10. Draw a network diagram and also find critical path :

Activity	Duration (in days)
1–2	20
1–3	25
2–3	10
2–4	12
3–4	6
4–5	10

11. Define Decision Tree Technique. What are its key features ?

12. Define Matrix Algebra. What are its significance ?

13. Explain Linear Programming and its objective in Simplex Method.

MP–204/MP–304 (Old)

December – Examination 2023

Master of Business Administration (IInd Year) Examination

QUANTITATIVE TECHNIQUES

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

Time : 3 Hours]   *[Maximum 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 Type 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 Quantitative Techniques ?

(ii)   What is Correlation ?

(iii) Define Calculus.

(iv)   What is Probability ?

(v)   Define Networks.

(vi)   What is Linear Programming ?

(vii) What are CPM key features ?

(viii) What do you mean by Index Numbers ?

Section–B   4×8=32

(Short Answer Type Questions)

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

2. Explain the concept of Correlation and Regression.

3. What are the key features of Business Forecasting ?

4. What do you mean by Pay-off Matrix ?

5. What are the key features of Time Series ?

6. Game Theory Practical—There are two players A and B participating in a play. Player A is the starting player. Player A has three strategies and

Player B also has three strategies. The pay-off matrix for Player A is given below. Decide optimal strategy for Player A and Player B. Find the value of the game.

Strategies for Player A	Strategies for Player B		
	B_1	B_2	B_3
A_1	8	5	7
A_2	2	3	8
A_3	6	1	5

7. What is the process of Quantitative Techniques ?

8. What are the key assumptions of Queuing Theory ?

9. What are the key technique to draw a network ?

Section–C   2×16=32

(Long Answer Type Questions)

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