SCHOOL OF PLANNING AND ARCHITECTURE, VIJAYAWADA

SEMESTER END EXAMINATIONS (REGULAR), MAY-2016

B.Planning, I YEAR II SEMESTER (CE)

QUANTATIVE METHODS – II (10210203)

Maximum Marks – 50   **Time – 2.00 Hours**

a) Answer any __Two questions out of 1 to 4 questions.__

b) Question No.5 is compulsory and __answer any four__ out of six sub-questions.

Q1. Define a Graph. What are the various types of Graphs? Draw appropriate Illustrations wherever necessary.   **(15M)**

Q2. Mc Donalds' uses an average of 10,000 pounds of **(15M)** potatoes per week. Average quantity of potatoes on hand is 5000 pounds. On an average how long do potatoes stay in restaurant before being used?

Q3. Solve the Transportation table to find Initial basic **(15M)** feasibility solution using Vogel's Approximation Method.

	D_1	D_2	D_3	D_4	Supply
S_1	19	30	50	10	7
S_2	70	30	40	60	9
S_3	40	8	70	20	18
Demand	5	8	7	14	34

Q4. What is a Linear programming problem. Explain the **(15M)** various solutions to linear programming problem through examples.

Q5. Write short notes on: **(4x5=20M)**
   a) Input & Output process in queuing theory.
   b) Importance of Linear programming.
   c) Mention the guide lines for linear programming model formulation.
   d) History of graph theory.
   e) Alpha & Beta Models.
   f) Stock and surplus variables.

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