5. What do you understand by Business Forecasting? Explain the objectives underlying the business forecasting.

6. By using Laspeyre's method, calculate the weighted price index for the year 2010 when the given data indicates the prices and consumption levels of various commodities :

Commodities	Base Price 2007 (₹)	Current Price (2010) (₹)	Average Quantity Consumed (2007)
Potatoes (per kg)	5.10	4.50	4000 kgs
Milk (per litre	14.00	17.00	800 litres
Eggs (per doz)	21.00	24.00	2000 dozens
Bread (per loaf)	17.50	19.00	350 loaves

7. Briefly explain the different decision rules adopted in decision-making under condition of uncertainty.

8. Explain the meaning of a queue and state the object of queuing analysis. Briefly describe the elements of queuing system.

9. What is Network Analysis ? When is it used ? What is meant by the phrase 'Critical Path' ?

MP–204/MP–304 (Old)

December – Examination 2021

Master of Business Administration (II Year) Examination

Quantitative Techniques

Paper : MP-204/MP-304 (Old)

Time : 1½ Hours]   [*Maximum Marks : 80*

Note :– The question paper is divided into two Sections A and B. Write answers as per the given instructions.

Section–A   4×4=16

(Very Short Answer Type Questions)

Note :– Answer any *four* 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 4 marks.

1. (i) What is Explicit and Implicit functions ?

   (ii) What is Linear and Non-linear correlation ?

(iii) What is Price Index ?

(iv) Write Fisher's Ideal Formula for Price Index Number.

(v) What is Conditional Probability ?

(vi) What is PERT ?

(vii) What do you mean by 2 × 2 Two-person games ?

(viii) Explain different types of floats.

Section–B   4×16=64

(Short Answer Type Questions)

Note :–   Answer any *four* questions. Eacg answer should not exceed **200** words. Each question carries 16 marks.

2. Write a short note on "Operation Research" describing some of the important O.R. techniques.

3. There are three dealers in a market who sales Radios, T.V. and CD players. A sells weekly 14 radios, 2 TV and CD players. B sells weekly 10 radios, 3 TV and 10 CD players. C sells weekly 9 radios, 5 TV and 9 CD players. If the profit per radio is Rs. 50, on TV is Rs. 20 and on CD players is Rs. 30. Calculate their individual profits.

4. Marks obtained by a student in Physics and Maths (out of 100) are given in the following Table :

Physics (x)	Maths (y)
80	82
45	56
55	50
56	48
58	60
60	62
65	64
68	65
70	70
75	74
85	90