

B.Com

M 6657

Reg. No. : .....

Name : .....



### First Semester B.Com: Degree Examination, November 2009

#### B.Com. (Complementary)

#### Course - I : BUSINESS STATISTICS (IC 01 COM)

Max. Weight : 30

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. Answer **all** questions.

- I. 1) In its present wage, the word statistics is
  - a) a decade old
  - b) a century old
  - c) two century old
  - d) five century old
- 2) Quartile deviation is
  - a)  $\frac{4}{5}\sigma$
  - b)  $\frac{3}{2}\sigma$
  - c)  $\frac{2}{3}\sigma$
  - d)  $\frac{5}{4}\sigma$
- 3) Classification is the process of arranging the data in
  - a) Different columns
  - b) Different rows
  - c) Different rows and columns
  - d) Grouping of related parts into different classes
- 4) Diagrams and graphs are tools of
  - a) Collection of data
  - b) Analysis
  - c) Presentation
  - d) Summarisation

[W = 1]

[WGP = 4]

P.T.O.



## II. 5. Coefficient of mean deviation

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

b)  $\frac{\text{Mean Deviation}}{\bar{X}}$

c)  $\frac{\text{Mean Deviation}}{\text{Median}}$

d)  $\frac{\text{M.D} \times 100}{\bar{X}}$

6) When the coefficient of skewness is zero, the distribution is

- a) J shaped  
b) U shaped  
c) Bell shaped  
d) L shaped

7) The coefficient of correlation

- a) Has no limits  
b) Can be less than one  
c) Varies between  $\pm 1$   
d) Can be more than one

8) The median of 5, 8, 7, 10, 12, 13 and 9 is

- a) 10  
b) 7  
c) 9  
d) None of the above [W = 1]  
[WGP = 4]

## PART – B

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

9. What is qualitative data?

10. Explain official enquiry.

11. What do you mean by oral interview?

12. What is quota sampling?

13. What do you mean by quantitative classification?

14. Explain deviation bars.



15. What is Cartogram ?
16. 'There are certain practical uses for Harmonic mean'. What are they ?
17. What do you mean by coefficient of quartile deviation ?
18. Explain Kelley's coefficient of skewness. [W = 8 × 1 = 8] [WGP 8 × 4 × 1 = 32]

**PART – C**

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

19. State the requisites of a good average.
20. What are the advantages of arithmetic mean ?
21. What is sampling ? State the advantages of sampling.
22. From the following data draw a histogram.

No. of Children in a family :	0	1	2	3	4	5
No. of families :	8	12	18	15	10	7

23. Find inter quartile range from the following :

Mark :	10	18	22	17	15	32
No. of Students :	8	10	13	7	5	8

24. Find geometric mean from the following :

$$X : 55, \quad 5, \quad .05, \quad .0005, \quad .0050$$

25. The mean value of 50 items were found to be 40. For the above calculation two values were taken 22 and 17, instead of 32 and 21. Find the correct value of mean.
26. For a moderately skewed data, the arithmetic mean is 200, the coefficient of variation is 8 and Karl Pearson's coefficient of skewness is 0.3. Find the mode and the median.

$$[W = 6 \times 2 = 12] [WGP = 6 \times 4 \times 2 = 48]$$



## PART - D

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

27. Define statistics. State its scopes and functions.

28. You are incharge of rationing in a State affected by food shortage. The following reports arrive from your local investigators.

Daily calorie value of food available per adult during current period is :

Area	Mean	Standard Deviation
X	2,500	500
Y	2,200	300

The estimated requirement of an adult is taken at 3,000 calories daily and the absolute minimum at 1,250. Comment on the reported figure and determine which in your opinion needs more urgent attention.

29. Find out appropriate Price Index from the following. Also prove, factor reversal test is satisfied in it.

Commodities	2007		2005	
	Price	Quantity	Price	Value
A	12	10	10	80
B	10	14	12	144
C	15	11	15	120
D	25	8	20	200

$$[W = 2 \times 4 = 8] [WGP = 2 \times 4 \times 4 = 32]$$