

S.No. 456

BATCH: 87-2016

Reg.No.

15

END OF SEMESTER EXAMINATIONS, NOVEMBER – 2017

BUSINESS STATISTICS

SUBJECT CODE: 14UAMA71 / 14UBMAC2

MAJOR: B.COM (CA) / B.Com.

TIME : 3 HOURS

SEMESTER : IV / III

MAX. MARKS: 75

**SECTION – A (10 x 1 = 10)**

**Answer ALL the Questions**

1. Define Primary data.
2. What is histogram?
3. What are the measures of central tendency?
4. Find the Range and Co-efficient of Range for the following data, 27,30,35,36,38,40,43.
5. Define Correlation.
6. What are the two types of Regression equations?
7. What are the tests of Index numbers?
8. State any two uses of Index numbers.
9. Define Interpolation.
10. What are the components of Time Series?

**SECTION – B (5 x 4 = 20)**

**Answer Any FIVE Questions:**

11. Discuss various methods of collecting primary data.
  12. Locate median from the following data.
- |                |    |     |    |     |    |     |    |
|----------------|----|-----|----|-----|----|-----|----|
| Size of shoes: | 5  | 5.5 | 6  | 6.5 | 7  | 7.5 | 8  |
| Frequency :    | 10 | 16  | 28 | 15  | 30 | 40  | 34 |
13. Calculate Geometric mean of the following: 50, 72, 54, 82, 93.
  14. A random sample of 5 college students is selected and their grades in mathematics and statistics are found to be

S.No	:	1	2	3	4	5
Mathematics	:	85	60	73	40	90
Statistics	:	93	75	65	50	80

Calculate rank correlation coefficient.

15. Calculate the regression equation of X on Y from the following data

X:	10	12	13	17	18
Y:	5	6	7	9	13

16. Construct an index number for 2002 taking 2001 as base year

Commodity	:	A	B	C	D
Price in 2001	:	90	40	90	30
Price in 2002	:	95	60	110	35

17. Write the uses of Index numbers.
18. Interpolate the profit for the year 2000 using Binomial expansion method.

Year	:	1998	1999	2000	2001	2002
Profit ('000)	:	100	107	?	157	212

**SECTION – C (3 x 15 = 45)**

**Answer Any THREE Questions:**

19. (i) Define Secondary data and explain various sources of Secondary data.  
(ii) Explain the different parts of Tabulation.
20. Calculate Karl Pearson's Coefficient of skewness for the following data.

X:	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
f:	2	5	7	13	21	16	8	3

21. Calculate Correlation Coefficient for the following data.

X:	12	9	8	10	11	13	7
Y:	14	8	6	9	11	12	3

22. Compute Index number, using Fisher's Ideal formula and show that it satisfies time reversal test and factor reversal test.

Commodity	Base year		Current year	
	Quantity	Price	Quantity	Price
A	12	10	15	12
B	15	7	20	5
C	24	5	20	9
D	5	16	5	14

23. Fit a straight line trend by the method of least squares & calculate the trend values.

Year	:	1996	1997	1998	1999	2000	2001	2002
Production (Tonnes)	:	12	10	14	11	13	15	16

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