

BACHELOR OF COMMERCE WITH ACCOUNTANCY, FINANCE AND INSURANCE (BAFI)

Examination April - 2026

Day & Date	Semester	Subject Name	Time	Code	Marks
Monday 13/04/2026	V	Statistical Theories & Business Applications	02.30 pm to 05.00 pm	541319	75

Instructions:

- 1) Question No. 1 is Compulsory
- 2) Attempt any Four questions from the remaining
- 3) All questions carry equal marks

Q.1 Attempt the following questions

- a) The Mean And Mode Of the distribution are 128 and 88 respectively then find Median (02)
- b) What are the limitations of Statistics (02)
- c) Define Range with example (02)
- d) If the third quartile $Q_3 = 35$ and Quartile deviation = 10 then find the value of first Quartile (02)
- e) Define Time Series (02)
- f) Find the Coefficients of variation (C.V) from the given data 12,07,15,11,2502 (02)
- g) Define Primary data and Secondary data (02)
- h) What is the relationship between Correlation Coefficients & Regression Coefficients (01)

Q.2 A) Calculate Median (M)& Mode (Z) for the data (07)

Wages (Rs.)	30-40	40-50	50-60	60-70	70-80	80-90
No. of Persons	10	20	40	25	8	6

B) Compute Q_3 , D_4 and P_{48} from the following data (08)

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	12	13	21	19	15	10

Q.3 A) Calculate Coefficients of variation (C.V) from the data given below (07)

Profit	50-60	60-70	70-80	80-90	90-100	100-100
No. of Companies	11	15	19	25	20	10

B) Calculate Quartile deviation and its Coefficients (08)

Marks	0-10	10-20	20-30	30-40	40-50
No. of Students	22	38	46	35	19

- Q.4 A) Calculate Karl Pearson's Coefficient of Correlation from the following data (07)**

X	10	08	07	09	06	03	02	04
Y	06	07	09	10	08	10	11	12

- Q.4 B) Given the following data find two regression equations and estimate x if y =35 (08)**

	X	Y
Mean	43	37
S.D.	3.1	2.8

$$r = 0.65$$

- Q.5 A) Calculate trend values by applying five yearly moving average (07)**

Year	2011	2012	2013	2014	2015	2016	2017	2018
No. of Students	35	39	41	40	42	43	47	49

- Q.5 B) Calculate the Rank Correlation from the following data (08)**

X	15	32	25	30	35	20	19	22	27	31
Y	50	70	65	72	90	58	53	57	68	74

- Q.6 A) From the following data Find Trend Line (07)**

Year	2010	2011	2012	2013	2014	2015	2016	2017
Sales	200	220	190	260	220	260	160	280

- Q.6 B) Find the missing frequency from the data. If the arithmetic mean is 33 (08)**

Marks	0-10	10-20	20-30	30-40	40-50	50-60
No. of Students	05	10	25	30	-----	10

- Q.7 Attempt any three (15)**

- Explain the types of Sampling
- Explain the components of Time Series
- Merits and demerits of mean and median
- Define Statistics and write its uses