Printing Page(s) : 1 **Paper Code :DCS-211**

Roll No.

MCA-12, M.Sc. (CA)-11

2nd Year Examination, Academic Batch 2018

Computer based optimization techniques

Time : 3 Hours] *[Max. Marks : 100*

***Note**. Attempt any **five** questions. All questions carry equal marks.*

Q.1. Explain Minimum matrix method for finding an initial basic feasible solution for a transportation problem?

Q.2. Write short notes on:
(a). Branch and bound method.
(b). Single channel and multi-Channel queuing models.

Q.3. Explain probabilistic inventory models?

Q.4. Explain the use of Integer Linear programming?

Q.5 What is a transportation problem? How is it useful in business and industry?

Q.6 Explain dynamic programming. What are applications of dynamic programming?

Q.7 Define a queue. Give a brief description of the type of queue discipline commonly faced.

Q.8 Use dynamic programming to solve the following linear programming problem :
Maximize Z = 3X1 + 4X2
Subject to, 2X1 + X2 <= 40,
2X1 + 5X2 <= 180,
X1, X2 >= 0