

MP-304/204(New)

June - Examination 2019

**Master of Business Administration - II Year
Examination****Quantitative Techniques****Paper - MP-304/204(New)****Time : 3 Hours]****[Max. Marks :- 80**

Note: The question paper is divided into three sections A, B and C. Write answers as per the given instructions.

Section - A**8 × 2 = 16**

(Very Short Answer Questions)

Note: Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 2 marks.

- 1) (i) What do you mean by Decision Tree?
- (ii) What is Pay of Matrix?
- (iii) What is Linear Programming?
- (iv) What is the full form of PERT?
- (v) What do you mean by Co-Factor of Determinant?
- (vi) State the Crammers Rule.
- (vii) What is co- relation?
- (viii) What do you mean by Break- Even Analysis?

Section - B**4 × 8 = 32**

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

- 2) Differentiate between Correlation and Regression.
- 3) Discuss the limitations of quantitative techniques.
- 4) Write a note on Objectives and importance of Forecasting in Business.
- 5) What do you understand by Exponential Smoothing? Enumerate its merits as well as demerits.
- 6) Explain the merits and demerits of moving average.
- 7) “An Index number is a special type of average”. Discuss.
- 8) Determine the regression equation by using the regression slope coefficient and intercept value as shown in the regression table below.

X-value	55	60	65	70	80
Y-value	52	54	56	58	62

- 9) Write down the principles of modelling.

Section - C $2 \times 16 = 32$

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum up to 500 words. Each question carries 16 marks.

10) A factory has 100 items on hand for shipment to a destination at the cost of Rs 1 a piece to meet a certain demand d . In case the demand d overshoots the supply. It is necessary to meet the unsatisfied demand by purchases on the local market at Rs 2 a piece. Construct the cost function if x is the number shipped from the factory.

11) Find Spearman's rank correlation coefficient between marks of mathematics and physics obtained by the student of class 12th. The marks of both subjects are given below in the table-

Mathematics	13	20	22	18	19	11	10	15
Physics	17	19	23	16	20	10	11	18

12) "Quantitative techniques are a great aid to management" Do you agree with this statement? Answer with reasons.

13) Discuss the main features of the decision theory. Also state its limitations.
