M 8922

I Semester B.Com. (Regular/Supple./Improvement)
Degree Examination, Nov. 2010
B.Com. (Complementary) (Course – I)
1C01 COM : BUSINESS STATISTICS

Time : 3 Hours

Max. WGP : 120

PART – A

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

I. 1) Statistics can

    a) Prove anything

    b) Disprove anything

    c) Neither prove or disprove anything, it is just a tool

    d) None of these

  2) In chronological classification data are classified on the basis of

    a) Attributes   b) Class interval

    c) Time   d) Location

  3) In two dimensional diagram

    a) Only height is considered

    b) Only width is considered

    c) Height, width and thickness is considered

    d) Both height and width are considered

  4) Which average is affected most by extreme observations ?

    a) Mode   b) Median

    c) Geometric mean   d) Arithmetic mean   [W = 1] [WGP = 4]

P.T.O.

II. 5) Coefficient of Q.D. is

a) $\dfrac{Q_3 + Q_1}{Q_3 - Q_1}$

b) $\dfrac{Q_3 - Q_1}{Q}$

c) $\dfrac{Q_3 - Q_1}{Q_3 + Q_1}$

d) None of these

6) In a negatively skewed distribution

a) Mode < median < mean

b) Mode < median > mean

c) Median > mode > mean

d) Mode < median > mean

7) Laspeyre's index is based

a) Base year quantities

b) Current year quantities

c) Both of them

d) None of these

8) The mode and mean of a skewed distribution is 10 and 12. Find the value of median.

a) 10

b) 12

c) 11.33

d) 16.33

[W = 1] [WGP = 4]

PART – B

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

9. Explain qualitative data.

10. What do you mean by confidential enquiry ?

11. What is 'information from correspondence' ?

12. What is convenience sampling ?

13. Explain class limits.

14. What do you mean by subdivided bar-diagram ?

15. What is Platy Curdie Curve ?

16. 'There are certain practical uses for weighted arithmetic mean'. What are they ?

17. What do you mean by range ?

18. Explain the concept of normal distribution.

[W = 8×1=8] [WGP = 8×4×1=32]

PART – C

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

19. State the requisites of a good measure of dispersion.

20. State the advantages and disadvantages of median.

21. What is census method of collecting the data ? State its advantages.

22. From the following find out made graphically.

Variable	10-20	20-30	30-50	50-60	60-70	70-80
Frequency	10	15	40	25	15	10

23. From the following find coefficient of quartile deviation.

Mark :	10	15	25	20	18	30	29
f :	8	12	15	9	5	6	7

24. The price of a commodity has increased by 10% in the first year, 15% in the second year and 20% in the third year. Find the average increases of price for the whole year

25. The mean value of 30 item is found to be 45. While calculating two items were wrongly taken as 28 and 32 instead of 45 and 25. Find the correct mean.

26. For a group of 20 items $\Sigma x = 1452$; $\Sigma x^2 = 144280$; mode = 63.7. Find Pearsonian coefficient of skewness.

[W = 6×2=12] [WGP = 6×4×2=48]

PART – D

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

27. "Statistics is the science of estimates and probabilities." Elucidate the above statement and give a more comprehensive definition of the science of statistics.

28. In a small town, a survey was conducted in respect of profits made by retail shops. The results were :

Profit or loss in '000 Rs.	No. of Shops	Profit or loss in '000 Rs.	No. of shops
– 4 to – 3	4	1 to 2	56
– 3 to – 2	10	2 to 3	40
– 2 to – 1	22	3 to 4	24
– 1 to 0	28	4 to 5	18
0 to 1	38	5 to 6	10

Find the coefficient of variation of earnings.

29. From the following find out appropriate price index. Also prove time reversal test in it.

Commodity	Price		Quantity	
	2005	2007	2007	2008
A	10	12	10	10
B	12	15	12	10
C	15	15	14	18
D	20	18	10	12

[W = 2×4=8] [WGP = 2×4×4=32]