## Roll No

Total No of pg: 3
May-2014

## B.Com (Professional )2014(Sem -3) <br> Business Statistic Subject code :BCOP 204 <br> Paper ID(B1120)

## Time: 3Hrs.

## Max marks: 60

## Instructions to Candidates:

(I)All questions of Section-A are compulsory Each question carry two marks. (II)Attempt any four questions from Section-B Each question carry ten marks.

## Section- A

$(10 \times 2=20)$
(Q1)(a) Distinguish between primary dada and secondary data
(b) What is an Ogive? How it is constructed.
(c) Find out median from the following $5,7,9,12,10,8,7,15,21$.
(d) If the regression coefficients of X on Y is $-1 / 6$ and that of Y on X is $-3 / 2$, find the value of correlation coefficient between X and Y
(e) Write Components of Time Series.
(g) Given sum of squares of items $=2430$
$\mathrm{X}=7$ and $\mathrm{N}=12$ Find the coefficient of variation.
(h) What is the difference between correlation and regression?
(i) Given to regression equation $8 \mathrm{X}-10 \mathrm{Y}+66=0$ and $40 \mathrm{X}-18 \mathrm{Y}=214$ Find $\overline{\mathrm{X}}$ and $\overline{\mathrm{Y}}$
(j) Calculate coefficient of correlation when Covariance of X and Y is 488 and Variance of X is 824 and Variance of Y is 325.

## Section-B

Q2. From the following data calculate coefficient of correlation between the age of Students and their playing habits.

Age(year) $\quad 15, \quad 16,17,18, \quad 19,20$.
No of Students 250, $200150,120,100,80$.
Regular players 200, 150, 90, 48, *30, 12.
Q3. Fit a straight give trend to the following data:

| Year | 1971 | 1972 | 1973 | 1974 | 1975 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| (production | 20 | 24 | 16 | 20 | 28 |
| In 600 tones) |  |  |  |  |  |

Estimate the production for the year 1977
Q4 From the data given below find
(a) Two regression equahans (b) The most Likely marks in statistics ,When marks in Economics are 30 (c) Also find coefficient of correlation between the two.

Marks in Economics25 283532313629383432
Marks in Statistics 43464941363231303339
Q5. The median and mode of the following wage distribution are known to be Rs. 33.5 and Rs. 34 respectively. Three frequency values from the table are however missing. Find out the missing frequencies when sum of frequencies is 230.

Wages(Rs.) $\quad 0-10,10-20,20-30,30-40,40-50,50-60,60-70$

No of parsons 4, 16, ---------, ----------, -------------, 64
Q6 Give the definition of statistics and discuss is scope and limitations.

Q7 (a) Calculate Bow ley's coefficient of Shawnees from the following data:

Marks (below) 10, 20, 30, 40, 50, 60, No of students $10,30,60,110,150,180$
(b) Cellulite S D From the flowing


Marks (below) 20406080100 )
No of Students $8 \quad 20 \quad 50,7080$

