

MP-204/MP-304 (Old)

December – Examination 2022

Master of Business Administration (II 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 is Operation Research ?
- (ii) Define Calculus.

- (iii) What is PERT ?
- (iv) What does Probability Mean ?
- (v) Define Correlation.
- (vi) What is Game Theory ?
- (vii) Define Break-even Analysis.
- (viii) What is Transportation ?

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 decision-making in operation research.
3. What is Saddle Point ?
4. What are the key features of simulation technique ?
5. Calculate probable error if coefficient of correlation is +0.92 and number of pair of items are 25.
6. What do you mean by test of optimality ?
7. What are the key features of assignment technique ?
8. What are the main principles of modelling ?
9. What is the objective of index numbers ?

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.

10. Explain the use of queuing theory in costing with the help of diagram.
11. Find the range of values p and q which will render the entry (2, 2) a saddle point for the game :

		Player B		
		B		
Player A	A	B ₁	B ₂	B ₃
	A ₁	2	4	5
	A ₂	10	7	q
	A ₃	4	p	8

12. Explain the importance and objectives of PERT system.
13. Explain the principle of minimization and randomization in linear programming.