



# Symbiosis College of Arts and Commerce

(An Autonomous College under Savitribai Phule Pune University)

Subject code		Semester	I	II	III	IV	V	VI	M.Com.	I	II	III	IV
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Title of Subject	<b>S.Y.B. Com with Specialization in Accounting and Finance</b> <b>Honours – Core III</b> <b>Title: Decision making using Statistical Techniques</b>
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Objectives	<ol style="list-style-type: none"> <li>1. To introduction to decision making under risk and uncertainty, by estimating the degree of risk and likely effect on business objectives.</li> <li>2. To analyze a decision situation and enable to arrive at a strategy which is the best under given circumstances of the case.</li> <li>3. To learn the techniques used for planning, scheduling, monitoring and coordinating large complex projects.</li> </ol>
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### Detailed syllabus

Unit	Contents of the syllabus	Number of Lectures
<b>1.</b>	<b>Theory of probability</b> 1.1 Permutation and combination 1.2 Basic probability rules 1.3 Joint and marginal probability 1.4 Conditional probability 1.5 Analyzing data on excel	<b>14</b>
<b>2.</b>	<b>Decision Theory</b> 2.1 Meaning and Scope 2.2 Decision under risk and uncertainty 2.3 Expected values 2.4 Pay off tables 2.5 Decision Tree 2.6 Analyzing data on excel	<b>14</b>
<b>3.</b>	<b>Business Forecasting</b> 3.1 Meaning, Objective and characteristics 3.2 Time Series Analysis 3.3 Association of Attributes 3.4 Analyzing data on excel	<b>12</b>
<b>4.</b>	<b>Project Management</b> 4.1 Network Analysis 4.2 Project time – cost trade off. 4.3 Analyzing data on excel	<b>14</b>
	<b>Total Number of Lectures</b>	<b>54</b>

#### Suggested Reference Books

1. Operations Research problems and solutions - V.K. Kapoor
2. Statistics (Theory, methods and application) – D.C. Sancheti & V.K. Kapoor

3. Business Mathematics Theory and Application – J.K. Sharma
4. Mathematics and Statistics for management – P.K.Mittal, Dr.B.G.Sathyaprasad , M.K.Pradeep Kumar Rao

**Outcomes:**

1. Learn the various techniques of decision making under risk and uncertainty.
2. To analyze and form a strategy under risk and uncertainty.
3. Learn the scheduling and cost control, under network analysis and cost trade off.