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. END SEMESTER EXAMINATIONS NOVEMBER-2022
SEMESTER - II
20UECCT2004 - Statistics for Economists-II

Total Duration : 2 Hrs 30 Mins.   Total Marks : 60

Section A

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

1. Define sampling.

2. Define correlation.

3. Predict what is meant by regression line.

4. Explain the uses of index number.

5. Solve 4 yearly moving average from the following data.

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Production	614	615	652	678	681	655	717	719	708	779	757

6. Compute rank correlation coefficient from the following data.

Statistics	1	2	3	4	5	6	7	8	9	10
Mathematics	2	4	1	5	3	9	7	10	6	8

7. Explain the merits and demerits of regression.

8. Solve the consumer price index number for 2007 on the basis of 2006 from the following data using the aggregate expenditure method.

Commodity	Quantity consumed 2006	Price in 2006 Rs.	Price in 2007 Rs.
A	6 Quintal	5.75	6.00
B	6 Quintal	5.00	8.00
C	1 Quintal	6.00	9.00
D	6 Quintal	8.00	10.00
E	4 Kg	2.00	1.50
F	1 Quintal	20.00	15.00

Section B

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

9. Explain the types of sampling.

Contd...

10. Compute Karl Pearson's coefficient of correlation from the following data:

Wages	100	101	102	102	100	99	97	98	96	95
Cost of living	98	99	99	97	95	92	95	94	90	91

11. Calculate the two regression equation of X on Y and Y on X from the following data taking deviation from actual means of X and Y.

Price (Rs)	10	12	13	12	16	15
Amount demanded	40	38	43	45	37	43

12. Compute Laspeyre's, Paasche's and Fisher's price index number for the following data.

Commodities	Units consumed		Price per unit	
	2006	2007	2006	2007
A	20	16	1.2	2.0
B	35	38	2.1	2.4
C	10	9	3.0	4.1
D	45	50	0.8	1.2

13. Solve and estimate the trend values by the method of least square from the data given below and estimate the sales for 2010.

Year	2003	2004	2005	2006	2007
Sales of Co. A(in lakhs Rs)	70	74	80	86	90

*****

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. END SEMESTER EXAMINATIONS NOVEMBER-2022
SEMESTER - II
20UECCT2004 - Statistics for Economists-II

Total Duration : 2 Hrs 30 Mins.   Total Marks : 60

Section A

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

1. Define sampling.

2. Define correlation.

3. Predict what is meant by regression line.

4. Explain the uses of index number.

5. Solve 4 yearly moving average from the following data.

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Production	614	615	652	678	681	655	717	719	708	779	757

6. Compute rank correlation coefficient from the following data.

Statistics	1	2	3	4	5	6	7	8	9	10
Mathematics	2	4	1	5	3	9	7	10	6	8

7. Explain the merits and demerits of regression.

8. Solve the consumer price index number for 2007 on the basis of 2006 from the following data using the aggregate expenditure method.

Commodity	Quantity consumed 2006	Price in 2006 Rs.	Price in 2007 Rs.
A	6 Quintal	5.75	6.00
B	6 Quintal	5.00	8.00
C	1 Quintal	6.00	9.00
D	6 Quintal	8.00	10.00
E	4 Kg	2.00	1.50
F	1 Quintal	20.00	15.00

Section B

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

9. Explain the types of sampling.

Contd...

10. Compute Karl Pearson's coefficient of correlation from the following data:

Wages	100	101	102	102	100	99	97	98	96	95
Cost of living	98	99	99	97	95	92	95	94	90	91

11. Calculate the two regression equation of X on Y and Y on X from the following data taking deviation from actual means of X and Y.

Price (Rs)	10	12	13	12	16	15
Amount demanded	40	38	43	45	37	43

12. Compute Laspeyre's, Paasche's and Fisher's price index number for the following data.

Commodities	Units consumed		Price per unit	
	2006	2007	2006	2007
A	20	16	1.2	2.0
B	35	38	2.1	2.4
C	10	9	3.0	4.1
D	45	50	0.8	1.2

13. Solve and estimate the trend values by the method of least square from the data given below and estimate the sales for 2010.

Year	2003	2004	2005	2006	2007
Sales of Co. A(in lakhs Rs)	70	74	80	86	90

*****