

## END OF SEMESTER EXAMINATIONS, APRIL / MAY - 2017

## BUSINESS STATISTICS

SUBJECT CODE: 14UAMA71

MAJOR : B.COM (CA)

SEMESTER : IV

TIME : 3 HOURS

MAX.MARKS: 75

SECTION - A (10 X 1 = 10)Answer ALL Questions:

1. What are the sources of collecting secondary data?
2. State any two limitations of Statistics.
3. Write the relationship between Mean, Median and Mode.
4. Define Skewness.
5. What are the different types of Correlation?
6. State the formula for computation of Rank Correlation Coefficient.
7. Define Index Number.
8. What do you mean by Weighted Index Number?
9. Define Extrapolation.
10. What are the four methods to estimate the Secular Trend?

SECTION - B (5 X 4 = 20)Answer ANY FIVE Questions:

11. Explain the different types of classification of Statistical Data.
12. Write short notes on Histogram and Frequency Polygon.
13. Find Mean, Median and Mode for the full data.  
32,51,23,46,20,78,57,56,57,30
14. Calculate Standard Deviation from the following data.

Height in (cms)	147	150	152	154	156	158
No of students	2	3	9	4	7	3

15. Calculate Karl Pearson's Coefficient of Correlation.

X	2	4	6	8	10
Y	12	14	16	18	20

16. Calculate Index number of prices for 2002 on the basis of 2001 from the data given below

Commodity	A	B	C	D	E
Weight	40	25	5	20	10
Price in 2001	16	40	0.50	5.12	2.00
Price in 2012	20	60	0.50	6.25	1.50

17. Explain the Components of Time Series.
18. Extrapolate the Profit for the year 2003 from the full data using Binomial Expansion Method.

Year	1998	1999	2000	2001	2002	2003
Profits (*000)	31	42	51	65	80	?

**SECTION – C (3 X 15 = 45)****Answer ANY THREE Questions:**

19. (i) Define Primary data and Secondary data.  
 (ii) Explain the different sources of collecting Secondary Data.
20. Calculate Karl Pearson's coefficient of Skewness from the full data.

Size	3	4	5	6	7	8	9	10
Frequency	7	10	14	35	102	136	43	8

21. Obtain the lines of Regression for the following

X	1	2	3	4	5	6	7	8	9
Y	9	8	10	12	11	13	14	16	15

22. Calculate Index Number from the following data using
- (i) Laspeyre's method  
 (ii) Paasche's method  
 (iii) Bowley's method  
 (iv) Fisher's ideal formula

Commodity	Base year		Current year	
	Kilo	Rate (Rs.)	Kilo	Rate (Rs.)
Bread	10	3	8	3.25
Meat	20	15	15	20
Tea	2	25	3	23

23. Fit a straight line Trend by the method of Least Squares and calculate Trend values.

Year	1997	1998	1999	2000	2001	2002
Production (Tonnes)	24	25	29	26	22	24

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