

Roll.No.

20UECCT2004

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.A.Economics - END SEMESTER EXAMINATIONS - NOVEMBER 2025
SEMESTER - II

20UECCT2004 - Statistics for Economists - II

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

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

1. Distinguish between simple random sampling and stratified random sampling.
2. The marks obtained by 5 students in Statistics and Mathematics are given below:

Student	Statistics	Mathematics
A	10	20
B	20	25
C	30	28
D	40	35
E	50	45

Compute Karl Pearson's coefficient of correlation.

3. The following data relate to marks obtained by 5 students in Statistics (X) and Economics (Y):

X (Statistics)	10	12	13	16	17
Y (Economics)	15	18	14	20	22

Fit the regression equation of Y on X.

4. Define index numbers. State any four uses of index numbers.
5. What are the four components of a time series? Explain briefly.
6. What is meant by sampling error? How does it differ from non-sampling error?
7. Define correlation. Distinguish between positive and negative correlation with suitable examples.
8. Define regression. Distinguish between regression coefficient and correlation coefficient.

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Section C

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

9. Explain the various methods of sampling.
10. The following data relate to the age of workers and their monthly wages. Calculate Karl Pearson's coefficient of correlation and interpret the result.

Age of workers (X)	20	25	30	35	40	45	50
Monthly Wages (Y)	30	35	40	50	55	60	65

11. The following data relate to the ages of workers(X) and their wages (Y):

Age of workers (X)	20	25	30	35	40	45
Monthly Wages (Y)	25	30	28	35	40	42

- (i) Fit the regression equation of X on Y and Y on X.
(ii) Estimate the wages of workers aged 50 years.
12. Explain the characteristics of a good (ideal) index number. What are the tests that an ideal index number should satisfy?
13. Explain the method of measuring secular trend in time series. Discuss the merits and demerits of moving average method.
