64222

Second Semester B.B.A. Degree Examinations, May/June 2019

(CBCS)

Paper 2.4 – QUANTITATIVE METHODS FOR BUSINESS – II

Time : 3 Hours] *[Max. Marks : 70*

Instructions to Candidates : Answers should be written in English only. Calculators are allowed.

SECTION – A

1. Answer any **FIVE** sub questions. Each sub-question carries **2** marks : **(5 × 2 = 10)**

   (a) What is secondary data?

   (b) What are ogive curves?

   (c) What is probable error?

   (d) State any two merits of arithmetic mean.

   (e) Index numbers are called "Economic Barometers". Why?

   (f) Write the formula to calculate Spearman's Rank Correlation.

   (g) Mention any two characteristics of a good measure of dispersion.

SECTION – B

Answer any **THREE** of the following. Each question carries **6** marks. **(3 × 6 = 18)**

2. Explain any three limitations of Statistics.

3. What is tabulation? Explain any four parts of a statistical table.

4. Tabulate the following data :

In 2017, out of the total 1,750 workers of a factory 1,250 were members of trade union. The number of women employed was 200 of which 175 did not belong to a trade union.

In 2018 the number of union workers increased to 1,580 of which 1,290 were men. On the other hand, the number of non-union workers fell down to 208 of which 180 were men.

5. State any three merits and demerits of arithmetic mean.

6. Calculate median from the following data :

Wages (Rs.)	100-110	110-120	120-130	130-140	140-150
Frequency	4	6	20	32	33

SECTION – C

Answer any **THREE** of the following. Each question carries **14** marks. **(3 × 14 = 42)**

7. Compute Fisher's Ideal Index and test whether it satisfies the reversibility tests.

Commodity	Base Year		Current Year	
	Price	Quantity	Price	Quantity
P	15	25	25	20
Q	20	60	60	35
R	15	60	50	48
S	10	10	20	13
T	30	16	40	16

8. Draw Ogive curves from the following data and locate median graphically. Verify the results by actual calculation.

C.I	0-50	50-100	100-150	150-200	200-250
f	10	30	50	40	20

9. Determine the two regression equations for the following data. Predict the value of Y when $X = 50$ and the value of X when $Y = 25$.

X	40	32	38	42	36	46
Y	30	35	40	36	28	35

10. An agent obtained samples of bulbs from 2 companies. He had them tested for durability and got the following results :

Durability (0000 hrs)	17-19	19-21	21-23	23-25
Company A	100	160	260	80
Company B	30	420	120	30

Which company bulbs are more uniform?

11. Calculate Karl Pearson's coefficient of correlation from the following data using 44 and 26 as assumed means for X and Y respectively.

X	43	44	46	40	44	42	45	42	40	42	57	48
Y	29	31	19	18	19	27	27	29	41	30	26	10