

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.(BIM) END SEMESTER EXAMINATIONS NOVEMBER-2022

SEMESTER - I

21UBBAT1001 - Business Statistics

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

1. What are the features & characteristics of Statistics?
2. Describe the methods of collecting data.
3. Calculate Mean from the following:

Marks	10	20	30	40	50	60
No. of Students	5	6	10	8	5	6

4. Find out the value of Quartile deviation from the following data:

Roll No:	1	2	3	4	5	6	7
Marks:	20	28	40	12	30	15	50

5. Calculate Spearman's Rank Correlation co-efficient.

Rank – Profits	1	2	3	4	5	6	7	8
Rank – Working Capital	4	5	7	8	1	2	3	6

6. What are the causes of variation in Time series data?
7. Fit a straight line trend to the following data:

Year	1990	1991	1992	1993	1994
Sales	20	25	28	30	27

8. What are the problems in construction of Index numbers?

Section B

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

9. What is meant by Diagrams? Draw Bar Diagram, Pie Diagram, Pictogram.
10. Calculate Mean, Median and mode from the following:

Value	0-4	5-9	10-19	20-29	30-39	40-49	50-59	60-69
Frequency	328	350	720	664	598	524	378	244

Contd...

11. The Rankings of 10 students are as follows (in two subjects):

Subject A	3	5	8	4	7	10	2	1	6	9
Subject B	6	4	9	8	1	2	3	10	5	7

Find Co-efficient of Rank Correlation.

12. Calculate the Seasonal Variation indices for the following time series by the simple average method:

Month	Year		
	2019	2020	2021
Jan	12	20	22
Feb	18	23	28
March	20	22	30
April	21	21	24
May	25	25	25
June	24	27	27
July	30	28	23
Aug	28	31	25
Sep	29	31	30
Oct	31	35	33
Nov	33	32	31
Dec	33	31	35

13. Construct Index numbers of Price from the following data by applying:

- Laspeyre's Method
- Paasche's Method
- Bowley's Method
- Fisher's Method
- Marshall – Edgeworth Method

Commodities	2020		2021	
	Price	Quantity	Price	Quantity
A	4	6	2	8
B	6	5	5	10
C	5	10	4	14
D	2	13	2	19
