Reg. No. : ....

Name : ....

I Semester B.A./B.Sc./B.Com./B.B.A./B.B.A.T.T.M./B.B.M./B.C.A./B.S.W./
B.A. Afsal-Ul-Ulama Degree (CCSS – Regular/Supple./Improvement)
Examination, November 2013
BBA / BBA TTM – COMPLEMENTARY COURSE
1C01 BBA / BBA (T) : Business Statistics

Time : 3 Hours   Max. Weightage : 30

PART – A

This Part consists of **two** bunches carrying **equal** weight of **one**. **Each** bunch consist of **four** objective type questions.

Answer **all** questions.

I. 1) Which of the following is the most suitable average ?

   a) Mode   b) Median

   c) Geometric mean   d) Harmonic mean

2) _____ is a circle of radius neither too large nor too small whose area is divided into as many different sectors as these are components of the whole data.

   a) Pie-diagram   b) Bar-diagram

   c) Square diagram   d) Rectangular diagram

3) _____ is a set of vertical bars whose areas are proportional to the frequencies represented

   a) Frequency polygon

   b) Smoothed frequency bars

   c) Ogive

   d) Histogram

4) A man travelled from one place to another at the rate of 20 k.m. per hour and returned at the rate of 30 k.m. per hour. The average speed in the whole journey is

   a) 2 5 km/hr   b) 24 km/hr

   c) 30 km/hr   d) 20 km/hr   (W=1)

II. 5) The mode of 3, 4, 5, 2, 3, 4, 1, 6, 4 is _____

   a) 6   b) 4   c) 3.6   d) 2

6) The relationship between Mean Deviation (M.D.) and Standard Deviation (S.D.) is

   a) 3 M.D. = 2 S.D.   b) 6 M.D. = 5 S.D.

   c) 5 M.D. = 4 S.D.   d) M.D. = S. D.

7) The sales of wool and umbrella are associated with _____ component of time series.

   a) Secular trend   b) Seasonal variation

   c) Irregular variation   d) None of these

8) If the correlation between two variables X and Y is negative then the regression coefficient of X on Y is _____

   a) Positive   b) Negative

   c) Not certain   d) None of the above   (W = 1)

PART – B

Answer **any 8** questions in **one** or **two** sentences **each. Each** question carries a weightage of **one.**

9. What is meant by population in statistics ?

10. What is Secondary Data ?

11. State the meaning of frequency distribution.

12. What is 'Open-end' class ?

13. Define Ogive.

14. Define Median.

15. What is variance ?

16. What is Lorenz curve ?

17. Define Kurtosis.

18. What is meant by Linear correlation ?   (W= 8×1=8)

PART – C

Answer **any six** questions. Answer not to exceed **one page. Each** question carries a weightage of **two.**

19. Discuss any four methods of collecting primary data.

20. Define tabulation. What are its advantages ?

21. Distinguish between correlation and regression.

22. List the merits and demerits of Least Square Method.

23. The following frequency distribution gives the height (in inches) of 100 students selected at random from a college of 3000 students :

Class interval :	60 – 62	62 – 64	64 – 66	66 – 68	68 – 70	70 – 72
No. of Students :	5	18	42	20	8	7

Calculate standard deviation.

24. Given below the arithmetic mean, the median, and the standard deviation of two distributions. Determine which distribution is more skewed.

    1) A. M.= 22 ; Median = 24 ; S.D. = 10

    2) A.M. = 22 ; Median = 25 ; S.D. = 12

25. The following are the marks obtained by 12 students in Accountancy and Business Statistics.

Accountancy :	50	54	56	59	60	62	61	65	67	71	71	74
Statistics :	22	25	34	28	26	30	32	30	28	34	36	40

Obtain Karl Pearson's co-efficient of correlation.

26. The following is the distribution of wages of workers :

Wages (Rs.) : 0 – 10 10 – 20 20 – 30 30 – 40 40 – 50 50 – 60 60 – 70 70 – 80

No. of workers : 20   45   85   160   70   55   35   30

Determine :

a) The percentage of workers getting wages more than Rs. 44.

b) The percentage of workers getting wages between Rs. 22 and 58. (W= 6×2=12)

PART – D

Answer **any two** questions. **Each** question carries a weightage of **4**.

27. Define Statistics. Explain its functions. Also state its limitations.

28. Obtain the lines of regression for the following data :

x :   120   90   80   150

y :   40   36   40   44

29. From the following data find the trend values of 5 yearly moving averages.

Year : 2000 2001 2002 2003 2004 2005 2006 2007 2008

Sales : 36   43   43   34   44   54   34   24   14   (W= 2×4=8)

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