

University of Pune
Department of Management Sciences
MBA-BT Semester II
Mid-Sem Exams Feb 2011

206-Simulation and Optimization

Maximum Marks: 40

Time: 2Hrs

Answer any 4 questions

Q. 1) Give the role and significance of different optimization / quantitative techniques in business and Industry for decision making. (10)

Q. 2) Write short Notes (any two) (10)

- a) Monte Carlo Simulation technique
- b) Degeneracy
- c) Decisions under uncertainty

Q. 3) A company has three factories A, B & C which supply to four warehouses P, Q, R & S. The monthly production capacity in tones at A, B & C is 120, 80 & 200 respectively. The monthly requirement in tones for the warehouses P, Q, R & S is 60, 50, 140 and 50 respectively. Transportation cost in Rs. is given in the matrix below. Determine transportation schedule that minimizes the total transportation cost.

From warehouse to factories

	A	B	C
P	4	3	7
Q	5	8	4
R	2	4	7
S	5	8	4

(10)

Q. 4) An ice cream retailer buys ice cream at a cost of Rs. 5 per cup and sells it for Rs. 8 per cup; any remaining unsold at the end of the day can be disposed of at a salvage price of Rs. 2 per cup. Past

