C 25515

(Pages : 2)

Name.....

Reg. No.....

FINAL YEAR B.Com. DEGREE EXAMINATION, MARCH 2003

Part III—Commerce

Paper II—BUSINESS STATISTICS

Time : Three Hours

Maximum : 100 Marks

Answers may be written **either** *in English* **or** *in Malayalam.*

Part A

Answer any **ten** *questions.*
Each question carries 2 *marks.*

1. What is meant by classification ?
2. Name the different types of diagrams.
3. Define Less than Ogive curve.
4. Give the formula for weighted arithmetic mean.
5. What is the difference between Standard deviation and Mean deviation ?
6. What is skewness ?
7. If $\mu_2 = 2{\cdot}5$, $\mu_3 = 0{\cdot}7$, $\mu_4 = 18{\cdot}75$, find a measure of kurtosis.
8. What is rank correlation ?
9. Give the two regression equations.
10. What are the methods to study seasonal variations ?
11. Write Laspeyre's and Paasche's index number formula.
12. What is a multistage sample ?

(10 × 2 = 20 marks)

Part B

Answer any **ten** *questions.*
Each question carries 5 *marks.*

13. Explain Distrust of Statistics.
14. Describe a frequency polygon and a frequency curve, with illustration.
15. What are the merits of mean ?
16. Discuss the limitations of quartile deviation.
17. Explain the properties of coefficient of correlation.
18. Briefly explain the moving average method to study trend.
19. The population of a country increased by 20 % in the first decade, 30 % in the second decade and 45 % in the third decade. What is the average rate of increase per decade in the population ?

20.

X :	2	4	6	8	10
f :	1	4	6	4	1

Find the mean deviation from mean.

21.

		X	Y
No. of observations	...	15	15
Mean	...	25	18
Sum of squares of deviation from the mean	...	136	138

Sum of the product of deviations of X and Y series from their mean = 122. Find the corr coefficient.

22. Calculate the cost of living index from the following data :—

Item		*Price*		*Weights*
		Base year	*Current year*	
Food	...	39	47	4
Fuel	...	8	12	1
Clothing	...	14	18	3
House rent	...	12	15	2
Miscellaneous	...	25	30	1

23.

1985	1986	1987	1988	1989	1990
20	24	22	30	28	32

Apply the method of semi-averages to measure trend.

24. Explain Quota Sampling method.

(10 × 5 =

Part C

Answer any **two** *questions.*
Each question carries 15 *marks.*

25. Discuss the different methods of collecting primary data.

26.

0—20	20—40	40—60	60—80	80—100
13	25	27	19	16

Calculate the Karl Pearson coefficient of skewness.

27.

X :	50	60	70	80	90
Y :	32	74	129	169	200

Find the value of Y when $x = 65$.

(2 × 15