2019

B.Com.

3rd Semester Examination

MARKETING MANAGEMENT (Honours)

Paper—GE 3-T

Full Marks : 40

Time : 2 Hours

The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.

Quantitative Techniques for Management

1. Answer *any five* questions :   2×5=10

    (a) What do you mean by secondary data? Give
         example.   2

    (b) What is the relation between A.M, G.M and
         H.M. ?   2

    (c) Calculate the mean deviation of the following
         values about the median : 8, 15, 53, 49, 19,
         62, 7, 15, 95, 77.   2

    (d) What do you mean by relative measures of
         dispersion?   2

[Turn Over]

(e) What are the properties of Correlation Co-efficient? 2

(f) What is the relation between Regression Co-efficient and Correlation Co-efficient? 2

(g) How to calculate index number under aggregative method ? 2

(h) What do you mean by quartile deviation? 2

2. Answr *any four* questions : 5×4=20

(a) Calculate quartile deviation from the following : 5

Class Interval	Frequency
10–15	4
15–20	12
20–25	16
25–30	22
30–40	10
40–50	8
50–60	6
60–70	4
Total	82

(b) What are the properties of Linear Regression?

5

(c) Two lines of regression are given by—

$$x + 4y + 3 = 0$$

and $4x + 9y + 5 = 0$

Find the value of two regression co-efficients and the correlation co-efficient between them.

(d) Using the weighted aggregative method, determine the index number of the following data :

Commodity	Base Price	Current Price	Weight
Rice	140	180	10
Oil	400	550	7
Sugar	100	250	6
Wheat	125	150	6
Fish	200	300	4

(e) Find the standard deviation from the following data : 49, 63, 46, 59, 65, 52, 60, 54.   5

(f) Describe the various methods of collecting primary data.   5

[Turn Over]

3. Answer *any one* question : $1 \times 10 = 10$

(a) (i) Calculate the coefficient of rank correlation of the following data :

Student No.	1	2	3	4	5	6	7	8
Marks in Statistics :	52	63	45	36	72	65	45	25
Marks in Accountancy :	62	53	51	25	79	43	60	33

   (ii) Two samples of sizes 60 and 90 have 52 and 48 as the respective A.Ms and 9 and 12 as the respective S.Ds. Find the A.M and S.D of the combined sample of size 150. $5+5$

(b) (i) Define an Index Number and state its uses.

   (ii) Calculate the price Index number using Fishers' formula for the following data and show that it satisfies the time reversal test.

Commodity	2017 (Base yr.)		2018 (Current yr.)	
	Price	Qnty.	Price	Qnty.
A	8	6	12	5
B	10	5	11	6
C	7	8	8	5

                                       $3+7$