

**VEER NARMAD SOUTH GUJARAT UNIVERSITY**  
University Campus, Udhna-Magdalla Road,  
SURAT – 395 007.

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**M.Com. (Part- II) Statistics**  
**ADVANCED STATISTICS PAPER – VI**  
**(External Programme)**

**Effect From 2015- 16**

**(1) Linear Programming:**

Formulation of L.P.P., Simplex method, revised simplex method, Big–M method, Two-phase method. Duality in L.P.P.; concept and application, statement of duality theorem and its application. (50%)

**(2) Inventory Models:**

EOQ models with uniform rate of demand and shortages not allowed, deterministic models with shortages, instantaneous production , finite rate of replenishment model, probabilistic demand model , single period model with uniform demand , ABC analysis of inventory. (25%)

**(3) Queuing theory:**

Classification of queues, Poisson process and exponential distribution, transient and steady states, Poisson queues with single service channel, Finite and infinite capacity and it's characteristics. (25%)

**Books :**

- (1) Hadley, G. (1995): Linear Programming, Narosa Publishing House, New Delhi.
- (2) Paria, G. ( ): Linear Programming, Books & Allied pvt Ltd., Kolkata.
- (3) Kanti Swarup, P.K. Gupta and Man Mohan (1995): Operations Research; Sultan Chand & Sons; New Delhi.
- (4) Sharma, S.D. (1998): Operations Research; Kedar Nath & Sons, Meerut.
- (5) Sharma, J.K. (1998): Operations Research; Mac Milan Pub., New Delhi.