S. NO.: 443 BATCH: 2015, 2016 Reg. No.: 9

END OF SEMESTER EXAMINATIONS, NOVEMBER - 2017
STATISTICS
SUBJECT CODE : 15UBPA06

MAJOR : B.COM (PA) **SEMESTER : II**
TIME : 3 HOURS **MAX. MARKS: 75**

SECTION A – (10 X 1 = 10)

Answer ALL the Questions:

1. The _____ are the lowest and the highest value that can be included in the class.
   a. Class intervals b. Class Limits c. Class Value d. Class Range
2. Which of the following is the type of Average?
   a. Standard deviation b. Correlation c. Regression d. Median
3. _____ is the measure of the variation of the Item.
   a. Average b. Dispersion c. Correlation d. Regression
4. The formula to find Karl Pearson's co-efficient of Skewness is
   a. $Skp = \frac{\text{Mean-Mode}}{\text{Standard deviation}}$ b. $Skp = \frac{\text{Mode-Mean}}{\text{Standard deviation}}$
   c. $Skp = \frac{\text{Standard deviation - Mode}}{\text{Median}}$ d. $Skp = \frac{\text{Standard deviation - Median}}{\text{Mode}}$
5. Which of the following is 'NOT' the type of correlation.
   a. Simple correlation b. Single correlation
   c. Partial correlation d. Multiple correlation
6. _____ is the measure of the average relationship between two or more variables in terms of the original units of the data.
   a. Correlation b. Regression c. Skewness d. Standard deviation
7. A _____ consists of statistical data which are collected, recorded, observed over successive increments.
   a. Classification b. Tabulation c. Time series d. Editing
8. Which of the following is 'NOT' the method of Business forecasting?
   a. Business Barometers b. Intrapolation
   c. Regression Analysis d. Survey method
9. _____ are devices for measuring differences in the magnitude of a group of related variables.
   a. Index Numbers b. Standard deviation
   c. Regression d. Correlation
10. Which of the following is 'NOT' the theorem of probability?
    a. Addition theorem b. Multiplication theorem
    c. Additions & Multiplication theorem d. Subraction theorem

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SECTION B – (5 X 4 = 20)

Answer any FIVE Questions:

11. Explain the meaning and scope of Statistics?

12. Calculate arithmetic mean from the following data.

Marks	0-10	10-30	30-60	60-100
No of students	5	12	25	8

13. Calculate Pearson's co-efficient of Skewness.

x	12.5	17.5	22.5	27.5	32.5	37.5	42.5	47.5
f	28	42	54	108	129	61	45	33

(Where $\bar{X} = 30.46$, mode = 32.5) (Assumed mean = 27.5)

14. Explain the uses of Regression Analysis.

15. Two ladies were asked to rank 7 different type of lipsticks. The ranks given by them as follows.

Lipsticks	A	B	C	D	E	F	G
Lady 1	2	1	4	3	5	7	6
Lady 2	1	3	2	4	5	6	7

Calculate Spearman's rank correlation co-efficient.

16. Explain the steps in forecasting.

17. Explain the uses of Index Number.

18. Calculate the probability of picking a card that was a heart or a spade. Comment on your answer.

SECTION C – (3 X 15 = 45)

Answer any THREE Questions:

19. Describe the various types of classifications.

20. From the price of shares of X and Y below find out which is more stable in value.

X	35	54	52	53	56	58	52	50	51	49
Y	108	107	105	105	106	107	104	103	104	101

21. Calculate the co-efficient of correlation between X and Y from the following data. Assume 69 and 112 as the mean value for X and Y.

X	78	89	99	60	59	79	68	61
Y	125	137	156	112	107	136	123	108

22. Explain the various methods of business forecasting.

23. For the data given below. Calculate the index number by taking.

    i) 2006 as the base year

    ii) 2013 as the base year.

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014
Price of commodity X	4	5	6	7	8	10	9	10	11

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