



**Bachelor of Business Administration-Information System Management**  
**BBA-ISM SEMESTER- II**

<b>Course Code</b>	UM02DBBS72	<b>Title of the Course</b>	<b>QUANTITATIVE TECHNIQUES</b>
<b>Total Credits of the Course</b>	<b>03</b>	<b>Hours per Week</b>	<b>03</b>

<b>Course Objectives</b>	<ol style="list-style-type: none"><li>1 To develop and enhance analytical ability in students for processing and interpreting statistical data.</li><li>2 To familiarize students with applications of Mathematical and Statistical methods in business management decision making problems</li></ol>
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**Course Content**

<b>Unit</b>	<b>Description</b>	<b>Weightage* (%)</b>
<b>1.</b>	<b>linear programming</b> 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%
<b>2.</b>	<b>Transportation and assignment problems</b> 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%
<b>3.</b>	<b>Theory of games</b> 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%
<b>4.</b>	<b>Statically quality control</b> 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%

<b>Teaching-Learning</b>	<b>Lectures, Assignments, Quiz and Seminars</b>
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<b>Methodology</b>		
<b>Evaluation Pattern</b>		
<b>Sr. No.</b>	<b>Details of the Evaluation</b>	<b>Weightage</b>
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

<b>Course Outcomes: Having completed this course, the learner will be able to</b>	
1.	Analyze and interpret mathematical and statistical methods and develop and enhance analytical ability for processing and interpreting statistical data.
2.	Apply Mathematical and Statistical methods in business management decision making problems

<b>Suggested References:</b>	
<b>Sr. No.</b>	<b>References</b>
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.
3.	statistic for management by k.k. Sharm

Online resources: <https://youtu.be/Dstf6uzWcY4?list=PLFCINVOTycUW5YpwtaTnV2x>

<https://youtu.be/DY3AEUdznwc?list=PLFCINVOTycUW5YpwtaTnV2x>

[https://youtu.be/VM3\\_86Algkw?list=PLFCINVOTycUW5YpwtaTnV2x-NJCZVnulG](https://youtu.be/VM3_86Algkw?list=PLFCINVOTycUW5YpwtaTnV2x-NJCZVnulG)

<https://youtu.be/owsh077YeVA?list=PLFCINVOTycUW5YpwtaTnV2x-NJCZVnulG>

<https://youtu.be/vTM-EE9EyV8?list=PLFCINVOTycUW5YpwtaTnV2x-NJCZVnulG>

<https://youtu.be/jpRMMBFzPjY?list=PLFCINVOTycUW5YpwtaTnV2x-NJCZVnulG>



**SARDAR PATEL UNIVERSITY**  
**Vallabh Vidyanagar, Gujarat**  
**(Reaccredited with 'A' Grade by NAAC (CGPA 3.25))**  
**Syllabus with effect from the Academic Year 2021-2022**

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<https://youtu.be/-AgOoFeccRU?list=PLFCINVOTycUW5YpwtaTnV2x-NJCZVnulG>

<https://www.youtube.com/watch?v=duZ4MVh5VX0&list=PLFCINVOTycUXOnNYGc>

<https://youtu.be/duZ4MVh5VX0?list=PLFCINVOTycUXOnNYGc70DheoGDqnU8ufA>

<https://youtu.be/0Fddg6iyZFM?list=PLFCINVOTycUXOnNYGc70DheoGDqnU8ufA>

<https://youtu.be/0Fddg6iyZFM?list=PLFCINVOTycUXOnNYGc70DheoGDqnU8ufA>

<https://youtu.be/0h8Cf3TAvIc?list=PLFCINVOTycUXOnNYGc70DheoGDqnU8ufA>

<https://youtu.be/0h8Cf3TAvIc?list=PLFCINVOTycUXOnNYGc70DheoGDqnU8ufA>

[https://youtu.be/t4zGxq\\_Uv5E?list=PLFCINVOTycUXOnNYGc70DheoGDqnU8ufA](https://youtu.be/t4zGxq_Uv5E?list=PLFCINVOTycUXOnNYGc70DheoGDqnU8ufA)

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