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
(2012 Admn. Onwards)
1C01 COM : Complementary Course in Commerce
BUSINESS STATISTICS

Time: 3 Hours                                                   Max. Weightage : 30

PART – A

This part consist of **two** bunches of questions carrying **equal** weightage of **one**.
**Each** bunch consists of four objective type questions. Answer **all** questions.

I. 1) _____ is a one dimensional representation.

    a) Bar diagram    b) Pie diagram   c) Histogram   d) Frequency curve

2) Combined arithmetic mean of a data is calculated as

    a) $\dfrac{n_1\bar{x}_2 + n_2\bar{x}_1}{n_1 + n_2}$
                b) $\dfrac{n_1\bar{x}_1 + n_2\bar{x}_2}{n_1}$

    c) $\dfrac{n_1\bar{x}_1 + n_2\bar{x}_2}{n_1 + n_2}$
                d) $\dfrac{n_1\bar{x}_1 + n_2\bar{x}_2}{n_2}$

3) Median is a _____ average.

    a) Mathematical  b) Absolute    c) Relative    d) Positional

4) If $B_2 > 3$, the curve is _____

    a) Symmetric    b) Mesokurtic   c) Leptokurtic  d) Platy kurtic    (W = 1)

II. 5) Harmonic mean of $\dfrac{1}{3}$ and $\dfrac{1}{5}$ is

    a) $\dfrac{1}{4}$
            b) 4
            c) $\dfrac{2}{15}$
            d) $\dfrac{3}{15}$

6) _____ index number measures the changes in the price level of current period on the basis of the price level of base period.
   a) Quantity       b) Weighted       c) Price       d) Unweighted

7) _____ is the value midway between its actual lower and upper limits.
   a) Frequency                    b) Class mark
   c) Class interval               d) Class boundary

8) Representative part of a population under study is _____
   a) Census       b) Sample       c) Primary       d) Secondary       (W = 1)

## PART – B

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

9. Define splicing of index number.

10. What are lepto and platy kurtic curves ?

11. Describe the method of finding quartile deviation.

12. Write down the demerits of mode.

13. Average rain fall of a city from Monday to Saturday is 3 cm. Due to heavy rainfall on Sunday, average rainfall increased to 5 cm. What was the rainfall on Sunday ?

14. Define harmonic mean.

15. Discuss the construction of pie diagram.

16. What is meant by frequency distribution ?

17. Distinguish between primary and secondary data.

18. Explain the role of statistics in commerce.                    (W = 8×1=8)

## PART – C

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

19. Discuss the important limitations of statistics.

20. What are the different methods of classification of data ?

21. Find the missing frequency from the following :

    | Marks | : | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 | 25-30 | 30-35 |
    |---|---|---|---|---|---|---|---|---|
    | No.of students | : | 10 | 12 | 16 | ? | 14 | 10 | 8 |

    The average mark is 16.82.

22. Define median. Explain its merits and demerits.

23. Calculate mean deviation from median.

    | x | 10 | 11 | 12 | 13 | 14 |
    |---|---|---|---|---|---|
    | f | 3 | 12 | 18 | 12 | 3 |

24. What are the desirable properties of a good measure of dispersion ?

25. Distinguish between fixed base and chain base methods.

26. Explain skewness and write down its measures.        (W = 6×2=12)

## PART – D

Answer **any two**. **Each** question carries a weightage of **four** :

27. Prices of a particular commodity in 5 cities are given below :

    **Commodity A :** 20   22    17    23    26

    **Commodity B :** 16   20    18    12    15

    Which commodity had more stable price ?

28. What is meant by sampling ? Explain the different types of sampling.

29. From the following data, construct index number under Kelley's method using 2002 as base year.

    | Items | 2002 | | 2006 | |
    |---|---|---|---|---|
    | | Price | Quantity | Price | Quantity |
    | X | 8 | 6 | 12 | 8 |
    | Y | 12 | 7 | 15 | 9 |
    | Z | 20 | 9 | 25 | 7 |

    (W= 2×4=8)