(FOR THE CANDIDATES ADMITTED

DURING THE ACADEMIC YEAR 2023 ONLY)

23UCC4A1

REG.NO. :

N.G.M.COLLEGE (AUTONOMOUS) : POLLACHI
END-OF-SEMESTER EXAMINATIONS : MAY - 2025

B.Com.-C.A   **MAXIMUM MARKS: 75**

SEMESTER-IV   **TIME : 3 Hours**

PART-III

BUSINESS STATISTICS

SECTION -A (10X1=10 Marks)

ANSWER THE FOLLOWING QUESTION (MCQ)

MULTIPLE CHOICE QUESTIONS.   **K1**

1. The origin if the word statistics has been traced to _____.
   (a) status   (b) statistique   (c) statistik   (d) all of these

2. Which is suitable to find the average changes in ratios and percentages?
   (a) A.M   (b) G.M   (c) H.M   (d) none of these

3. Identify inter quartile range_____.
   (a) Q_3-Q_1 (b) $(Q_3-Q_1)/2$ (c) $(Q_3-Q_1)/(Q_{3+}Q_1)$ (d) none of the above

4. The coefficient of correlation is independent of _____.
   (a) change of origin   (b) change of scale   (c) both,(a) and (b)   (d) none of these

5. The coefficient of correlation was introduced by_____.
   (a) Fisher   (b)Bowley   (c) Spearman   (d) Karl-Pearson

ANSWER THE FOLLOWING IN ONE OR TWO SENTENCES.   **K2**
6. Write any two characteristics of Statistics.
7. Define: Median
8. When the Range is used?
9. What is Linear Correlation?
10. State the meaning of Regression.

SECTION- B (5X5=25 Marks)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTION.   **K3**

11.(a)   Describe the scope of statistics.

(OR)

    (b)   What are the limitations of statistics?

12.(a)   Calculate harmonic mean.

Marks	10	20	30	40	50
No. of Students	4	5	8	2	1

(OR)

    (b) Calculate the median from the following data.

Marks	50	30	20	10	5
No. of Students	7	9	18	4	2

13.(a) Calculate quartile deviation and its co-efficient from the following data.

Roll No	1	2	3	4	5	6	7
Marks	20	30	12	15	35	40	50

(OR)

(b) Show how combined standard deviation is calculated?

14. (a) Interpret Simple, Partial and Multiple correlation with an example.

(OR)

(b) Assess "Whether Karl Pearson's correlation co-efficient is the most popular one?

15. (a) Compare Correlation with Regression.

(OR)

(b) List the uses of Regression.

SECTION- C **(5X8=40 Marks)**

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTION. K4 & K5

16. (a) Find the mean value from the following data.

Class intervals	0-9	10-19	20-29	30-39	40-49	50-59
Frequency	2	15	10	8	3	2

(OR)

(b) Calculate arithmetic mean by direct method.

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	5	10	25	30	20	10

17.(a) Calculate median from the following:

Mid Value	115	125	135	145	155	165	175
Frequency	7	25	40	55	14	35	50

(OR)

(b) Calculate mode.

Marks	30-40	40-50	50-60	60-70	70-80	80-90
No. of Students	3	8	9	14	4	2

18. (a) Compute quartile deviation and its co-efficient from the following data.

Class intervals	10-20	20-30	30-40	40-50	50-60	60-70	70-80
Frequency	12	19	5	10	9	6	6

(OR)

(c) Calculate standard deviation from the following data.

Wages (in Rs.)	75	80	85	90	95	100
No. of Workers	3	7	18	12	6	4

19.(a) Calculate Karl Pearson's co-efficient of correlation between the height and weight from the

data given below:

Height (inches)	62	64	67	63	65	66	70
Weight (lbs)	128	124	130	128	125	129	132

(OR)

(b) Two Judges in a beauty context gave the following ranks. Compute rank correlation between
the two.

Judge A	8	7	6	3	2	1	5	4
Judge B	7	5	4	1	3	2	6	8

20. (a) From the following data, determine the regression equations X on Y and Y on X by normal
equations.

X	6	2	10	4	8
Y	9	11	5	8	7

Or

(b) Calculate two regression equations from the following data.

X	10	12	13	12	16	15
Y	40	38	43	45	37	43

****

ETHICAL PAPER