Paper Code: UM02DBBS52	Total Credits: 3	
Title Of Paper: Quantitative Techniques		
Unit	**Description in detail**	**Weightage (%)**
1	**linear programming** Lpp: Definition meaning assumption limitations users mathematical form terminology (constraints, objective, function, solution, feasible solution) Methods of solving lpp: Graphical Simplex (using only slack variables) (Word problem are omitted)	**25 %**
2	**Transportation and assignment problems** t.p. mathematical form Methods for obtaining initial basic feasible solution • n.w corner method • matrix minima method • Vogel's approximations method unbalanced t.p assignment problem mathematical form Hungarian method to solve maximization and minimization problem Unbalanced assignment problem	**25 %**
3	**Theory of games** Meaning of the term "GAME" Types of game Value to game Saddle point Game problem of mixed strategy Solution of 2xs and mX2 games using graphical method Solutions of mXn games using dominance rule Limitation of theory of games	**25 %**
4	**Statically quality control** Sqc meaning uses Variation in quality Example based on charts for variable (X and r charts) And charts for attributes (P, np and c charts) Difference between variable charts and attribute charts. Difference between p and np charts Note: 20% theory and 80% example	**25 %**

Reference books

1) quantities technique s in management et by n.d.vahora the mc graw hill company (3rd edition)
2) Quantitative techniques by c.r.kotharivikas publications house pvt. Ltd.(3rdedition)
3) statistic for management by k.k. Sharma