



25804957

QP CODE: 25804957

Reg No :

Name :

I.M.C.A DEGREE EXAMINATION, NOVEMBER 2025

First Semester

Faculty of Technology and Applied Sciences

I M C A

CORE - IMCA1C03 - STATISTICS

2020 ADMISSION ONWARDS

003F757C

Time: 3 Hours

Maximum: 75 Marks

Part A

*Answer any **ten** questions*

*Each question carries **3** marks*

1. Distinguish between primary and secondary data.
2. What are objectives of tabulation?
3. What is mean by indirect personal investigation?
4. What are general rules for constructing diagrams?
5. Explain three dimensional diagrams.
6. Explain pie diagrams.
7. Find the geometric mean of 57,87,53,73,81.
8. Find mean deviation from mean 25,63,85,75,62,70,83,28,30,12.
9. What are positive and negative skewnes?
10. What is central moments?
11. Exaplin Linear and non linear correlation.
12. Define Line of best Fit.

(10×3=30 marks)





Part B

Answer *all* questions

Each question carries **9** marks

13. a) What are the uses of statistics in different areas?

OR

b) Explain classification and tabulation of data.

14. a) Explain dimensional diagrams.

OR

b) Explain different types of graphs.

15. a) Find mean and median from the following data.

Marks	0 - 10	0 -20	0 -30	0 - 40	0 - 50	0 -60	0 - 70
No. of students	3	13	28	48	60	67	7

OR

b) Calculate the standard deviation of the following two series and state which one is more variable.

Marks	No.of Students Section A	No.of students Section B
20 -30	5	7
30 - 40	10	15
40 -50	25	30
50 -60	5	15
60 -70	5	8

16. a) Calculate Bowley's coefficient of skewness for the following data.





Size	2-5	5-8	8-11	11-14	14-17
Frequency	2	5	9	12	2

OR

- b) Find out measure of skewness and kurtosis of the data given below.

Income	20 - 40	40 - 60	60 - 80	80 - 100
No. of persons	2	4	3	1

17. a) Find the coefficient of correlation between x and y and interpret the result.

X	1.2	1.1	1.9	1.8	1.0	0.9
Y	15	10	20	10	10	5

OR

- b) For 17 observations on price (x) and supply (y), the following data were obtained in appropriate units. $\sum x = 544$, $\sum x^2 = 19040$, $\sum y = 244$, $\sum y^2 = 3773$, $\sum xy = 8413$, obtain the equations of the two regression lines. what is the supply when price is Rs 35?

(5×9=45 marks)

