

Roll.No.

23UBCAT2002

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

B.Com. CS - END SEMESTER EXAMINATIONS - NOVEMBER 2025
SEMESTER - II

23UBCAT2002 - Business Statistics

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Explain the different types of diagrams.
2. Calculate the mean, median and mode for the following data.

x	10	20	30	40	50	60
f	5	18	20	10	6	1

3. Find the mean deviation about mean for the following data.

x	2	3	4	5	6	7
f	1	5	8	4	2	1

4. Calculate the rank correlation for the following data.

x	1	2	3	4	5	6	7	8	9	10	11	12
y	12	8	6	10	3	5	4	7	8	2	11	5

5. Distinguish between correlation and regression.
6. Calculate the 5 yearly moving averages:

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019
Production	87	67	92	86	112	101	114	107	121

7. Construct an index number for 2006 taking 2005 as base from the following data:

Commodity	A	B	C	D
Price in 2005	80	50	90	30
Price in 2006	95	60	100	45

8. Convert the following Fixed Base Index (F.B.I) into Chain Base Index Numbers (C.B.I).

Year	1969	1970	1971	1972	1973
F.B.I	80	88	105	95	133

Contd...

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Explain the various methods of collecting primary data.

10. Calculate mean, median and mode for the following data

CI	25-35	35-45	45-55	55-65	65-75	75-85
f	39	51	56	78	50	42

11. Find the two regression lines.

x	57	58	59	59	60	61	62	64
y	77	78	75	78	82	82	79	81

12. Fit a straight line by the method of least squares for the following data. Also estimate the profit for the year 2012.

Year	2003	2004	2005	2006	2007	2008	2009	2010
Profit (Rs. in'000)	38	10	65	72	69	60	87	35

13. Calculate Laspeyre's, Paasche's and Fisher's price index numbers for the following data.

Commodity	2006		2007	
	Price	Qty	Price	Qty
A	20	15	30	10
B	30	18	40	15
C	10	20	45	10
D	15	25	25	5
