



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

| | | | |
|------------------------------------|----------------------|----------------------------|----------------------------------|
| Course Code | UM02 IDBBS 01 | Title of the Course | Business Mathematics – II |
| Total Credits of the Course | 04 | Hours per Week | 04 |

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

Course Content

| Unit | Description | 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 2x2 and mx2 games using graphical method Solutions of mxn games using dominance rule Limitation of theory of games | 25% |
| 4. | Statically quality control S.Q.C. meaning uses Variation in quality Example based on charts for variable (\bar{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% |



SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat (Reaccredited with 'A')
Grade by NAAC (CGPA 3.11)

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

| | |
|--------------------------|---|
| Teaching-Learning | Lectures, Assignments, Quiz and Seminars |
|--------------------------|---|

| | | |
|---------------------------|--|------------------|
| Methodology | | |
| Evaluation Pattern | | |
| Sr. No. | Details of the Evaluation | Weightage |
| 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% |

| | |
|---|---|
| Course Outcomes: Having completed this course, the learner will be able to | |
| 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 |

| | |
|------------------------------|---|
| Suggested References: | |
| Sr. No. | References |
| 1. | quantities techniques 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 |



SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar, Gujarat (Reaccredited with 'A')
Grade by NAAC (CGPA 3.11)

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

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/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 3.11)

Syllabus as per NEP 2020 with effect from the Academic Year 2023-2024

<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
