



K17U 1070

Reg. No. : .....

Name : .....

**II Semester B.Com. Degree (CBCSS – Reg./Supple./Imp.)**  
**Examination, May 2017**  
**COMPLEMENTARY COURSE IN COMMERCE**  
**2C02 COM : Quantitative Techniques for Business Decisions**  
**(2014 Admn. Onwards)**

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions. **Each** carries  $\frac{1}{2}$  mark.

1. \_\_\_\_\_ are statistical devices used for presenting frequency distribution.
2. A frequency distribution when cumulated, we get \_\_\_\_\_ distribution.
3. The difference between the highest and the lowest values in a series is  
a) Range                      b) Mean                      c) Median                      d) Mode
4. It is a mathematical measure of the average relationship between two or more variables in terms of the original units of the data  
a) Regression analysis                      b) Regression coefficient  
c) Regression equation                      d) Regression line                      (4x $\frac{1}{2}$ =2)

PART – B

Answer **four** questions. **Each** carries **one** mark.

5. What is correlation coefficient ?
6. What do you mean by elasticity ?
7. What is median ?
8. Explain time series analysis.
9. What is ogives ?
10. Define probability.                      (4x1=4)

P.T.O.



## PART – C

Answer **any six** questions. **Not** exceeding **one** page. **Each** carries **three** marks.

11. Write a short note on Baye's theorem in probability estimation.
12. What is coefficient of variation ?
13. Differentiate between census and sample.
14. Explain :
  - a) Bernoulli Process
  - b) Bar Chart
  - c) Histogram
15. Find the elasticity of demand with respect to the demand function,  $X = 8/P^{3/2}$ .
16. Calculate the arithmetic mean of the daily incomes of 5 families Rs : 10, 90, 85, 103, 11.
17. Find the coefficient of correlation between X and Y.

<b>X</b>	2	3	4	5	6	7	8
<b>Y</b>	4	5	6	8	9	7	10

18. If 3% of electric bulb manufactured by a company is defective, find the probability that in a sample of 100 bulbs, exactly 5 bulbs are defective. (6×3=18)

## PART – D

Answer **any two** questions. **Each** carries **eight** marks.

19. Compute the coefficient of correlation between heights and weights of ten persons and comment.

<b>Heights (inches)</b>	62	72	78	58	65	70	66	63	60	72
<b>Weights (kgs)</b>	50	65	63	50	54	60	61	55	54	65

20.

<b>Year</b>	1	2	3	4	5	6	7	8	9	10
<b>Country A</b>	96	74	68	50	99	172	245	302	232	345
<b>Country B</b>	254	231	201	172	189	187	166	203	200	202

Evaluate the trend in two times series by the method of moving averages.

21. The number of calories in a salad on the lunch menu is normally distributed with mean 200 and standard deviation 5. Find the probability that the salad you select will contain a) more than 208 calories b) Between 190 and 200 calories. (2×8=16)