

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.B.A - END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - II

24UBAAT2002 - Business Statistics and Logic

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

- The mean height of 25 male workers in a factory is 61 cm and the mean height of 35 female workers in the same factory is 58 cm. Find the combined mean height of 60 workers in the factory.
- Calculate the Spearman's rank correlation coefficient between marks in accountancy and marks in statistics from the data:

Marks in accountancy	48	35	17	23	47
Marks in statistics	45	20	40	25	48

- Explain the concepts of binomial, Poisson, and normal distributions.
- In a certain code, **APPLE** is written as **DSSOH**. How is **MANGO** written in the same code?
- In a frequency distribution, the coefficient of skewness based on quartiles is 0.6. If the sum of the upper and lower quartiles is 100 and the median is 38. Find the value of the upper quartile.
- You are given below the following information about advertising and sales

	Adv.Exp(X) (in Lakhs)	Sales (Y) (in Lakhs)
Mean	10	90
S.D	3	12

Correlation coefficient = 0.8

- Obtain the Regression equation of X on Y
 - What should be advertisement expenditure if the company wants to attain sales target of Rs.120 lakhs?
- A box contains 7 red, 2 white, and 5 blue balls. Find the probability of drawing red, white, and blue, in that order when 3 balls are drawn successively without replacement from the box.
 - Identify the odd one out: 23, 29, 31, 37, 40, 43, 47

Contd...

Section C

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

9. Find the quartile deviation for the following distribution.

Marks	0-10	10-20	20-30	30-40	40-50	50-60
Frequency	8	20	25	30	12	5

10. From the following data, calculate Karl Pearsons coefficient of skewness:

Marks more than	0	10	20	30	40	50	60	70	80
No of students	150	140	100	80	80	70	30	14	0

11. Compute coefficient of correlation for the following data through Pearsons method.

X	25	35	45	52	20	33	40	30
Y	20	15	10	14	23	18	22	30

12. A player tosses two fair coins. He wins Rs.5.00 if 2 heads occurs, Rs.2.00 if one head occurs, and Re.1.00 if no head occurs. Find his expected winning.
13. Justify the importance of number series in competitive exams and problem-solving.

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