

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. A&F - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - I

20UAFAT1001 - Business Statistics

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

- Find the mode, median and mean for this set of numbers: 3, 6, 9, 14, 3.
- From the given data compute the Harmonic Mean of 5, 10,17,24,30.
- Calculate mean deviation from mean and median for the following data:
100,150,200,250,360,490,500,600,671.
- With the help of the data given below, find the interquartile range, quartile deviation, and coefficient of quartile deviation.

150	100	268	280	195	140	200
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- Write a note on components of Time Series.
- Find the trend line from the following data by Semi-Average Method

Year	1989	1990	1991	1992	1993		1994	1995	1996
Production	150	152	153	151	154		153	156	158

- Explain stratified sampling with example.
- Two dice are rolled together, find the probability of getting a double or sum of face as 4.

Section C

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

- Following is the distribution of persons according to different income groups. Calculate arithmetic mean.

Income (Rs.100)	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of Persons	6	8	10	12	7	4	3

- Use Actual Mean Method and determine the coefficient of correlation for the following data:

X	12	16	20	24	28	32	36
Y	6	9	12	15	18	21	24

Contd...

11. Calculate 5 yearly moving average of number of students studying in Commerce College as shown by the following figure.

Year	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
No. of Students	332	311	357	392	402	405	410	427	405	438

12. As per the survey on cars owned by each family in the locality, the data has been arranged in the following table:

Number of Cars	O_i	E_i
One Car	30	25.6
Two Cars	14	15
Three Cars	6	5.2
Total	50	

Perform Chi- Square Test.

13. You toss a fair coin three times:
- What is the probability of three heads, HHH?
 - What is the probability that you observe exactly one heads?
 - Given that you have observed at least one heads, what is the probability that you observe at least two heads?
