquad$
Below 70 $\qquad$
Below 80 $\qquad$
Below 90 $\qquad$ 100
4. From the prices $x$ and $y$ of shares A\& B respectively given below, state which share is more stable in value

Price of share A(x)
55
Price of share $B(y)$
54 $\qquad$ 107
52 105
53 $\qquad$ 105
56 $\qquad$ 106
58 $\qquad$ 107
52 104
50 $\qquad$ 103
51 $\qquad$ 104
49 $\qquad$ 101
5. a) Define Correlation. Explain various types of correlation with suitable e.g.
b) Draw a scatter diagram from the data and interpret the results

| $\mathbf{x}$ | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{y}$ | 32 | 20 | 24 | 36 | 40 | 28 | 38 | 44 |

6. From the following data obtain two regression equations

| Sales | purchases |
| :--- | ---: |
| 91 | 71 |
| 97 | 75 |
| 108 | 69 |
| 121 | 97 |
| 67 | 70 |
| $124 \longrightarrow$ | 91 |
| 51 | 39 |
| 73 | 61 |
| 111 | 80 |
| 57 | 47 |

7. What is a time series analysis and what is its main component. Give illustrations for each of them.
