

FOURTH SEMESTER B.Com. (U.G.) DEGREE EXAMINATION, MARCH 2013

(CCSS)

BC4 C04—QUANTITATIVE TECHNIQUES FOR BUSINESS

Time : Three Hours

Maximum : 30 Weightage

Part A

This part contains three bunches of questions carrying equal weightage.

Each bunch has four questions.

Answer all twelve questions.

A. Fill in the blanks :

- 1 In the study of relationship between variables, if there are only two variables, the correlation is said to be _____.
- 2 Rank correlation method is used to study the correlation between _____.
- 3 The quantitative expression of likelihood of an event is termed as _____.
- 4 Poisson distribution is a _____ probability distribution.

B. Choose the correct answer from the bracket :

- 5 If two events are A and B ; then A and B is written as :

(a) $A \cup B$.

(b) A/B .

(c) $A \cap B$.

(d) $\bar{A} \cap \bar{B}$.

- 6 Height of the Normal curve is maximum at the point of :

(a) Standard deviation.

(b) Mean.

(c) First Quartile.

(d) Third Quartile.

- 7 Which of the following is an example of Non-parametric test ?

(a) Z test.

(b) 't' test.

(c) F test.

(d) χ^2 test.

- 8 Two events are said to be mutually exclusive when :

(a) Both of them can occur.

(b) Only one can occur.

(c) None can occur.

(d) None of these.

Turn over

C. Answer in *one word* :

9. The Standard Deviation of a sampling distribution is called as :
10. Sign test is an example for :
11. The only parameter of a Poisson distribution is :
12. The % Area under Normal curve covered by Mean ± 1.96 Standard deviation is :
(12 \times $\frac{1}{4}$ = 3 weightage)

Part B

Answer all **nine** questions in *one or two sentences each*.
Each question carries a *weightage of 1*.

13. State any two uses of 't' distribution.
14. List two features of Binomial distribution.
15. When are two events called independent ?
16. What is ANOVA ?
17. What are the two Errors in hypothesis testing.
18. Define Poisson distribution.
19. Distinguish between Normal distribution and Standard Normal distribution.
20. What is a hypothesis ? Give one example.
21. Distinguish between Simple Correlation and Multiple Correlation.

(9 \times 1 = 9 weightage)

Part C

Answer any **five** questions.
Each question carries a *weightage of 2*.

22. What are the properties of a Normal curve ?
23. The data given below relates to price and quantity supplied of a commodity over a period of 5 years.

Price (in Rs.)	:	6	7	5	9	8
Supply (in tons)	:	9	8	10	7	6

Calculate Pearson's Correlation Coefficient.

24. The odds against A solving a problem in statistics are 8 to 6 and odds in favour of B solving same problem are 14 to 16. What is the probability that (a) The problem is solved ; (b) Problem is not solved.

