ANNA UNIVERSITY, CHENNAI
AFFILIATED INSTITUTIONS
REGULATIONS – 2017
CHOICE BASED CREDIT SYSTEM
MASTER OF BUSINESS ADMINISTRATION (GENERAL)

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs):
MBA programme curriculum is designed to prepare the post graduate students
I. To have a thorough understanding of the core aspects of the business.
II. To provide the learners with the management tools to identify, analyze and create business opportunities as well as solve business problems.
III. To prepare them to have a holistic approach towards management functions.
IV. To motivate them for continuous learning.
V. To inspire and make them practice ethical standards in business.

PROGRAMME OUTCOMES (POs):
On successful completion of the programme,
1. Ability to apply the business acumen gained in practice.
2. Ability to understand and solve managerial issues.
3. Ability to communicate and negotiate effectively, to achieve organizational and individual goals.
4. Ability to upgrade their professional and managerial skills in their workplace.
5. Ability to explore and reflect about managerial challenges, develop informed managerial decisions in a dynamically unstable environment.
6. Ability to take up challenging assignments.
7. Ability to understand one’s own ability to set achievable targets and complete them.
8. Ability to pursue lifelong learning.
9. To have a fulfilling business career.

<table>
<thead>
<tr>
<th>Programme Educational Objectives</th>
<th>Programme Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PO1</td>
</tr>
<tr>
<td>I</td>
<td>✓</td>
</tr>
<tr>
<td>II</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>✓</td>
</tr>
<tr>
<td>IV</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>✓</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 1</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 1</td>
<td>SEM 2</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 3</td>
</tr>
<tr>
<td>YEAR 2</td>
<td>SEM 4</td>
</tr>
<tr>
<td>Stream/ Specialization</td>
<td>PO1</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----</td>
</tr>
<tr>
<td><strong>Marketing Management</strong></td>
<td></td>
</tr>
<tr>
<td>Brand Management</td>
<td>✓</td>
</tr>
<tr>
<td>Consumer Behaviour</td>
<td>✓</td>
</tr>
<tr>
<td>Customer Relationship Management</td>
<td>✓</td>
</tr>
<tr>
<td>Integrated Marketing Communication</td>
<td>✓</td>
</tr>
<tr>
<td>Retail Marketing</td>
<td>✓</td>
</tr>
<tr>
<td>Services Marketing</td>
<td>✓</td>
</tr>
<tr>
<td>Social Marketing</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Financial Management</strong></td>
<td></td>
</tr>
<tr>
<td>Banking Financial Services Management</td>
<td>✓</td>
</tr>
<tr>
<td>Corporate Finance</td>
<td>✓</td>
</tr>
<tr>
<td>Derivatives Management</td>
<td>✓</td>
</tr>
<tr>
<td>Merchant Banking and Financial Services</td>
<td>✓</td>
</tr>
<tr>
<td>Security Analysis and Portfolio Management</td>
<td>✓</td>
</tr>
<tr>
<td>Strategic Investment and Financing Decisions</td>
<td>✓</td>
</tr>
<tr>
<td>International Trade Finance</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Human Resource Management</strong></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship Development</td>
<td>✓</td>
</tr>
<tr>
<td>Industrial Relations and Labour Welfare</td>
<td>✓</td>
</tr>
<tr>
<td>Labour Legislations</td>
<td>✓</td>
</tr>
<tr>
<td>Managerial Behaviour and Effectiveness</td>
<td>✓</td>
</tr>
<tr>
<td>Organizational Theory, Design and Development</td>
<td>✓</td>
</tr>
<tr>
<td>Strategic Human Resource Management</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Systems Management</strong></td>
<td></td>
</tr>
<tr>
<td>Advanced Database Management System</td>
<td>✓</td>
</tr>
<tr>
<td>Data mining for Business Intelligence</td>
<td>✓</td>
</tr>
<tr>
<td>E-Business Management</td>
<td>✓</td>
</tr>
<tr>
<td>Stream/ Specialization</td>
<td>Operations Management</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Logistics Management</td>
<td>✔</td>
</tr>
<tr>
<td>Materials Management</td>
<td>✔</td>
</tr>
<tr>
<td>Product Design</td>
<td>✔</td>
</tr>
<tr>
<td>Project Management</td>
<td>✔</td>
</tr>
<tr>
<td>Services Operations Management</td>
<td>✔</td>
</tr>
<tr>
<td>Supply Chain Management</td>
<td>✔</td>
</tr>
</tbody>
</table>
ANNA UNIVERSITY, CHENNAI
AFFILIATED INSTITUTIONS
REGULATIONS – 2017
CHOICE BASED CREDIT SYSTEM
MASTER OF BUSINESS ADMINISTRATION (FULL TIME)
CURRICULA AND SYLLABI I TO IV SEMESTERS

SEMESTER - I

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CATEGORY</th>
<th>CONTACT PERIODS</th>
<th>L</th>
<th>T</th>
<th>P</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>THEORY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>BA5101</td>
<td>Economic Analysis for Business</td>
<td>PC</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>2.</td>
<td>BA5102</td>
<td>Principles of Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>BA5103</td>
<td>Accounting for Management</td>
<td>PC</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>BA5104</td>
<td>Legal Aspects of Business</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>BA5105</td>
<td>Organizational Behaviour</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>BA5106</td>
<td>Statistics for Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>BA5107</td>
<td>Total Quality Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>PRACTICALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>BA5111</td>
<td>Spoken and Written Communication #</td>
<td>EEC</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>27</td>
<td>23</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

# No end semester examination is required for this course.

SEMESTER - II

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CATEGORY</th>
<th>CONTACT PERIODS</th>
<th>L</th>
<th>T</th>
<th>P</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>THEORY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>BA5201</td>
<td>Applied Operations Research</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>BA5202</td>
<td>Business Research Methods</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>BA5203</td>
<td>Financial Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>BA5204</td>
<td>Human Resource Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>BA5205</td>
<td>Information Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>BA5206</td>
<td>Operations Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>BA5207</td>
<td>Marketing Management</td>
<td>PC</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>PRACTICALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>BA5211</td>
<td>Data Analysis and Business Modelling</td>
<td>EEC</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>26</td>
<td>22</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>
### SEMESTER - III

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CATEGORY</th>
<th>CONTACT PERIODS</th>
<th>L</th>
<th>T</th>
<th>P</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>THEORY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>BA5301</td>
<td>International Business Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>BA5302</td>
<td>Strategic Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>Professional Elective I ***</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>Professional Elective II ***</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>Professional Elective III ***</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td>Professional Elective IV ***</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>Professional Elective V ***</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td>Professional Elective VI ***</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>PRACTICALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>BA5311</td>
<td>Summer Training</td>
<td>EEC</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>26</td>
<td>24</td>
<td>0</td>
<td>25</td>
</tr>
</tbody>
</table>

*** Chosen electives should be from two streams of management of three electives each.

### SEMESTER - IV

<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CATEGORY</th>
<th>CONTACT PERIODS</th>
<th>L</th>
<th>T</th>
<th>P</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>PRACTICALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>BA5411</td>
<td>Project Work</td>
<td>EEC</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>12</td>
</tr>
</tbody>
</table>

TOTAL NO. OF CREDITS:86
<table>
<thead>
<tr>
<th>SL. NO.</th>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CATEGORY</th>
<th>CONTACT PERIODS</th>
<th>L</th>
<th>T</th>
<th>P</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td>Principles of Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td>Accounting for Management</td>
<td>PC</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>Economic Analysis for Business</td>
<td>PC</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>Legal Aspects of Business</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>Organizational Behaviour</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td>Statistics for Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td>Marketing Management</td>
<td>PC</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td>Spoken and Written Communication</td>
<td>PC</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>9.</td>
<td></td>
<td>Applied Operations Research</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td>Business Research Methods</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td>Strategic Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td>Financial Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td></td>
<td>Human Resource Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td>Information Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td>Operations Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td></td>
<td>International Business</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td>Total Quality Management</td>
<td>PC</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
PROFESSIONAL ELECTIVES (PE)

FUNCTIONAL SPECIALIZATIONS

1. Students can take three electives subjects from two functional specializations
   Or
2. Students can take six elective subjects from any one sectoral specializations

<table>
<thead>
<tr>
<th>SL. NO</th>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CATEGORY</th>
<th>CONTACT PERIODS</th>
<th>L</th>
<th>T</th>
<th>P</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Stream/ Specialization : Marketing Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>BA5001</td>
<td>Brand Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>BA5002</td>
<td>Consumer Behaviour</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>BA5003</td>
<td>Customer Relationship Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>BA5004</td>
<td>Integrated Marketing Communication</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>BA5005</td>
<td>Retail Marketing</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>BA5006</td>
<td>Services Marketing</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>BA5007</td>
<td>Social Marketing</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stream/ Specialization : Financial Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>BA5008</td>
<td>Banking Financial Services Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>BA5009</td>
<td>Corporate Finance</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>BA5010</td>
<td>Derivatives Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>BA5011</td>
<td>Merchant Banking and Financial Services</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>BA5012</td>
<td>Security Analysis and Portfolio Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>13.</td>
<td>BA5013</td>
<td>Strategic Investment and Financing Decisions</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>BA5031</td>
<td>International Trade Finance</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stream/ Specialization : Human Resource Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>BA5014</td>
<td>Entrepreneurship Development</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>BA5015</td>
<td>Industrial Relations and Labour Welfare</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>BA5016</td>
<td>Labour Legislations</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>18.</td>
<td>BA5017</td>
<td>Managerial</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Course Code</td>
<td>Course Title</td>
<td>Stream/ Specialization</td>
<td>Credits</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------------</td>
<td>--------------------------------------------------------</td>
<td>------------------------</td>
<td>---------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>BA5018</td>
<td>Behaviour and Effectiveness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>BA5019</td>
<td>Organizational Theory, Design and Development</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>BA5020</td>
<td>Strategic Human Resource Management</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>BA5021</td>
<td>Advanced Database Management System</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>BA5022</td>
<td>Datamining for Business Intelligence</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>BA5023</td>
<td>Enterprise Resource Planning</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>BA5024</td>
<td>Software Project Management and Quality</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>BA5025</td>
<td>E-Business Management</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>BA5026</td>
<td>Logistics Management</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>BA5027</td>
<td>Materials Management</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>BA5028</td>
<td>Product Design</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>BA5029</td>
<td>Project Management</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>BA5030</td>
<td>Services Operations Management</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>BA5031</td>
<td>Supply Chain Management</td>
<td>PE</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTORAL SPECIALIZATIONS

1. Students can take three electives subjects from two functional specializations or
2. Students can take six elective subjects from any one sectoral specializations

<table>
<thead>
<tr>
<th>SL. NO</th>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>CATEGORY</th>
<th>CONTACT PERIODS</th>
<th>L</th>
<th>T</th>
<th>P</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sectoral Specialization: Logistics and Supply Chain Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>BA5051</td>
<td>Supply Chain Concepts and Planning</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>2.</td>
<td>BA5052</td>
<td>Sourcing and Supply Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>3.</td>
<td>BA5053</td>
<td>Supply Chain Inventory Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>BA5054</td>
<td>Supply Chain Information System</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>5.</td>
<td>BA5055</td>
<td>Warehouse Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>6.</td>
<td>BA5056</td>
<td>Transportation and Distribution Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>7.</td>
<td>BA5057</td>
<td>Reverse and Contract Logistics</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>8.</td>
<td>BA5058</td>
<td>Air Cargo Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>9.</td>
<td>BA5059</td>
<td>Containerization and Allied Business</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>10.</td>
<td>BA5060</td>
<td>Exim Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>11.</td>
<td>BA5061</td>
<td>Fundamentals of Shipping</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>12.</td>
<td>BA5062</td>
<td>Port and Terminal Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sectoral Specialization: Infrastructure and Real Estate Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>BA5063</td>
<td>Infrastructure Planning Scheduling and Control</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>14.</td>
<td>BA5064</td>
<td>Contracts and Arbitration</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>15.</td>
<td>BA5065</td>
<td>Project Management for Infrastructure</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>16.</td>
<td>BA5066</td>
<td>Management of Human Resources, Safety and Quality</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>17.</td>
<td>BA5067</td>
<td>Disaster Mitigation and Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>18.</td>
<td>BA5068</td>
<td>Economics and Financial Management in Construction</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>19.</td>
<td>BA5069</td>
<td>Urban Environmental Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>20.</td>
<td>BA5070</td>
<td>Smart Materials, Techniques and Equipments for Infrastructure</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>21.</td>
<td>BA5071</td>
<td>Strategic Airport Infrastructure Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>22.</td>
<td>BA5072</td>
<td>Real Estate Marketing and Management</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>23.</td>
<td>BA5073</td>
<td>Infrastructure and Real Estate Entrepreneurship</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>24.</td>
<td>BA5074</td>
<td>Valuation of Real Estate and Infrastructure Assets</td>
<td>PE</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>SL. NO.</td>
<td>COURSE CODE</td>
<td>COURSE TITLE</td>
<td>CATEGORY</td>
<td>CONTACT PERIODS</td>
<td>L</td>
<td>T</td>
<td>P</td>
<td>C</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
<td>--------------------------------------------------</td>
<td>----------</td>
<td>-----------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>1.</td>
<td>BA5111</td>
<td>Spoken and Written Communication #</td>
<td>EEC</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>2.</td>
<td>BA5211</td>
<td>Data Analysis and Business Modeling</td>
<td>EEC</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>BA5311</td>
<td>Summer Training</td>
<td>EEC</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4.</td>
<td>BA5411</td>
<td>Project Work</td>
<td>EEC</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>24</td>
<td>12</td>
</tr>
</tbody>
</table>
OBJECTIVES:
- To introduce the concepts of scarcity and efficiency; to explain principles of micro economics relevant to managing an organization; to describe principles of macro economics to have the understanding of economic environment of business.

UNIT I INTRODUCTION

UNIT II CONSUMER AND PRODUCER BEHAVIOUR

UNIT III PRODUCT AND FACTOR MARKET

UNIT IV PERFORMANCE OF AN ECONOMY – MACRO ECONOMICS

UNIT V AGGREGATE SUPPLY AND THE ROLE OF MONEY

TOTAL: 60 PERIODS

OUTCOMES:
- Students are expected to become familiar with both principles of micro and macro economics. They would also become familiar with application of these principles to appreciate the functioning of both product and input markets as well as the economy.

REFERENCES:
OBJECTIVES:

- To familiarize the students to the basic concepts of management in order to aid in understanding how an organization functions, and in understanding the complexity and wide variety of issues managers face in today’s business firms.

UNIT I  INTRODUCTION TO MANAGEMENT  9

UNIT II  PLANNING  9

UNIT III  ORGANISING  9
Nature and purpose of organizing- Organization structure- Line and staff authority- Departmentation- Span of control- Centralization and decentralization- Delegation of authority- Staffing- Selection and Recruitment- Career development- Career stages- Training- Performance appraisal

UNIT IV  DIRECTING  9
Managing people- Communication- Hurdles to effective communication- Organization culture- Elements and types of culture- Managing cultural diversity.

UNIT V  CONTROLLING  9
Process of controlling- Types of control- Budgetary and non-budgetary control techniques - Managing productivity- Cost control- Purchase control- Maintenance control- Quality control- Planning operations.

TOTAL: 45 PERIODS

OUTCOMES:

i) The students should be able to describe and discuss the elements of effective management, ii) discuss and apply the planning, organizing and control processes, iii) describe various theories related to the development of leadership skills, motivation techniques, team work and effective communication, iv) communicate effectively through both oral and written presentation.

REFERENCES:

OBJECTIVES:
- Acquire a reasonable knowledge in accounts
- Analysis and evaluate financial statements

UNIT I  FINANCIAL ACCOUNTING  12

UNIT II  COMPANY ACCOUNTS  12
Meaning of Company -Maintenance of Books of Account-Statutory Books- Profit or Loss Prior to incorporation- Final Accounts of Company- Alteration of share capital- Preferential allotment, Employees stock option- Buyback of securities.

UNIT III  ANALYSIS OF FINANCIAL STATEMENTS  12
Analysis of financial statements – Financial ratio analysis, cash flow (as per Accounting Standard 3) and funds flow statement analysis.

UNIT IV  COST ACCOUNTING  12

UNIT V  ACCOUNTING IN COMPUTERISED ENVIRONMENT  12
Significance of Computerised Accounting System- Codification and Grouping of Accounts-Maintaining the hierarchy of ledgers- Prepackaged Accounting software.

TOTAL: 45+15 = 60 PERIODS

OUTCOME
- Possess a managerial outlook at accounts.

REFERENCES:
8. Sawyers, Jackson, Jenkins, Arora, Managerial Accounting, 2nd edition, Cengage, 2011
OBJECTIVE:
To create the knowledge of Legal perspective and its practices to improvise the business.

UNIT I    COMMERCIAL LAW

THE INDIAN CONTRACT ACT 1872

THE SALE OF GOODS ACT 1930

UNIT II    COMPANY LAW 2013 (amended on 03.05.18)
Major principles – Nature and types of companies, Formation, Memorandum and Articles of Association, Prospectus, Power, duties and liabilities of Directors, winding up of companies, Corporate Governance. Amendments of Companies Act, 2013

UNIT III    INDUSTRIAL LAW

UNIT IV    CORPORATE TAX AND GST (amended on 03.05.18)
Corporate Tax planning, Income Tax, Goods and Services Tax – Introduction, Objective, Classification and practical implications of GST

UNIT V    CONSUMER PROTECTION ACT AND INTRODUCTION OF CYBER LAWS

OUTCOME:
- Legal insight will be established in the business practices according to the situation of changing environment.

TEXT BOOKS

TOTAL: 45 PERIODS
OBJECTIVE:
- To provide an overview of theories and practices in organizational behavior in individual, group and organizational level.

UNIT I	FOCUS AND PURPOSE

UNIT II	INDIVIDUAL BEHAVIOUR

UNIT III	GROUP BEHAVIOUR
Organization structure – Formation – Groups in organizations – Influence – Group dynamics – Emergence of informal leaders and working norms – Group decision making techniques – Team building - Interpersonal relations – Communication – Control.

UNIT IV	LEADERSHIP AND POWER

UNIT V	DYNAMICS OF ORGANIZATIONAL BEHAVIOUR

OUTCOME:
- Students will have a better understanding of human behavior in organization. They will know the framework for managing individual and group performance.

REFERENCES:
OBJECTIVE:
- To learn the applications of statistics in business decision making.

UNIT I INTRODUCTION
Basic definitions and rules for probability, conditional probability independence of events, Baye's theorem, and random variables, Probability distributions: Binomial, Poisson, Uniform and Normal distributions.

UNIT II SAMPLING DISTRIBUTION AND ESTIMATION
Introduction to sampling distributions, sampling distribution of mean and proportion, application of central limit theorem, sampling techniques. Estimation: Point and Interval estimates for population parameters of large sample and small samples, determining the sample size.

UNIT III TESTING OF HYPOTHESIS - PARAMETRIC TESTS
Hypothesis testing: one sample and two sample tests for means and proportions of large samples (z-test), one sample and two sample tests for means of small samples (t-test), F-test for two sample standard deviations. ANOVA one and two way.

UNIT IV NON-PARAMETRIC TESTS

UNIT V CORRELATION AND REGRESSION

TOTAL: 45 PERIODS

OUTCOME:
To facilitate objective solutions in business decision making under subjective conditions.

REFERENCES:
OBJECTIVE:

- To learn the quality philosophies and tools in the managerial perspective.

UNIT I  INTRODUCTION


UNIT II  PRINCIPLES AND PHILOSOPHIES OF QUALITY MANAGEMENT


UNIT III  STATISTICAL PROCESS CONTROL


UNIT IV  TOOLS AND TECHNIQUES FOR QUALITY MANAGEMENT

Quality functions development (QFD) – Benefits, Voice of customer, information organization, House of quality (HOQ), building a HOQ, QFD process. Failure mode effect analysis (FMEA) – requirements of reliability, failure rate, FMEA stages, design, process and documentation. Seven Tools (old & new). Bench marking and POKA YOKE.

UNIT V  QUALITY SYSTEMS ORGANIZING AND IMPLEMENTATION


TOTAL: 45 PERIODS

OUTCOME:

- To apply quality philosophies and tools to facilitate continuous improvement and ensure customer delight.

REFERENCES:

6. Indian standard – quality management systems – Guidelines for performance improvement (Fifth Revision), Bureau of Indian standards, New Delhi.
OBJECTIVES:
- To familiarize learners with the mechanics of writing
- To enable learners to write in English precisely and effectively.
- To enable learners to speak fluently and flawlessly in all kinds of communicative contexts with all nationalities.

UNIT I PERSONAL COMMUNICATION
Day-to-day conversation with family members, neighbours, relatives, friends on various topics, context specific - Journal writing, mails/emails, SMS, greeting cards, situation based - accepting/declining invitations, congratulating, consoling, conveying information, oral reports, extempore.

UNIT II EMPLOYABILITY SKILLS
Interview skills – HR and technical – Types of interview, preparation for interview, mock interview, Group Discussion – Communication skills in Group Discussion, Structure of GD, GD process, successful GD techniques. Time management and effective planning – identifying barriers to effective time management, time management techniques, relationship between time management and stress management.

UNIT III WORK PLACE COMMUNICATION
e-mails, minutes, reports of different kinds – annual report, status report, survey report, proposals, memorandums, presentations, interviews, profile of institutions, speeches, responding to enquiries, complaints, resumes, applications, summarizing, strategies for writing.

UNIT IV RESEARCH WRITING
Articles for publication (Journals), developing questionnaire, writing abstract, dissertation, qualities of research writing, data (charts, tables) analysis, documentation.

UNIT V WRITING FOR MEDIA AND CREATIVE WRITING
Features for publication (Newspapers, magazines, newsletters, notice-board), case studies, short stories, travelogues, writing for children, translation, techniques of writing.

TOTAL: 60 PERIODS

Note: It is an activity based course. Student individually or as a group can organize event(s), present term papers etc. This will be evaluated by the faculty member(s) handling the course and the consolidated marks can be taken as the final mark.

No end semester examination is required for this course.

OUTCOMES:
Learners should be able to
- Get into the habit of writing regularly.
- Express themselves in different genres of writing from creative to critical to factual writing.
- Take part in print and online media communication
- Read quite widely to acquire a style of writing and
- Identify their area of strengths and weaknesses in writing.
- Speak confidently with any speakers of English, including native speakers.
- Speak effortlessly in different contexts – informal and formal.
REFERENCES:

Management books:
- Robin Sharma - The greatness guide
- Steven Covey - 7 Habits of Effective people
- Arindham Chaudhuri - Count your chickens before they hatch
- Ramadurai - TCS Story

Blogs: Seth Godwin, Guy Kawasaki, Kiruba Shankar
Review: Harvard Business review
Reports: Deloitte Netsis
Magazines: Bloomberg Businessweek, Economist


BA5201 APPLIED OPERATIONS RESEARCH

OBJECTIVE:
- To learn the concepts of operations research applied in business decision making.

UNIT I INTRODUCTION TO LINEAR PROGRAMMING (LP) 9
Introduction to applications of operations research in functional areas of management. Linear Programming-formulation, solution by graphical and simplex methods (Primal - Penalty, Two Phase), Special cases. Dual simplex method. Principles of Duality. Sensitivity Analysis.

UNIT II LINEAR PROGRAMMING EXTENSIONS 9

UNIT III INTEGER PROGRAMMING AND GAME THEORY 9
Solution to pure and mixed integer programming problem by Branch and Bound and cutting plane algorithms. Game Theory-Two person Zero sum games-Saddle point, Dominance Rule, Convex Linear Combination (Averages), methods of matrices, graphical and LP solutions.

UNIT IV INVENTORY MODELS, SIMULATION AND DECISION THEORY 9

UNIT V QUEUING THEORY AND REPLACEMENT MODELS 9
Queueing Theory - single and Multi-channel models – infinite number of customers and infinite calling source. Replacement Models-Individuals replacement Models (With and without time value of money) – Group Replacement Models.

TOTAL: 45 PERIODS
OUTCOME:
- To facilitate quantitative solutions in business decision making under conditions of certainty, risk and uncertainty.

REFERENCES:

BA5202 BUSINESS RESEARCH METHODS

OBJECTIVE:
- To familiarise the students to the principles of scientific methodology in business enquiry; to develop analytical skills of business research; to develop the skills for scientific communications.

UNIT I INTRODUCTION

UNIT II RESEARCH DESIGN AND MEASUREMENT

UNIT III DATA COLLECTION

UNIT IV DATA PREPARATION AND ANALYSIS

UNIT V REPORT DESIGN, WRITING AND ETHICS IN BUSINESS RESEARCH

TOTAL: 45 PERIODS
OUTCOME:
- Students would become acquainted with the scientific methodology in business domain. They would also become analytically skillful. They would become familiar with the nuances of scientific communications.

REFERENCES:

BA5203 FINANCIAL MANAGEMENT L T P C
4 0 0 4

OBJECTIVES:
Facilitate student to
- Understand the operational nuances of a Finance Manager
- Comprehend the technique of making decisions related to finance function

UNIT I FOUNDATIONS OF FINANCE:
9

UNIT II INVESTMENT DECISIONS:
9
Capital Budgeting: Principles and techniques - Nature of capital budgeting- Identifying relevant cash flows - Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index - Comparison of DCF techniques Concept and measurement of cost of capital - Specific cost and overall cost of capital.

UNIT III FINANCING AND DIVIDEND DECISION:
9
Dividend decision- Issues in dividend decisions, Importance, Relevance & Irrelevance theories – Walter’s – Model, Gordon’s model and MM model. – Factors determining dividend policy – Types of dividend policies – forms of dividend

UNIT IV WORKING CAPITAL MANAGEMENT:
9
UNIT V LONG TERM SOURCES OF FINANCE:
Indian capital and stock market, New issues market Long term finance: Shares, debentures and term loans, lease, hire purchase, venture capital financing, Private Equity.

TOTAL: 45 PERIODS

OUTCOME:
• Possess the techniques of managing finance in an organization

REFERENCES:

BA5204 HUMAN RESOURCE MANAGEMENT

OBJECTIVE:
• To provide knowledge about management issues related to staffing, training, performance, compensation, human factors consideration and compliance with human resource requirements.

UNIT I PERSPECTIVES IN HUMAN RESOURCE MANAGEMENT

UNIT II THE CONCEPT OF BEST FIT EMPLOYEE

UNIT III TRAINING AND EXECUTIVE DEVELOPMENT

UNIT IV SUSTAINING EMPLOYEE INTEREST

UNIT V PERFORMANCE EVALUATION AND CONTROL PROCESS

TOTAL: 45 PERIODS
OUTCOME:
- Students will gain knowledge and skills needed for success as a human resources professional

REFERENCES:

BA5205 INFORMATION MANAGEMENT

OBJECTIVES:
- To understand the importance of information in business
- To know the technologies and methods used for effective decision making in an organization.

UNIT I INTRODUCTION

UNIT II SYSTEM ANALYSIS AND DESIGN
Case tools - System flow chart, Decision table, Data flow Diagram (DFD), Entity Relationship (ER), Object Oriented Analysis and Design (OOAD), UML diagram.

UNIT III DATABASE MANAGEMENT SYSTEMS
DBMS – HDBMS, NDBMS, RDBMS, OODBMS, Query Processing, SQL, Concurrency Management, Data warehousing and Data Mart

UNIT IV SECURITY, CONTROL AND REPORTING

UNIT V NEW IT INITIATIVES
Role of information management in ERP, e-business, e-governance, Data Mining, Business Intelligence, Pervasive Computing, Cloud computing, CMM.

TOTAL: 45 PERIODS

OUTCOME
- Gains knowledge on effective applications of information systems in business

REFERENCES:

BA5206 OPERATIONS MANAGEMENT L T P C
3 0 0 3

OBJECTIVE:
- To provide a broad introduction to the field of operations management and explain the concepts, strategies, tools and techniques for managing the transformation process that can lead to competitive advantage.

UNIT I INTRODUCTION TO OPERATIONS MANAGEMENT
Operations Management – Nature, Importance, historical development, transformation processes, differences between services and goods, a system perspective, functions, challenges, current priorities, recent trends; Operations Strategy – Strategic fit, framework; Supply Chain Management

UNIT II FORECASTING, CAPACITY AND FACILITY DESIGN

UNIT III DESIGN OF PRODUCT, PROCESS AND WORK SYSTEMS

UNIT IV MATERIALS MANAGEMENT
UNIT V SCHEDULING AND PROJECT MANAGEMENT

Project Management – Scheduling Techniques, PERT, CPM; Scheduling - work centers – nature, importance; Priority rules and techniques, shop floor control; Flow shop scheduling – Johnson’s Algorithm – Gantt charts; personnel scheduling in services.

TOTAL: 45 PERIODS

OUTCOME:
- Understanding of the strategic and operational decisions in managing manufacturing and service organizations and appreciation of the role of operations management function in an organization.

REFERENCES:

BA5207 MARKETING MANAGEMENT

OBJECTIVES:
- Developing an understanding of ideas and nuances of modern marketing
- Describe the process to formulate and manage the B2B marketing strategy including all key components.
- Explain the techniques to conduct market analysis practices including market segmentation and targeting.
- Compare and contrast different perspectives that characterize the study of consumer behavior.
- Explain the role of IMC in the overall marketing program.

UNIT I INTRODUCTION

UNIT II MARKETING STRATEGY
Marketing strategy formulations – Key Drivers of Marketing Strategies - Strategies for Industrial Marketing – Consumer Marketing — Services marketing – Competitor analysis - Analysis of consumer and industrial markets – Strategic Marketing Mix components.

UNIT III MARKETING MIX DECISIONS
UNIT IV  BUYER BEHAVIOUR  
Understanding industrial and individual buyer behavior - Influencing factors – Buyer Behaviour Models – Online buyer behaviour - Building and measuring customer satisfaction – Customer relationships management – Customer acquisition, Retaining, Defection.

UNIT V  MARKETING RESEARCH & TRENDS IN MARKETING  

TOTAL: 60 PERIODS

OUTCOMES:
• knowledge of analytical skills in solving marketing related problems
• awareness of marketing management process

REFERENCES :

BA5211  DATA ANALYSIS AND BUSINESS MODELING

OBJECTIVE :
• to have hands-on experience on decision modeling.
[Business models studied in theory to be practiced using Spreadsheet / Analysis Software]

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Exp. No.</th>
<th>Details of experiments Name</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Descriptive Statistics</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>Hypothesis - Parametric</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Hypothesis – Non-parametric</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>Correlation &amp; Regression</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Forecasting</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>-</td>
<td>Extended experiment – 1</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>Portfolio Selection</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>7</td>
<td>Risk Analysis &amp; Sensitivity Analysis</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td>Revenue Management</td>
<td>4</td>
</tr>
<tr>
<td>10</td>
<td>-</td>
<td>Extended experiment – 2</td>
<td>4</td>
</tr>
<tr>
<td>11</td>
<td>9</td>
<td>Transportation &amp; Assignment</td>
<td>4</td>
</tr>
<tr>
<td>12</td>
<td>10</td>
<td>Networking Models</td>
<td>4</td>
</tr>
<tr>
<td>13</td>
<td>11</td>
<td>Queuing Theory</td>
<td>4</td>
</tr>
<tr>
<td>14</td>
<td>12</td>
<td>Inventory Models</td>
<td>4</td>
</tr>
<tr>
<td>15</td>
<td>-</td>
<td>Extended experiments – 3</td>
<td>4</td>
</tr>
</tbody>
</table>

• Spreadsheet Software and
• Data Analysis Tools

TOTAL: 60 PERIODS
OUTCOME
- Knowledge of spreadsheets and data analysis software for business modeling.

TEXTBOOKS
6. Vikas Gupta, Comdex Business Accounting with Ms Excel, 2010 and Tally ERP 9.0 Course Kit, Wiley India, 2012

BA5301 INTERNATIONAL BUSINESS MANAGEMENT L T P C
3 0 0 3

OBJECTIVE:
- To familiarize the students to the basic concepts of international business management.

UNIT I INTRODUCTION

UNIT II INTERNATIONAL TRADE AND INVESTMENT

UNIT III INTERNATIONAL STRATEGIC MANAGEMENT

UNIT IV PRODUCTION, MARKETING, FINANCIAL AND HUMAN RESOURCE MANAGEMENT OF GLOBAL BUSINESS
OUTCOME:

- Students would be familiar with global business environment, global strategic management practices and get acquainted with functional domain practices. They would be familiar with conflicts situations and ethical issues in global business.

REFERENCES:


UNIT IV STRATEGY IMPLEMENTATION & EVALUATION
The implementation process, Resource allocation, Designing organisational structure-Designing Strategic Control Systems- Matching structure and control to strategy-Implementing Strategic change-Politics-Power and Conflict-Techniques of strategic evaluation & control-case study.

UNIT V OTHER STRATEGIC ISSUES
Managing Technology and Innovation-Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy-case study

OUTCOME:
- This Course will create knowledge and understanding of management concepts principles and skills from a people, finance, marketing and organisational perspectives the development of appropriate organisational policies and strategies within a changing context to meet stakeholder interests information systems to learn from failure key tools and techniques for the analysis and design of information systems, including their human and organisational as well as technical aspects.

REFERENCES:

TOTAL: 45 PERIODS
FUNCTIONAL SPECIALIZATIONS

BA5001 BRAND MANAGEMENT  L T P C
                                    3 0 0 3

OBJECTIVES :
• To understand the basic Principles of branding.
• To understand the key issues in crafting and evaluating brand strategies
• To improve the skills in delivering persuasive brand presentations.
• To evaluate brand extension and its contribution to parent brand
• To develop an understanding of brand equity and a range of performance related outcomes.

UNIT I INTRODUCTION  8

UNIT II BRAND STRATEGIES  10

UNIT III BRAND COMMUNICATIONS  8
Brand image Building – Brand Loyalty programmes – Brand Promotion Methods – Role of Brand ambassadors, celebrities – On line Brand Promotions.

UNIT IV BRAND EXTENSION  9
Brand Adoption Practices – Different type of brand extension – Factors influencing Decision for extension – Re-branding and re-launching.

UNIT V BRAND PERFORMANCE  10

TOTAL: 45 PERIODS

OUTCOMES :
• Have a solid understanding of the key ‘branding’ concepts, methods and tools used by marketing practitioners.
• Be able to more confidently engage in and contribute to ‘brand building’ projects, developments, and discussions.

REFERENCES :
OBJECTIVES:
- To understand the concepts of consumer behaviour and its application in purchase decisions.
- To analyse the relationship between psychological, social and cultural drivers behind consumer behaviour and marketing.
- To identify the dynamics of human behaviour and the basic factors that influence the consumers decision process.

UNIT I INTRODUCTION

UNIT II CONSUMER BEHAVIOR MODELS
Industrial and individual consumer behaviour models - Howard-Sheth, Engel – Kollat, Webstar and wind Consumer Behaviour Models – Implications of the models on marketing decisions.

UNIT III INTERNAL INFLUENCES
Psychological Influences on consumer behavior – motivation – perception – personality Learning and Attitude- Self Image and Life styles – Consumer expectation and satisfaction.

UNIT IV EXTERNAL INFLUENCES
Socio-Cultural, Cross Culture - Family group – Reference group – Communication - Influences on Consumer behavior

UNIT V PURCHASE DECISION PROCESS
High and low involvement - Pre-purchase and post-purchase behavior – Online purchase decision process – Diffusion of Innovation – Managing Dissonance - Emerging Issues.

TOTAL: 45 PERIODS

OUTCOMES:
- Identify the major individual, social and cultural factors that affect consumers’ decision making process;
- Explain and analyze the major stages which consumers usually go through when making a consumption-related decision
- Understand the essence of how consumers make decisions and assess the relevant implications for marketing practitioners

REFERENCES:
OBJECTIVE:
- To understand the need and importance of maintaining a good customer relationship.

UNIT I INTRODUCTION 9

UNIT II UNDERSTANDING CUSTOMERS 9
Customer information Database – Customer Profile Analysis - Customer perception, Expectations analysis – Customer behavior in relationship perspectives; individual and group customer’s - Customer life time value – Selection of Profitable customer segments.

UNIT III CRM STRUCTURES 9

UNIT IV CRM PLANNING AND IMPLEMENTATION 9

UNIT V TRENDS IN CRM 9
e- CRM Solutions – Data Warehousing – Data mining for CRM – an introduction to CRM software packages.

TOTAL: 45 PERIODS

OUTCOME:
- To use strategic customer acquisition and retention techniques in CRM.

REFERENCES:
1. G.Shainesh, Jagdish, N.Sheth, Customer Relationship Management A Strategic Prespective, Macmillan 2010
OBJECTIVE:
- This course introduces students to the basic concepts of advertising and sales promotion and how business organizations and other institutions carry out such activities.

UNIT I INTRODUCTION TO ADVERTISEMENT 9

UNIT II ADVERTISEMENT MEDIA 9

UNIT III SALES PROMOTION 9
Scope and role of sale promotion – Definition – Objectives of sales promotion - sales promotion techniques – Trade oriented and consumer oriented. Sales promotion – Requirement identification – Designing of sales promotion campaign – Involvement of salesmen and dealers – Out sourcing sales promotion national and international promotion strategies – Integrated promotion – Coordination within the various promotion techniques – Online sales promotions- case studies.

UNIT IV PERSONAL SELLING 9

UNIT V PUBLICITY AND PUBLIC RELATIONS 9

TOTAL: 45 PERIODS

OUTCOME:
- Insight into the importance of advertising and sales promotion campaigns planning and objective setting in relation to consumer decision making processes.

REFERENCES:
OBJECTIVE:
- To understand the concepts of effective retailing

UNIT I  INTRODUCTION
An overview of Global Retailing – Challenges and opportunities – Retail trends in India – Socio economic and technological Influences on retail management – Government of India policy implications on retails.

UNIT II  RETAIL FORMATS
Organized and unorganized formats – Different organized retail formats – Characteristics of each format – Emerging trends in retail formats – MNC’s role in organized retail formats.

UNIT III  RETAILING DECISIONS

UNIT IV  RETAIL SHOP MANAGEMENT

UNIT V  RETAIL SHOPPER BEHAVIOUR
Understanding of Retail shopper behavior – Shopper Profile Analysis – Shopping Decision Process - Factors influencing retail shopper behavior – Complaints Management - Retail sales force Management – Challenges in Retailing in India.

TOTAL: 45 PERIODS

OUTCOME:
- To manage the retail chains and understand the retail customer’s behavior

REFERENCES:
2. J K Nayak, Prakash C.Dash, Retail Management, Cengage, 2017
OBJECTIVE:
- To understand the meaning of services and the significance of marketing the services.

UNIT I  INTRODUCTION

UNIT II  SERVICE MARKETING OPPORTUNITIES
Assessing service market potential - Classification of services – Expanded marketing mix – Service marketing – Environment and trends – Service market segmentation, targeting and positioning.

UNIT III  SERVICE DESIGN AND DEVELOPMENT

UNIT IV  SERVICE DELIVERY AND PROMOTION
Positioning of services – Designing service delivery System, Service Channel – Pricing of services, methods – Service marketing triangle - Integrated Service marketing communication.

UNIT V  SERVICE STRATEGIES

OUTCOME:
- Will be able to apply the concepts of services marketing in promoting services.

REFERENCES:

OBJECTIVE:
- To enhance Competiveness in Social Marketing by ethical values and social media in Marketing.

UNIT I  INTRODUCTION
Social marketing - Definition - Scope and concept - Evolution of Social marketing - Need for Social marketing - A comparative study between Commercial and Social marketing - Use of market research - social change tools - Factors influencing Social marketing - Challenges and opportunities.
UNIT II  SOCIAL MARKETING PROCESS AND PLANNING  9

Segmentation - Motives and benefits - Sheth’s and Frazier’s attitude - behavior segmentation - Stage approach to segmentation - Selecting target audiences - Cross cultural targeting - cultural and individual tailoring.

UNIT III  SOCIAL MARKETING MIX  9
Social marketing mix - policy - product - place - price - promotion - people - partnership.
Rating & Reviews - Virtual world - Using media in social marketing - Importance - effectiveness of mass media in social marketing - Practical model for media use in social marketing - Advertisement - Publicity - Edutainment - Civic or Public - Choosing media & methods.

Role of media in social marketing campaigns - planning and developing Social media campaigning – Campaign vs Programme - Programme planning models – conceptual model Lawrence Green’s PRECEDE-PROCEED model.

UNIT IV  ETHICAL ISSUES AND CHALLENGES  9
Ethical principles - Codes of behaviour - Critics of social marketing - Critic of power imbalance in social marketing - Criticism of unintended consequences - Competition in social marketing- Definition - monitoring - countering competition - competition and principle of differential advantage - Internal competition.

UNIT V  TRENDS IN SOCIAL MARKETING  9
Future of Social marketing - setting priorities in social marketing - Repositioning strategies- Future of Public sector – NGO – Private sector social marketing.

Social Media marketing - Importance - Big Brands & Small business - E mail marketing -Social Media Tools –Marketing with Social network sites, blogging, micro blogging, podcasting with Podomatic

OUTCOME:
• Applying Ethical Principles in Social Marketing through advanced marketing medias

REFERENCES :
4. Hastings, G. Social Marketing: Why should the Devil Have All the Best Tunes, Routledge 2013
OBJECTIVES:
- Grasp how banks raise their sources and how they deploy it and manage the associated risks
- Understand e-banking and the threats that go with it.

UNIT I  OVERVIEW OF INDIAN BANKING SYSTEM  9

UNIT II  SOURCES AND APPLICATION OF BANK FUNDS  9
Capital adequacy, Deposits and non-deposit sources, Designing of deposit schemes and pricing of deposit services, application of bank funds – Investments and Lending functions, Types of lending – Fund based, non-fund based, asset based – Different types of loans and their features, Major components of a typical loan policy document, Steps involved in Credit analysis, Credit delivery and administration, Pricing of loans, Customer profitability analysis.

UNIT II  CREDIT MONITORING AND RISK MANAGEMENT  9
Need for credit monitoring, Signals of borrowers’ financial sickness, Financial distress prediction models – Rehabilitation process, Risk management – Interest rate, liquidity, forex, credit, market, operational and solvency risks – risk measurement process and mitigation, Basic understanding of NPAs and ALM.

UNIT IV  MERGERS, DIVERSIFICATION AND PERFORMANCE EVALUATION  9
Mergers and Diversification of banks into securities market, underwriting, Mutual funds and Insurance business, Risks associated therewith. Performance analysis of banks – background factors, ratio analysis and CAMELS.

UNIT V  HIGH TECH E-BANKING  9

TOTAL: 45 PERIODS

OUTCOME:
- Price various types of loans proposed by banks to various prospective borrowers with different risk profiles and evaluate the performance of banks

REFERENCES:
OBJECTIVES:
Student will acquire
- Nuances involved in short term corporate financing
- Good ethical practices

UNIT I  INDUSTRIAL FINANCE
Indian Capital Market – Basic problem of Industrial Finance in India. Equity – Debenture financing – Guidelines from SEBI, advantages and disadvantages and cost of various sources of Finance - Finance from international sources, financing of exports – role of EXIM bank and commercial banks.– Finance for rehabilitation of sick units.

UNIT II  SHORT TERM-WORKING CAPITAL FINANCE

UNIT III  ADVANCED FINANCIAL MANAGEMENT

UNIT IV  FINANCING DECISION
Simulation and financing decision - cash inadequacy and cash insolvency - determining the probability of cash insolvency- Financing decision in the Context of option pricing model and agency costs- Inter-dependence of investment- financing and Dividend decisions.

UNIT V  CORPORATE GOVERNANCE
Corporate Governance - SEBI Guidelines- Corporate Disasters and Ethics-Corporate Social Responsibility- Stakeholders and Ethics- Ethics, Managers and Professionalism.

OUTCOME:
- Good ethical corporate manager

REFERENCES:
7. Website of SEBI
OBJECTIVE:

- To understand the nuances involved in derivatives and to understand the basic operational mechanisms in derivatives.

UNIT I  INTRODUCTION

UNIT II  FUTURES CONTRACT

UNIT III  OPTIONS

UNIT IV  SWAPS
Definition of SWAP – Interest Rate SWAP – Currency SWAP – Role of Financial Intermediary – Warehousing – Valuation of Interest rate SWAPs and Currency SWAPs Bonds and FRNs – Credit Risk.

UNIT V  DERIVATIVES IN INDIA

OUTCOME:
- This course aims at providing an in-depth understanding of financial derivatives in terms of concepts, structure, instruments and trading strategies for profit and risk management.

REFERENCES:
8. Website of NSE, BSE.
OBJECTIVES:
To enable student
- Understand the modes of issuing securities
- Acquire financial evaluation technique of leasing and hire purchase

UNIT I MERCHANT BANKING

UNIT II ISSUE MANAGEMENT

UNIT III OTHER FEE BASED SERVICES
Mergers and Acquisitions – Portfolio Management Services – Credit Syndication – Credit Rating – Mutual Funds - Business Valuation.

UNIT IV FUND BASED FINANCIAL SERVICES

UNIT V OTHER FUND BASED FINANCIAL SERVICES

TOTAL: 45 PERIODS

OUTCOME
- Good knowledge on merchant banking activities

REFERENCES:
4. J.C.Verma, A Manual of Merchant Banking, Bharath Publishing House, New Delhi,
7. Website of SEBI
OBJECTIVES:
Enables student to
- Understand the nuances of stock market operations.
- Understand the techniques involved in deciding upon purchase or sale of securities.

UNIT I INVESTMENT SETTING

UNIT II SECURITIES MARKETS

UNIT III FUNDAMENTAL ANALYSIS

UNIT IV TECHNICAL ANALYSIS

UNIT V PORTFOLIO MANAGEMENT
Portfolio analysis – Portfolio Selection –Capital Asset Pricing model – Portfolio Revision Portfolio Evaluation – Mutual Funds.

TOTAL: 45 PERIODS

OUTCOME
- Become a good investment analyst

REFERENCES:
OBJECTIVE:
- Enable students to acquire techniques of evaluating strategic investment decisions and understand the causes of prediction modes of financial distress.

UNIT I INVESTMENT DECISIONS 9

UNIT II CRITICAL ANALYSIS OF APPRAISAL TECHNIQUES 10
Significance of Information and data bank in project selections – Investment decisions under capital constraints – capital rationing, Portfolio – Portfolio risk and diversified projects.

UNIT III STRATEGIC ANALYSIS OF SELECTED INVESTMENT DECISIONS 10
Lease financing – Lease Vs Buy decision – Hire Purchase and installment decision – Hire Purchase Vs Lease Decision – Mergers and acquisition – Cash Vs Equity for mergers.

UNIT IV FINANCING DECISIONS 8
Capital Structure – Capital structure theories – Capital structure Planning in Practice.

UNIT V FINANCIAL DISTRESS 8
Consequences, Issues, Bankruptcy, Settlements, reorganization and Liquidation in bankruptcy.

TOTAL: 45 PERIODS

OUTCOME:
- Possess good knowledge in techniques for making strategic investment decision and tackling financial distress

REFERENCES:
7. Website of IDBI Related to Project Finance.
UNIT I  INTERNATIONAL TRADE  9

UNIT II  EXPORT AND IMPORT FINANCE  9

UNIT III  FOREX MANAGEMENT  9

UNIT IV  DOCUMENTATION IN INTERNATIONAL TRADE  9

UNIT V  EXPORT PROMOTION SCHEMES  9

TOTAL: 45 PERIODS

OUTCOME
• Possess good knowledge on international trade and the documentation involved in it.

TEXT BOOKS

REFERENCES
3. Website of Indian Government on EXIM policy
OBJECTIVE:

- To develop and strengthen entrepreneurial quality and motivation in students. To impart basic entrepreneurial skills and understandings to run a business efficiently and effectively.

UNIT I ENTREPRENEURIAL COMPETENCE


UNIT II ENTREPRENEURIAL ENVIRONMENT


UNIT III BUSINESS PLAN PREPARATION


UNIT IV LAUNCHING OF SMALL BUSINESS


UNIT V MANAGEMENT OF SMALL BUSINESS

Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business.

TOTAL: 45 PERIODS

OUTCOME:

- Students will gain knowledge and skills needed to run a business.

REFERENCES:

OBJECTIVE:
- To explore contemporary knowledge and gain a conceptual understanding of industrial relations.

UNIT I   INDUSTRIAL RELATIONS  7
Concepts – Importance – Industrial Relations problems in the Public Sector – Growth of Trade Unions – Codes of conduct.

UNIT II   INDUSTRIAL CONFLICTS  12

UNIT III  LABOUR WELFARE  8

UNIT IV   INDUSTRIAL SAFETY  9

UNIT V   WELFARE OF SPECIAL CATEGORIES OF LABOUR  9

TOTAL: 45 PERIODS

OUTCOME:
- Students will know how to resolve industrial relations and human relations problems and promote welfare of industrial labour.

REFERENCES:
OBJECTIVE:

- To have a broad understanding of the legal principles governing the employment relationship at individual and collective level.
- To familiarise the students to the practical problems inherent in the implementation of labour statutes.

Contained in the following acts are to be studied.

<table>
<thead>
<tr>
<th>Act</th>
<th>Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Factories Act, 1948</td>
<td>3</td>
</tr>
<tr>
<td>The Trade Unions Act, 1926</td>
<td>4</td>
</tr>
<tr>
<td>The Payment of Wages Act, 1936</td>
<td>3</td>
</tr>
<tr>
<td>The Minimum Wages Act, 1948</td>
<td>2</td>
</tr>
<tr>
<td>The Industrial Disputes Act, 1947</td>
<td>5</td>
</tr>
<tr>
<td>The Workmen’s Compensation Act, 1923</td>
<td>2</td>
</tr>
<tr>
<td>The Payment of Gratuity Act, 1972</td>
<td>3</td>
</tr>
<tr>
<td>The Payment of Bonus Act, 1965</td>
<td>3</td>
</tr>
<tr>
<td>The Employee’s Provident Fund &amp; Misc. Act, 1952</td>
<td>3</td>
</tr>
<tr>
<td>The Employees State Insurance Act, 1948</td>
<td>4</td>
</tr>
<tr>
<td>The Industrial Employment (Standing Orders) Act, 1946</td>
<td>3</td>
</tr>
<tr>
<td>The Apprentices Act, 1961</td>
<td>2</td>
</tr>
<tr>
<td>The Equal Remuneration Act, 1976</td>
<td>2</td>
</tr>
<tr>
<td>The Maternity Benefit Act, 1961</td>
<td>2</td>
</tr>
<tr>
<td>The Child Labour Prevention and Regulation Act, 1986</td>
<td>2</td>
</tr>
</tbody>
</table>

TOTAL: 45 PERIODS

OUTCOMES:

- To appreciate the application of labour laws.
- Legal Provision relating to
  a) Wages
  b) Working Conditions and Labour Welfare
  c) Industrial Relations
  d) Social Security

REFERENCES:

7. Respective Bare Acts.
OBJECTIVE:
- To examine managerial styles in terms of concern for production and concern for people. To assess different systems of management and relate these systems to organisational characteristics.

UNIT I  DEFINING THE MANAGERIAL JOB  8

UNIT II  DESIGNING THE MANAGERIAL JOB  12

UNIT III  THE CONCEPT OF MANAGERIAL EFFECTIVENESS  7
Definition – The person, process, product approaches – Bridging the Gap – Measuring Managerial Effectiveness – Current Industrial and Government practices in the Management of Managerial Effectiveness- the Effective Manager as an Optimizer.

UNIT IV  ENVIRONMENTAL ISSUES IN MANAGERIAL EFFECTIVENESS  8

UNIT V  DEVELOPING THE WINNING EDGE  10
Organisational and Managerial Efforts – Self Development – Negotiation Skills – Development of the Competitive Spirit – Knowledge Management – Fostering Creativity and innovation.

TOTAL:45 PERIODS

OUTCOME:
- Students will gain knowledge about appropriate style of managerial behaviour.

REFERENCES:
OBJECTIVE:
- To learn how an organization can be designed and developed to deal with the challenges from environment, technology, and its own processes.

UNIT I ORGANISATION & ITS ENVIRONMENT 8

UNIT II ORGANIZATIONAL DESIGN 15
Organizational Design – Determinants – Components – Types - Basic Challenges of design – Differentiation, Integration, Centralization, Decentralization, Standardization, Mutual adjustment-Mechanistic and Organic Structures- Technological and Environmental Impacts on Design- Importance of Design – Success and Failures in design - Implications for Managers.

UNIT III ORGANISATIONAL CULTURE 6
Understanding Culture – Strong and Weak Cultures – Types of Cultures – Importance of Culture - Creating and Sustaining Culture - Culture and Strategy - Implications for practicing Managers.

UNIT IV ORGANISATIONAL CHANGE 6

UNIT V ORGANISATION EVOLUTION AND SUSTENANCE 10
Organizational life cycle – Models of transformation – Models of Organizational Decision making – Organizational Learning – Innovation, Intrapreneurship and Creativity-HR implications.

TOTAL: 45 PERIODS

OUTCOME:
- Students will be able to analyze organizations more accurately and deeply by applying organization theory.

REFERENCES:
OBJECTIVE:
- To help students understand the transformation in the role of HR functions from being a support function to strategic function.

UNIT I HUMAN RESOURCE DEVELOPMENT 10

UNIT II E-HRM 6

UNIT III CROSS CULTURAL HRM 7

UNIT IV CAREER & COMPETENCY DEVELOPMENT 10

UNIT V EMPLOYEE COACHING & COUNSELING 12

OUTCOME:
- Students will have a better understanding of the tools and techniques used by organizations to meet current challenges.

REFERENCES:
OBJECTIVES:
- To understand the various advanced databases used in the organization
- To be aware of recent trends in database management.

UNIT I  INTRODUCTION
DBMS Models - Multimedia Databases, Parallel Databases, embedded, web, spatial, temporal databases, Virtualization, Active Databases - Embedded databases - Web databases.

UNIT II  DATABASE IMPLEMENTATION

UNIT III  DISTRIBUTED DATABASES

UNIT IV  OBJECT ORIENTED DATABASES
Object Oriented Concepts – Data Object Models –Object Oriented Databases – Issues in OODBMS - Object Oriented Relational Databases – Object Definition Languages – Object Query Languages

UNIT V  EMERGING TRENDS
Data Mining – Data warehousing – Star, Snowflake, Fact Constellation; open source database systems, Scripting Language, JDBC, ODBC

TOTAL: 45 PERIODS

OUTCOMES:
- Awareness of database models
- Knowledge of database technologies

REFERENCES:
OBJECTIVES:
- To know how to derive meaning from huge volume of data and information
- To understand how knowledge discovering process is used in business decision making

UNIT I  INTRODUCTION
Data mining, Text mining, Web mining, Spatial mining, Process mining, BI process- Private and Public intelligence, Strategic assessment of implementing BI

UNIT II  DATA WAREHOUSING
Data warehouse – characteristics and view - OLTP and OLAP - Design and development of data warehouse, Meta data models, Extract/ Transform / Load (ETL) design

UNIT III  DATA MINING TOOLS, METHODS AND TECHNIQUES
Regression and correlation; Classification- Decision trees; clustering –Neural networks; Market basket analysis- Association rules-Genetic algorithms and link analysis, Support Vector Machine, Ant Colony Optimization

UNIT IV  MODERN INFORMATION TECHNOLOGY AND ITS BUSINESS OPPORTUNITIES
Business intelligence software, BI on web, Ethical and legal limits, Industrial espionage, modern techniques of crypto analysis, managing and organizing for an effective BI Team.

UNIT V  BI AND DATA MINING APPLICATIONS
Applications in various sectors – Retailing, CRM, Banking, Stock Pricing, Production, Crime, Genetics, Medical, Pharmaceutical.

OUTCOMES:
- Big Data Management
- Appreciate the techniques of knowledge discovery for business applications

REFERENCES:
1. Jiawei Ham and Micheline Kamber, Data Mining concepts and techniques, Kauffmann Publishers 3 rd edition, 2011
9. Elizabeth Vitt, Michael Luckevich Stacia Misner, Business Intelligence, Microsoft, 2011
OBJECTIVES:
- To understand the business process of an enterprise
- To grasp the activities of ERP project management cycle
- To understand the emerging trends in ERP developments

UNIT I INTRODUCTION
Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology - Issues to be consider in planning design and implementation of cross functional integrated ERP systems.

UNIT II ERP SOLUTIONS AND FUNCTIONAL MODULES
Overview of ERP software solutions- Small, medium and large enterprise vendor solutions, BPR, and best business practices - Business process Management, Functional modules.

UNIT III ERP IMPLEMENTATION

UNIT IV POST IMPLEMENTATION
Maintenance of ERP- Organizational and Industrial impact; Success and Failure factors of ERP Implementation.

UNIT V EMERGING TRENDS ON ERP

OUTCOMES
- Knowledge of ERP implementation cycle
- Awareness of core and extended modules of ERP

REFERENCES:
OBJECTIVES:

- To understand the various project management phases – Initiation, Planning, Tracking and Closure
- To study various project estimation methodologies, process models and risk management
- To understand quality assurance in software development

UNIT I PROJECT MANAGEMENT OVERVIEW 8
What is Project and Project Management, Various phase of Project Management, Project Stakeholders, Project Management Organisation (PMO); Roles and Responsibilities of Project Manager. Brief introduction to various process models - Waterfall, RAD, V, Spiral, Incremental, Prototyping, Agile – SCRUM, Extreme Programming (XP) and Kanban Project Initiation - Project Charter; Statement of Work (SoW)

UNIT II PROJECT PLANNING 10
Project Planning Activities- Project Scope, Work Breakdown Structures (WBS), Software estimation methodologies - COCOMO Model and Function Point
Project Scheduling Techniques – Program Evaluation and Review Technique (PERT), Gantt Chart and Critical Path Method (CPM)

UNIT III PROJECT TRACKING 10
Monitoring and Control, Project Status Reporting; Project Metrics; Earned Value Analysis (EVA); Project Communication Plan & Techniques; Steps for Process Improvement.
Risk Management: Concepts of Risks and Risk Management; Risk Management Activities; Effective Risk Management; Risk Categories; Aids for Risk Identification; Potential Risk Treatments; Risk Components and Drivers; Risk Prioritization.

UNIT IV PROJECT CLOSURE 8
Project Closure Analysis, Lesson Learnt
Software Quality Assurance-Software Quality Assurance Activities; Software Qualities; Software Quality Standards – ISO Standards for Software Organization, Capability Maturity Model (CMM), Comparison between ISO 9001 & SEI CMM, Other Standards.

UNIT V AGILE PROJECT MANAGEMENT WITH SCRUM 9
Agile Manifesto and Agile Principles

TOTAL:45 PERIODS

OUTCOMES:
At the end of this course, student should be able to:
- Manage different phases of Software Project Management
- Identify Risk and create risk mitigation plan
- Apply software quality assurance for better quality software delivery

REFERENCES:
- Jalote, “Software Project Management in Practice”, Pearson Education
- Ken Schwaber, Agile Project Management with Scrum, Microsoft Press
- Mike Cohn, Agile Estimating & Planning, Pearson
ONLINE RESOURCES:
- http://agilemanifesto.org/
- https://www.scrum.org/Resources/What-is-Scrum
- http://www.scrumguides.org/scrum-guide.html#purpose

BA5024 E- BUSINES S MANAGEMENT L T P C
3 0 0 3

OBJECTIVES:
- To understand the practices and technology to start an online business

UNIT I INTRODUCTION TO e-BUSINESS 8

UNIT II TECHNOLOGY INFRASTRUCTURE 10
Internet and World Wide Web, internet protocols- FTP, intranet and extranet, Cloud Service Models – SAAS, PaaS, IAAS, Cloud Deployment Models – Public Cloud, Private Cloud, Hybrid Cloud, Auto-Scaling in the Cloud, Internet information publishing technology- basics of web server hardware and software

UNIT III BUSINESS APPLICATIONS 10
Consumer oriented e-business–e-tailing and models-Marketing on web–advertising, e-mail marketing, affiliated programs - e-CRM; online services. Business oriented e-business, e- governance, EDI on the internet, Delivery management system, Web Auctions, Virtual communities and Web portals–social media marketing

UNIT IV e-BUSINESS PAYMENTS AND SECURITY 9

UNIT V LEGAL AND PRIVACY ISSUES 8
Legal, Ethics and privacy issues – Protection needs and methodology – consumer protection, cyber laws, contracts and warranties, Taxation and encryption policies.

TOTAL: 45 PERIODS

OUTCOMES:
At the end of this course, student should be able to know how to build and manage an e-business

REFERENCES

BA5025 LOGISTICS MANAGEMENT L T P C
3 0 0 3

OBJECTIVE:
- To learn the need and importance of logistics in product flow.

UNIT I INTRODUCTION
Definition and Scope of Logistics – Functions & Objectives – Customer Value Chain – Service Phases and attributes – Value added logistics services – Role of logistics in Competitive strategy – Customer Service

UNIT II DISTRIBUTION CHANNELS AND OUTSOURCING LOGISTICS
Distribution channel structure - channel members, channel strategy, role of logistics and support in distribution channels. Logistics requirements of channel members.
Logistics outsourcing – catalysts, benefits, value proposition. Third and fourth party logistics. Selection of service provider.

UNIT III TRANSPORTATION AND PACKAGING

UNIT IV PERFORMANCE MEASUREMENT AND COSTS

UNIT V CURRENT TRENDS

TOTAL: 45 PERIODS

OUTCOME:
- To enable an efficient method of moving products with optimization of time and cost.

REFERENCES:
OBJECTIVE:
• Understand how material management should be considered for profitability

UNIT I  INTRODUCTION
Operating environment-aggregate planning-role, need, strategies, costs techniques, approaches-master scheduling-manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production plan

UNIT II  MATERIALS PLANNING

UNIT III  INVENTORY MANAGEMENT
Policy Decisions-objectives-control -Retail Discounting Model, Newsvendor Model; EoQ and EBQ models for uniform and variable demand With and without shortages -Quantity discount models. Probabilistic inventory models.

UNIT IV  PURCHASING MANAGEMENT
Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting-buying seasonal commodities-purchasing under uncertainty-demand management-price forecasting-purchasing under uncertainty-purchasing of capital equipment-international purchasing

UNIT V  WAREHOUSE MANAGEMENT
Warehousing functions – types - Stores management-stores systems and procedures-incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management -operational efficiency-productivity-cost effectiveness-performance measurement

TOTAL: 45 PERIODS

OUTCOME:
• Student gains knowledge on effective utilisation of materials in manufacturing and service organisation

REFERENCES:
OBJECTIVE:

- Understand the application of structured methods to develop a product.

UNIT I INTRODUCTION

UNIT II PRODUCT PLANNING

UNIT III PRODUCT CONCEPT

UNIT IV INDUSTRIAL DESIGN AND DESIGN TOOLS

UNIT V PATENTS

TOTAL: 45 PERIODS

OUTCOME

- Student gains knowledge on how a product is designed based on the needs of a customer.

REFERENCES:
OBJECTIVE:
- To learn the concepts of managing projects.

UNIT I  INTRODUCTION TO PROJECT MANAGEMENT  9

UNIT II  PLANNING AND BUDGETING  9

UNIT III  SCHEDULING & RESOURCE ALLOCATION  9

UNIT IV  CONTROL AND COMPLETION  9

UNIT V  PROJECT ORGANISATION & CONFLICT MANAGEMENT  9

TOTAL: 45 PERIODS

OUTCOME:
- To apply project management principles in business situations to optimize resource utilization and time optimisation.

REFERENCES:

OBJECTIVE:
- To help understand how service performance can be improved by studying services operations management

UNIT I  INTRODUCTION  9
Services – Importance, role in economy, service sector – growth; Nature of services -Service classification , Service Package, distinctive characteristics , open-systems view; Service Strategy – Strategic service vision, competitive environment, generic strategies, winning customers; Role of information technology; stages in service firm competitiveness; Internet strategies - Environmental strategies.
UNIT II  SERVICE DESIGN  9

UNIT III  SERVICE QUALITY  9

UNIT IV  SERVICE FACILITY  9
Services capes – behaviour - environmental dimensions – framework; Facility design – nature, objectives, process analysis – process flow diagram, process steps, simulation; Service facility layout; Service Facility Location – considerations, facility location techniques – metropolitan metric, Euclidean, centre of gravity, retail outlet location, location set covering problem.

UNIT V  MANAGING CAPACITY AND DEMAND  9
Managing Demand – strategies; Managing capacity – basic strategies, supply management tactics, operations planning and control; Yield management; Inventory Management in Services– Retail Discounting Model, Newsvendor Model; Managing Waiting Lines – Queuing systems, psychology of waiting; Managing for growth- expansion strategies, franchising, globalization.

TOTAL: 45 PERIODS

OUTCOME:
• To design and operate a service business using the concepts, tools and techniques of service operations management.

REFERENCES:

BA5030 SUPPLY CHAIN MANAGEMENT  L T P C
3 0 0 3

OBJECTIVE:
• To help understand the importance of and major decisions in supply chain management for gaining competitive advantage.

UNIT I  INTRODUCTION  9
UNIT II  STRATEGIC SOURCING  9
Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs buy continuum
-Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a world class supply base-
Supplier Development - World Wide Sourcing.

UNIT III  SUPPLY CHAIN NETWORK  9
Distribution Network Design – Role - Factors Influencing Options, Value Addition – Distribution
Supply Chain Network optimization models. Impact of uncertainty on Network Design - Network Design
decisions using Decision trees.

UNIT IV  PLANNING DEMAND, INVENTORY AND SUPPLY  9
Managing supply chain cycle inventory. Uncertainty in the supply chain — Analyzing impact of supply
chain redesign on the inventory - Risk Pooling - Managing inventory for short life - cycle products -
multiple item -multiple location inventory management. Pricing and Revenue Management

UNIT V  CURRENT TRENDS  9
Supply Chain Integration - Building partnership and trust in SC Value of Information: Bullwhip Effect -
Effective forecasting - Coordinating the supply chain.  . SC Restructuring - SC Mapping -SC process
restructuring, Postpone the point of differentiation – IT in Supply Chain - Agile Supply Chains -Reverse
Supply chain. Agro Supply Chains.

TOTAL: 45 PERIODS

OUTCOME:
• Ability to build and manage a competitive supply chain using strategies, models, techniques and
information technology.

REFERENCES :
2. Sunil Chopra and Peter Meindl, Supply Chain Management-Strategy Planning and Operation, PHI
3. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education,
7. Joel D. Wisner, G. Keong Leong, Keah-Choon Tan, Principles of Supply Chain Management- A
OBJECTIVES:
• To describe the various streams of the supply chain
• To describe the drivers of the supply chain
• To describe the concepts employed in the supply chain
• To explain about the strategies employed in the supply chain

UNIT - I CONCEPTS OF SUPPLY CHAIN
Service and manufacturing supply chain dynamics - Evolution of supply chain management - Multiple views and flows - Service supply chains - Manufacturing supply chains - Measures of supply chain performance - Differentiation-Bullwhip effect

UNIT - II SUPPLY CHAIN PROCESSES AND STRATEGIES

UNIT - III SUPPLY CHAIN PERFORMANCE DRIVERS AND FORECASTING
Drivers of supply chain performance - Logistics drivers (Location, inventory and transportation) - Cross functional drivers (Pricing, information and sourcing) – Forecasting introduction - Framework for a forecast system - Choosing right forecasting technique - Judgment methods (Composite Forecasts, Surveys, Delphi Method, Scenario Building, Technology Forecasting, Forecast by Analogy) - Causal methods (Regression Analysis - Linear & Non-Linear Regression, Econometrics) - Time series analysis (Autoregressive Moving Average (ARMA), Exponential Smoothing, Extrapolation, Linear Prediction, Trend Estimation, Growth Curve, Box-Jenkins Approach) – CPFR

UNIT - IV SALES AND OPERATIONS PLANNING
Introduction to Sales and operations planning - Purpose of sales and operations plans - Decision context - Sales and operations planning as a process - Overview of decision support tools

UNIT - V RESOURCE PLANNING AND SCHEDULING

OUTCOMES:
The students will be able to
• Identify the concepts of supply chain.
• Analyze supply chain dynamics and various issues of supply chain performance.

TEXT BOOKS:
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009
3. Supply Chain management, Chandrasekaran, N., Oxford University Publications, 2010
OBJECTIVES
- To provide understanding of the framework.
- To illustrate current practices in industries.
- To provide knowledge on certain tools & techniques

UNIT - I INTRODUCTION TO PURCHASING AND SUPPLY CHAIN MANAGEMENT 9

UNIT - II STRATEGIC SOURCING 9

UNIT - III STRATEGIC SOURCING PROCESS 9

UNIT - IV SUPPLIER PERFORMANCE AND QUALITY MANAGEMENT 9

UNIT - V FUTURE DIRECTIONS 9
Purchasing and Supply Strategy Trends Green Buying, Sustainability, material research, Lean supply Chain Management

TOTAL: 45 PERIODS

OUTCOMES:
- To Understand basic functions and nuances.
- To Understand the holistic dimensions of SCM & corporate perspectives.
- Learn to acquire skills to become a sourcing professional.

TEXT BOOKS:
OBJECTIVE:
This course provides you the basic concepts and advanced models in inventory management. This course discusses issues related to inventory in a supply chain context. It also gives a multi-dimensional view to approach a problem with case studies.

UNIT I  INTRODUCTION TO INVENTORY MANAGEMENT  9
Inventory in SCM, Cash to cash cycle time, measure of inventory in terms of days, Inventory turnover ratio and its relationship with working capital, Review of models, Q-models and P-models Aggregation of Inventory, Cycle stock concepts, Ordering multiple items in a single order to reduce cycle stock

UNIT II  INVENTORY MODELS  9
Safety stock issues Safety stock with lead time and demand uncertainty (for Q-models), Short term discounting & Forward Buying, Periodic review models with safety stock, Comparison of P and Q systems

UNIT III  INVENTORY MANAGEMENT STRATEGIES  9
Single period models, Inventory management for fashion supply chains, Postponement strategies to reduce inventory, Examples of Fashion supply chains: NFL Reebok, ZARA and Sport Obermeyer Risk Pooling, Applications, Risk pooling in different forms-Substitution, Specialisation, Postponement and Information pooling

UNIT IV  INVENTORY OPTIMIZATION  9
Distribution resource planning techniques, Inventory and transportation integration decisions, Vendor Managed Inventory, Product availability measures, Product fill rate, order fill rate, Cycle service level.

UNIT V  LATEST TRENDS IN INVENTORY MANAGEMENT SYSTEMS  9
Industry initiatives, Efficient consumer Response and Quick response ,CPFR and other industry initiatives, Inventory reduction strategies, Managing inventory in Reverse Logistics and Remanufacturing situations , Best practices in Inventory Management in a Supply Chain

OUTCOME:
At the end of this course, the students can confidently approach their supply chain inventory issues and they can use different tools appropriately to solve the problems and enhance the performance of their supply chains.

TEXT BOOKS:
2. Janat Shah, Supply Chain Management, Pearson Education India, 2009
OBJECTIVES:
- To explain the various technological aspects that are described in the different logistical background
- To explain the real-time description updated technologies in the logistics sector and supply chain industry

UNIT - I ELECTRONIC SCM, COMMUNICATION NETWORKS

UNIT - II ENTERPRISE INFORMATION SYSTEMS
Overview of enterprise information systems - Information functionality and principles - Introduction enterprise information systems - Classification of enterprise information systems - Information architecture - Framework for managing supply chain information - Describe on popular enterprise application packages - Benefits of enterprise information systems

UNIT - III SCM SYSTEMS DEVELOPMENT, DEPLOYMENT AND MANAGEMENT
Stakeholders in supply chain information systems - Stakeholders in SCM - Stakeholders in supply chain information systems - Information systems development - Logistics information systems design - Defining enterprise architecture - Choosing appropriate system development methodologies - Adopting relevant systems development model

UNIT - IV DEPLOYMENT AND MANAGEMENT
Information systems deployment - IT Operations and infrastructure management - Portfolio, programme and project management - Management of risk - Management of value

UNIT - V INFORMATION INTEGRATION
Enterprise application integration and supply chain visibility - Enterprise application integration - Supply chain visibility - Supply chain event management - Supply chain performance - Planning and design methodology - Problem definition and planning - Data collection and analysis - Recommendations and implementation - Decision support systems

TOTAL: 45 PERIODS

OUTCOME:
The students will be able to understand the various enterprise information system and its architecture and benefits. Students can gain knowledge about various e-commerce models, e-SCM, benefits and communication networks.

TEXT BOOKS:

REFERENCES:
5. Donald J. Bowersox and David J. Closs, Logistical Management - The Integrated Supply chain
OBJECTIVES:

• To help the students in explaining the significance of Warehousing.
• To provide timely customer service,
• To keep track of items so they can be found readily & correctly
• To minimize the total physical effort
• To minimize the cost of moving goods in & out of stage.

UNIT I INTRODUCTION WAREHOUSING

UNIT II INVENTORY MANAGEMENT

UNIT III INVENTORY CONTROL

UNIT IV MATERIALS HANDLING

UNIT V MODERN WAREHOUSING METHODS
Modern Warehousing – Automated Storage & Retrieval Systems & their Operations – Bar Coding Technology & Applications in Logistics Industry – RFID Technology & Applications – Advantages of RFID

TOTAL: 45 PERIODS

OUTCOME:
At the end of the course, the students will be able to get complete insight into warehouse concepts, various inventory control techniques and application of inventory management in supply chain.

TEXT BOOKS:

REFERENCES:
OBJECTIVES:
- To explore the fundamental concepts of transportation and distribution management
- To gain knowledge in network planning, routing and scheduling and application of IT in transportation and distribution management.

UNIT - I DISTRIBUTION 9
Role of Distribution in Supply chain, Distribution channels – Functions, resources, Operations in Distribution, Designing Distribution network models - its features - advantages and disadvantages.

UNIT - II PLANNING 9
Distribution network planning, Distribution network decisions, Distribution requirement planning (DRP)

UNIT - III TRANSPORTATION 9
Role of Transportation in Logistics and Business, Principle and Participants-Scope and relationship with other business functions, Modes of Transportation - Mode and Carrier selection, Routing and scheduling.

UNIT - IV TRANSPORTATION 9
International transportation, Carrier, Freight and Fleet management, Transportation management systems-Administration, Rate negotiation, Trends in Transportation.

UNIT - V INFORMATION TECHNOLOGY (IT) 9
Usage of IT applications - E commerce – ITMS, Communication systems-Automatic vehicle location systems, Geographic information Systems.

TOTAL: 45 PERIODS

OUTCOMES: The students will be able to:
- Gain knowledge about the distribution requirements planning.
- Predict the scope and relationship of transportation with other business functions
- Make use of the advantages and disadvantages of the various models.

TEXT BOOKS:

REFERENCES:
OBJECTIVES:

- To prepare students successfully implement a contract logistics and closed supply chain in Retail, FMCG and Automobile sectors.
- To explain the concept and principle of contract logistics and closed supply chain

UNIT - I  CONTRACT LOGISTICS  9
Third party logistics industry overview - A framework for strategic alliances - Evolution of contract logistics - Types of third party logistics providers – Automobile, FMCG and Retail - Third party services and integration

UNIT - II  CLOSED LOOP SUPPLY CHAINS AND LOGISTICS  9
Introduction closed loop supply chains and logistics – Logistics and closed loop supply chain service - Overview of return logistics and closed loop supply chain models – Introduction product returns - Product Vs Parts returns - Strategic issues in closed loop supply chains

UNIT - III  BUSINESS AND MARKET  9

UNIT - IV  EMERGING TRENDS  9
Emerging trends in Retail, E-Commerce- FMCG and Automobile sectors - Systems and technology - For consumer goods operations, High tech logistics system - Impact and value of advanced logistics

UNIT - V  MANAGING PROCESSES  9
Managing processes - Step by step process - Use of third party service providers - Additional factors – Contemporary issues – Make in India and its impact on Countries GDP and Economic Growth.

OUTCOME:
The students will be able to understand the basics of contract logistics, third party logistics industry and third party logistics providers. And it helps to gain knowledge about Make in India concept and its impact on the GDP growth

TEXT BOOKS:
1. Janat Shah, Supply Chain Management: Text and Cases, Pearson Education India, 2009

REFERENCES:
2. D. F. Blumberg, Reverse Logistics & Closed Loop Supply Chain Processes, Taylor and Francis, 2005
OBJECTIVES:

- To provide the participants with a good knowledge of airfreight operations, services and management that can support them in various business functions and roles such as operations, customer service, account management and sales.
- To create awareness about the Air Cargo management.
- To provide general information or a framework on the setup of air cargo processes, for business.

UNIT - I  AIR PORTS AND SHIPMENT  9
Ground Handling Agencies - Air Craft - Advantage of Air shipment - Economics of Air Shipment - Sensitive Cargo by Air shipment - Do’s and Don'ts in Air Cargo Business

UNIT - II  AIR CARGO  9
Air Cargo Console - Freight of Air Cargo - Volume based Calculation of Freight - Weight based Calculation of Freight - Import Documentation - Export Documentation

UNIT - III  AIRWAY BILLS  9
Airway Bills - FIATA - IATA - History of IATA - Mission of IATA - Price setting by IATA - Licensing of Agencies - Sub Leasing of Agencies - freight carriers by scheduled freight tonne kilometers flown

UNIT - IV  CARGO VILLAGE  9
History of Dubai Cargo Village - Location of DCV - Equipment and Handling at DCV - Operations - Advantage of Sea Air Cargo - Why Sea Air Cargo is Cheaper - Why Air freight from Dubai is Cheaper?

UNIT - V  DG CARGO  9
DG Cargo by Air - Classification and labelling - Types of Labels according Cargo – Samples of Labels - Packing and Transportation of DG Goods by Air

TOTAL: 45 PERIODS

OUTCOME:
The outcome of this course will provide the basics concepts of airports and aircrafts and various participants in air cargo transportation. Students will come to know about roles of the customs and the government in air transport.

TEXT BOOKS:

REFERENCES:
OBJECTIVES:
- To provide an overview of the various elements of containerization and allied businesses
- To realize the potential of containerization and allied businesses

UNIT – I  BASIC CONCEPT OF CONTAINERIZATION  9
Introduction to Liner Shipping industry - Unitization concept and methods - Malcolm Mclean and the birth of containerization - Generations of container ships and their specification - Container types, their specifications and cargoes carried in them.

UNIT – II  FREIGHTING AND SIZE OF CONTAINER  9
Container shipping business - FCL and LCL sea freight products - Freighting of FCL and LCL cargo - Slot utilization strategies - Estimation of optimum container fleet size - Multiport LCL consolidation

UNIT – III  CHARACTERISTICS AND PHYSICAL OPERATIONS  9
Containerisation: Concept, Classification, Benefits and Constraints, Container terminal business-World’s leading container terminals and location characteristics - container terminal infrastructure - container terminal productivity and profitability - Inland container Depot’s (ICD) Roles and functions - Container Freight Stations (CFS), Clearance at ICD, CONCOD, ICD’s under CONCOD, Charting: Kinds of Charter, Charter Party and Arbitration.

UNIT – IV  CONTAINER TYPES AND BUSINESS  9

UNIT – V  MULTIMODAL TRANSPORT  9
Alternate uses of containers - marketing of used containers - carriage of shipper own containers - multimodal transport options for containers - Insurance for containers - strategies for managing container imbalance.

OUTCOMES:
- The students will learn the practices and ways to promote containerization and allied businesses
- The learners will have a complete idea about the different concepts, trends and strategies used for containerization and allied businesses

REFERENCES:
OBJECTIVES:
- To enlighten the students about the major functions in export and import processes.
- To provide the expertise for solving issues related to requirements in EXIM management.

UNIT – I  FUNDAMENTALS OF IMPORT AND EXPORT  9

UNIT - II  OVERVIEW OF EXPORT AND IMPORT  9
Marketing for Exports - Negotiation and finalization of Export contract - Export Documentation Procedures - Cargo Insurance - Export Promotion Councils and incentive schemes - Role of Logistics in Exports - Export Houses / Trading Houses

UNIT - III  DOCUMENTATION FRAMEWORK  9
Import for industrial use - Import - Import Documentation and Customs clearance procedures - Types of Imports - Import Licenses - Cargo Insurance - Role of Logistics in Import

UNIT - IV  CREDIT AND PAYMENTS  9
Payment methods in Foreign Trade - Documentary Credit / Letter of Credit - LOU - UCP 600 with respect to Shipping Documents and L/C Negotiation - Export / import financing strategies - Managing payment risks.

UNIT - V  CUSTOMS CLEARANCE AND AGENCIES  9

TOTAL: 45 PERIODS

OUTCOMES:
- The students would be aware about the formalities of export and import industry
- The students will be able to comprehend the importance of exim management.

REFERENCES:
3. Director General of Foreign Trade, Foreign Trade Policy and Handbook of Procedures, 2015
UNIT – I INTERDICTION OF SHIPPING
Role of Shipping in International trade - Types of ships and cargoes carried by them - International Organizations serving the shipping industry (IMO, BIMCO, ICS, IACS, IAPH) - Ship Registration and Classification.

UNIT – II LINER SHIPPING OPERATIONS
Liner shipping business - Types of Liner services - Container shipping lines and their services - Break bulk, Ro-Ro and project cargo services - Liner freight rates - Liner cargo documentation - Liner agency functions

UNIT – III DRY BULK BUSINESS
Dry Bulk shipping business - World's leading dry bulk ports and cargoes handled by them - Types of Dry bulk ships and the Dry Bulk industry structure - Dry bulk market indices - Types of Chartering - Port agency functions.

UNIT – IV TANKER OPERATIONS AND BUSINESS
Liquid Bulk shipping business - World's leading wet bulk ports and cargoes handled by them - Types of tankers and gas carriers - Tanker freighting system (worldscale) - Factors affecting Tanker markets - Marine pollution conventions.

UNIT – V SHIP BUILDING AND REPAIR
Service providers to shipping industry - Ship management companies - Ports, inland terminals and Container Freight Stations - Ship building and repair yards - Financing the Shipping industry - Marine insurance providers.

OUTCOMES:
- The students would be acquainted with the basics of shipping management
- The students will learn the skills needed for shipping industry

REFERENCES:

BA5062 PORT AND TERMINAL MANAGEMENT

OBJECTIVES:
- To enlighten the students about the major functions in the port and terminal management
- To expose the students on the trends in port and terminal management

UNIT – I INTRODUCTION TO PORT AND TERMINAL
Role of ports in international trade and transport - Economic impact of ports on the regional economy - Multiplier effect - Location characteristics of ports - Different types of ports (natural, manmade, river, estuary).

UNIT – II PORT OPERATIONS
Design features of facilities in ports for handling various cargoes - Organization structure in Ports - Delivery of port services and the relationship between various departments - Marine Department – Traffic Department – other departments.
UNIT – III PORT MARKETING AND SERVICES
Marketing of Port services - Pricing of Port services - Components of port tariff - Concept of hinterland – Identifying the needs of ship owners and operators, ship agents, forwarders, truckers, rail and barge operators - Concept of Total Logistics cost.

UNIT – IV PORT PERFORMANCE
Measurement of port performance - vessel turn round time, cargo volume, speed of cargo handling - Information flow requirements of the port, statutory bodies and port users - Port community computer systems and EDI applications.

UNIT – V PORT SECURITY AND ISSUES
Environmental issues connected with Ports & Terminals - Health and safety issues - Port security issues - International Ships and Port facility security (ISPS) code - Role of national, regional and local governments in owning / operating / managing ports.

OUTCOMES:
- The students would be aware about skills pertaining to port and terminal management
- The students should be able to understand the principles and applications for port and terminal management

REFERENCES:

SECTORAL SPECIALISATION IN INFRASTRUCTURE AND REAL ESTATE MANAGEMENT

BA5063 INFRASTRUCTURE PLANNING, SCHEDULING AND CONTROL L T P C 3 0 0 3

OBJECTIVE:
- To give an exposure to the students on the concept and the principles of planning, scheduling and control about infrastructure industry.

UNIT I INTRODUCTION
Introduction to infrastructure - Need and importance of infrastructure in India - Overview of power sector - Overview of water supply and sanitation sector-Overview of road, rail, air and port transportation sectors-Overview of telecommunication sector-Overview of rural and urban infrastructure-Introduction to special economic zones-Organizations and players in infrastructure field -Overview of infrastructure project finance.

UNIT II INFRASTRUCTURE PRIVATIZATION
Privatization of infrastructure in India - Benefits of privatization-Problems with privatization-Challenges in privatization of water supply projects- Challenges in privatization of power sector projects – Challenges in privatization of road transportation projects.
UNIT III RISKS IN INFRASTRUCTURE PROJECTS
Economic and demand risks, political risks, socio-economic risks and cultural risks in infrastructure projects - Legal and contractual issues in infrastructure projects - Challenges in construction of infrastructure projects.

UNIT IV RISK MANAGEMENT FRAMEWORK
Planning to mitigate risk - Designing sustainable contracts - Introduction to fair process and negotiation - Negotiation with multiple stakeholders - Sustainable development - Information technology and systems for successful management.

UNIT V DESIGN & MAINTENANCE OF INFRASTRUCTURE
Innovative design and maintenance of infrastructure facilities - Modeling and life cycle analysis techniques - Capacity building and improving Government’s role in implementation - Integrated framework for successful planning and management.

OUTCOMES
On successful completion of the course, students will be able to
- explain the basic concepts related to infrastructure and understand management.
- explain the benefits and problems with infrastructure
- identify the challenges and strategies for successful planning and implementation of infrastructure.
- apply the above concepts to various infrastructure domains.

REFERENCES
7. Urban Water Development in India 2011 – Published and Distributed by India Infrastructure Research
8. Manual on sewerage and sewage treatment, CPHEEO, Ministry of urban affairs and employment, Govt.of India, New Delhi, 2012

BA5064 CONTRACTS AND ARBITRATION
OBJECTIVE:
- To create awareness on contracts for construction industry, impart knowledge on tender preparation, tendering process, laws on arbitration, arbitration procedure and laws on dispute resolution in India.
UNIT I  INTRODUCTION TO CONTRACTS IN CONSTRUCTION INDUSTRY

UNIT II  LAWS RELATED TO CONSTRUCTION INDUSTRY
Labor and industrial laws - Payment of wages act, contract labor - Workmen's compensation act - Insurance, industrial dispute act - Role of RERA

UNIT III  ARBITRATION OF ENGINEERING CONTRACTS

UNIT IV  NEGOTIATION, MEDIATION AND CONCILIATION
Concepts and purpose - Statutory background ADR and mediation rules - Duty of mediator and disclose facts - Power of court in mediation.

UNIT V  ALTERNATE DISPUTE RESOLUTION
Structure of Indian Judicial - The arbitration and reconciliation ordinance 1996 - Dispute resolution mechanism under the Indian judicial system - Litigation in Indian courts - Case studies.

TOTAL : 45 PERIODS

OUTCOMES:
On successful completion of the course, students will be able to
- understand the laws on contracts for construction industry in India
- apply knowledge of contracts in preparation of contract document and tendering process
- apply appropriate methods to assess the critical factors in contracts leading to arbitration and disputes between the parties
- suggest suitable type of arbitration or dispute resolution for the situation of problem

REFERENCES
5. International Federation of Consulting Engineers (FIDIC) documents, Geneva, 2009 (http://www.fidic.org)
OBJECTIVE:
- To impart projects types, time & resource management, resource optimization and new trends in project management.

UNIT I  PROJECT AND ITS PROCESS
Define project and process - Boundaries of project - Objectives and functions of project management - Characteristics and types of projects - Organization structure / styles - Roles of project management group - Project management office and its role - Project knowledge area - Project integration - Process group interaction - Project flow - Project life cycle - Influencing factors.
- Case study.

UNIT II  PROJECT TIME MANAGEMENT
Project scope management - Work breakdown structure - Activity/Task – Events - Case study - Project planning tools - Rolling wave planning - Gantt charts, Milestone chart, Program progress chart- Creating milestone plan - Project network - Fulkerson's rules - A-O-A and A-O-N networks - Analyze project time - Critical path method (deterministic approach) - Activity oriented network analysis- 80-20 rule - Case study - Type of time estimates & square network diagram - Project updating and monitoring - Case study - Estimate time - Program Evaluation & Review Technique (Probabilistic approach) - Event oriented network analysis - Optimistic, pessimistic and most likely time - Degree of variability in average time - Probabilistic estimate - % utilization of resources.

UNIT III  RESOURCE MANAGEMENT

UNIT IV  RESOURCE OPTIMIZATION
Types of cost - Direct, indirect and total cost - Variation of cost with time - Schedule compression techniques - Crashing, fast tracking & Re-estimation - Crash time and crash cost - Optimize project cost for time and resource - CPM cost model - Life cycle assessment - Impacts and economical assessment - Life cycle cost - Maintenance and operation - Life cycle forecasting - Concept and applications.

UNIT V  EMERGING TRENDS IN PROJECT MANAGEMENT
AGILE Project management and Project Management using latest tools - Case study.
TOTAL :45 PERIODS

OUTCOMES:
On successful completion of the course, the students will be able to
- explain the concept of projects, its process, objectives and functions of project management
- analyze and manage time in projects through gantt charts, cpm and pert techniques
- balance resource requirements of projects so as to avoid idling of resources
- update projects and determine revised schedule of activities and critical path, if any
- crash projects to determine its optimum time-minimum cost relationships

REFERENCES

BA5066 MANAGEMENT OF HUMAN RESOURCES, SAFETY AND QUALITY

OBJECTIVE:
- to impart knowledge on management of human resources, labor legislation, safety and quality aspects in construction

UNIT I HUMAN RESOURCES MANAGEMENT
Introduction - Concept- Growth - Role and function - Manpower planning for construction companies - Line and staff function - Recruitment, selection, placement, induction and training; over staffing; Time office and establishment functions; wage and salary administration - Discipline - Separation process.

UNIT II LABOR LEGISLATION
Labor laws- Labor law relating to construction industry- Interstate migration- Industrial relations- Collective bargaining- Worker’s participation in management - Grievance handling - Discipline - Role of law enforcing agencies and judiciary -Women in construction industry.

UNIT III SAFETY MANAGEMENT

UNIT IV SAFETY IMPLEMENTATION
Application of ergonomics to the construction industry - Prevention of fires at construction site- Safety audit.

UNIT V QUALITY MANAGEMENT IN CONSTRUCTION
Importance of quality - Elements of quality - Quality characteristics- Quality by design - Quality conformance -Contractor quality control - Identification and traceability - Continuous chain management - Brief concept and application - Importance of specifications- Incentives and penalties in specifications - Workmanship as a mark of quality - Final inspection - Quality assurance techniques - Inspection, testing, sampling - Documentation - Organization for quality control, Cost of quality - Introduction to TQM, Six sigma concept- ISO 14000 in quality management.

OUTCOMES:
On successful completion of the course, students will be able to
- Identify the need and importance of human resource management, labour laws relating to construction industry
- Identify the need and measures to improve safety in construction industry and safety audit
- Identify the need for applying ergonomics to construction industry
- Enumerate the need, importance, elements of quality and significance of quality assurance in industry
REFERENCES
3. Arya Ashok “Discipline & Disciplinary procedure” Organisation Development Institute, 1998
4. Arya Ashok, “Management case studies – An analytical and Developmental Tool” Organisation Development Institute, New Delhi, 1999

BA5067 DISASTER MITIGATION AND MANAGEMENT

OBJECTIVES:
- To create an awareness on the various types of disasters and to expose the students about the measures, its effect against built structures, and hazard assessment procedure in India.
- To impart knowledge on the methods of mitigating various hazards such that their impact on communities is reduced.

UNIT I INTRODUCTION
Difference between hazards and disaster -Types of disasters-Phases of disaster management - Hazards - Classification of hazards - Hazards affecting buildings - Building safety against hazards - Floods - Cyclone - Landslides -Tsunami - Fire.

UNIT II EARTHQUAKE DISASTER

UNIT III OTHER DISASTERS
Landslides-Landslide zoning map - Causes -Protection measures Floods -Flood zone map - Effects on buildings -Protection measures from damage to buildings -Mitigation strategies -Tropical cyclones - Effects on buildings -Protection measures from damage to buildings - Tsunami - Tsunami wave characteristics -Peculiarities of tsunami deposits -Tsunami impact on coastal lines - Effects of Tsunami on built structures - Fire disaster - Causes and effects of fire disaster - Preventive mechanism.
UNIT IV   HAZARD ASSESSMENT

UNIT V   LAND USE ZONING REGULATIONS, QUALITY CONTROL AND DISASTER MANAGEMENT POLICY

TOTAL : 45 PERIODS

OUTCOMES:
On successful completion of the course, students will be able to
- understand the various types of disaster viz hydrological, coastal and marine disasters, atmospheric disasters, geological, mass movement and land disasters, wind and water driven disasters.
- identify the potential deficiencies of existing buildings for eq disaster and suggest suitable remedial measures.
- derive the guidelines for the precautionary measures and rehabilitation measures for eq disaster.
- understand the effects of disasters on built structures
- derive the protection measures against floods, cyclone and land slides
- understand the hazard assessment procedure
- get the awareness regarding landuse zoning regulations & quality control

REFERENCES
OBJECTIVE:

- To study the concepts of construction economics and finance such as comparing alternatives proposals, evaluating alternative investments, management of funds, Insurance procedures, risks involved and economics of costing.

UNIT I    BASIC PRINCIPLES  9
Time Value of Money - Cash flow diagram - Nominal and effective Interest - Continuous interest - Nominal and effective interest - continuous interest. Single Payment Compound Amount Factor (P/F,F/P) – Uniform series of Payments (F/A,A/F,F/P,A/P) – Problem time zero (PTZ)- equation time zero (ETZ). Constant increment to periodic payments – Arithmetic Gradient(G), Geometric Gradient (C)

UNIT II    MARKET STRUCTURE AND CONSTRUCTION ECONOMICS  9
Types of Market Structure in the Construction Industry – Markets and the competitive environment - Perfect competition -. Monopolistic competition - Oligopoly - Monopoly – Characteristics and economic Profit – Construction Economics – BOOT, BOT, BOO Methods - Depreciation - Inflation-Taxes

UNIT III    EVALUATING ALTERNATIVE INVESTMENTS  9
Present worth analysis, Annual worth analysis, Future worth analysis, Rate of Return Analysis (ROR) and Incremental Rate of Return (IROR) Analysis, Benefit/Cost Analysis, Break Even Analysis - Replacement Analysis- Equipment Replacement Analysis.

UNIT IV    FUNDS MANAGEMENT  9
Project Finance - Sources - Working capital management- Inventory Management- Mortgage Financing-- Interim construction financing - Security and risk aspects

UNIT V    ECONOMICS OF COSTING  9

TOTAL: 45 PERIODS

OUTCOME:

- On completion of this course the students will be able to know the concepts in Economics and Finance in Construction.

REFERENCES

OBJECTIVES:

- To create an awareness on the various environmental issues in an urban scenario and give an exposure to the urban water resources and its management.
- To impart knowledge on the stages of works involved in a water supply project of a city, safe wastewater collection system for generated wastewater and its management, solid waste and their safe disposal beyond urban limit to be free from pollution is also addressed in the course work.

UNIT I URBAN ENVIRONMENTAL ISSUES

UNIT II URBAN MASTER PLANS
Planning and organizational aspects - Urban waste resources management - Water in urban ecosystem - Urban water resources planning and organization aspects - Storm water management practices - Types of storage - Magnitude of storage - Storage capacity of urban components - Percolation ponds - Temple tanks - Rainwater harvesting - Urban water supply - Demand estimation - Population forecasting - Source identification - Water conveyance - Storage reservoirs - Fixing storage capacity - Distribution network - Types - Analysis - Computer applications - Conservation techniques - Integrated urban water planning - Smart city project planning - Green Building - LEED certification - Green audit

UNIT III URBAN WASTEWATER MANAGEMENT
Sewage generation - Storm drainage estimation - Industry contribution - Wastewater collection system - Separate and combined system - Hydraulic design of sewer and storm drain - Wastewater treatment - Disposal methods - Concept of decentralization - 3R concepts.

UNIT IV MUNICIPAL SOLID WASTE MANAGEMENT
Sources of solid waste - Characteristics - Rate of generation - Segregation at source - Collection of solid waste - Methods of collection - Route analysis - Transfer and transfer stations - Processing and disposal of solid waste.

UNIT V CASE STUDIES
Environmental economics - Social and physiological aspects of pollution - Successful urban management - Models - Urban management - Case studies from developed nations - Software.

OUTCOMES:
On successful completion of the course, students will be able to

- understand planning of a city and identify various urban environmental issues
- apply and prepare project plans to integrate urban water resource
- develop water resource management using available water resources
- understand and apply the principles of solid waste management

REFERENCES
OBJECTIVE:
- To give an exposure on the advanced materials, techniques and equipments used in infrastructure industry.

UNIT I SPECIAL CONCRETES 9

UNIT II METALS 9

UNIT III ADVANCED CONSTRUCTION TECHNIQUES 9
Sub structure construction: Box jacking - Pipe jacking - Under water construction of diaphragm walls and basement - Tunneling techniques - Cable anchoring and grouting - Driving diaphragm walls, sheet piles, laying operations for built up offshore system - Shoring for deep cutting - Large reservoir construction - Trenchless technology.

UNIT IV SUPERSTRUCTURE CONSTRUCTION FOR BUILDINGS 9
Vacuum dewatering of concrete flooring - Concrete paving technology - Techniques of construction for continuous concreting operation in tall buildings of various shapes and varying sections - Launching techniques suspended form work - Erection techniques of tall structures, large span structures - Launching techniques for heavy decks - Inset pre-stressing in high rise structures, aerial transporting, handling, erecting lightweight components on tall structures.

UNIT V CONSTRUCTION OF SPECIAL STRUCTURES 9
Erection of lattice towers and rigging of transmission line structures - Construction sequence in cooling towers, silos, chimney, sky scrapers, bow string bridges, cable stayed bridges - Launching and pushing of box decks - Advanced construction techniques of offshore structures - Construction sequence and methods in domes and prestress domes - Support structure for heavy equipment and conveyor and machinery in heavy industries - Erection of articulated structures, braced domes and space decks. Demolition Techniques - Advanced techniques and sequence in demolition and dismantling.

TOTAL :45 PERIODS

OUTCOMES:
On successful completion of the course, students will be able to
- explain the properties and applications of special concretes, composites, smart and intelligent materials
- identify and explain advanced construction techniques used for sub structure construction
- select appropriate techniques for super structure construction of buildings
- select suitable techniques for construction of special structures
- choose relevant technique for demolition and dismantling works

REFERENCES
OBJECTIVE:
- To provide the participants with a good knowledge on strategic planning and marketing in airport organizations.

UNIT I INTRODUCTION TO AIRPORT INFRASTRUCTURE
Growth of air transport, Airport organization and associations, Classification of airports airfield components, Air traffic zones and approach areas. Context of airport system planning - Development of airport planning process - Ultimate consumers - Airline decision - Other airport operations.

UNIT II AIRPORT INFRASTRUCTURE CAPACITY DESIGN
Components, size, turning radius, speed, airport characteristics. Capacity and Delay - Factors affecting capacity, determination of runway capacity related to delay, gate capacity and taxiway capacity.

UNIT III AIRPORT INFRASTRUCTURE PLANNING AND SURVEYS
Runway length and width, sight distances, longitudinal and transverse, runway intersections, taxiways, clearances, aprons, numbering, holding apron. Planning and design of the terminal area: Operational concepts, space relationships and area requirements, noise control, vehicular traffic and parking at airports. Air traffic control and aids: Runways and taxiways markings, day and night landing aids, airport lighting and other associated aids.

UNIT IV AIRPORT INFRASTRUCTURE ENTERPRISE
The economic impact on countries and regions - the main governance patterns in the airport business - The International path of evolution in the airport business - Airport transport value chain - Air enterprises - two primary actors in the air transport value chain - Skipping peripheral positions in the value chain. Rise of airport marketing for the aviation related business - Airport revenue management- Airport alliances- management contract.

UNIT V THE DEVELOPMENT OF THE NON AVIATION INFRASTRUCTURE
Related value Proposition. Evolution of traditional Airport - Evolutionary patterns for airport enterprises- Commercial Airport Philosophy - tourist and conference service - logistic services- property management- consulting services - BAA and the non aviation business - best airport in the world: The case of Singapore Airport - Role and meaning of loyalty for a service company- Benchmarking airline experience - Provider - Customer relational link - benefits from ALPS implementation of ALPS.

OUTCOMES:
On the successful completion of the course, students will be able to:
- explain the classification of airports airfield components
- explain the main governance patterns in the airport business
- identify the evolutionary patterns for airport enterprises.
- explain the primary actors in the air transport value chain

REFERENCES
OBJECTIVE:
- To provide the participants with a good knowledge on real estate marketing and management.

UNIT I CONCEPT
Fundamental concepts and techniques involved in real estate development process - Role of various organizations - CREDAI - BAI etc

UNIT II EVENTS AND PRE-PROJECT STUDIES
Modeling sequential events in real estate development process - Site evaluation - Land procurement - Development Team assembly - Market study

UNIT III DEVELOPMENT PLANNING & APPROVAL PROCESS
Identifying technical inputs required, planning objectives, front end clearances from various authorities, timing of the project and scheduling

UNIT IV CONSTRUCTION AND PROJECT MANAGEMENT
Identifying the elements of infrastructure and the resource mobilization, disaggregating the project components, mobilizing the human and fiscal resources procuring and storing materials

UNIT V PROJECT MARKETING & HANDING OVER
Over of the completed project - Communication tools required for presenting the project - In house sales promotion - Franchisee system - Joint venture and sharing issues - Procedure and laws relating to transfer of completed project.

TOTAL: 45 PERIODS

OUTCOMES:
On successful completion of the course, students will be able to
- Explain the fundamental concepts and techniques involved in real estate development process
- Explain the procedure and laws relating to transfer of completed project
- Identify the fiscal resources procuring and storing materials process.

REFERENCES:
2. Fillmore W Galaty, “Modern real estate practice” (2002); Dearborn Trade publishing, New York, USA
3. Tanya Davis, “Real estate developer’s handbook” (2007), Atlantic pub company, Ocala, USA.
OBJECTIVES:
- To develop and strengthen entrepreneurial quality and motivation in students.
- To impart basic entrepreneurial skills and understandings to run a business efficiently and effectively.

UNIT I ENTREPRENEURIAL COMPETENCE
Entrepreneurship concept - Entrepreneurship as a Career - Entrepreneurial Personality - Characteristics of Successful Entrepreneur - Knowledge and Skills of Entrepreneur.

UNIT II ENTREPRENEURIAL ENVIRONMENT

UNIT III BUSINESS PLAN PREPARATION

UNIT IV LAUNCHING OF SMALL BUSINESS

UNIT V MANAGEMENT OF SMALL BUSINESS
Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units - Effective Management of small Business.

TOTAL :45 PERIODS

OUTCOME:
Students will gain knowledge and skills needed to start and run an enterprise.

REFERENCES
OBJECTIVE:
- To gain knowledge about the valuation of different infrastructure assets

UNIT I  REAL ESTATE VALUATION
Scope and objectives - Concepts of valuation - Types of value - Value vs Price vs Cost - Different methods of valuation - SWOT analysis

UNIT II  APPROACHES TO REAL ESTATE VALUATION
Sales comparison approach - Cost approach - Income approach - SWOT analysis

UNIT III  VALUATION OF VARIOUS CATEGORIES OF REAL ESTATE
Residential real estate valuation - Commercial real estate valuation - Industrial real estate valuation - Retail real estate valuation - Mixed-use real estate valuation

UNIT IV  INFRASTRUCTURE ASSET VALUATION
Objective and approaches - Different categories of infrastructure assets - Valuation methodology - Key operational and financial parameters - Valuation framework and models.

UNIT V  SECTORAL INFRASTRUCTURE VALUATION
Power sector - IT sector - Telecom sector - Aviation - Education sector - Other service sectors - Plant and Machinery - Case studies

TOTAL: 45 PERIODS

OUTCOME:
- Students will gain knowledge and skills in connection to the valuation of different types of real estates and infrastructure assets.

REFERENCES:
1. Infrastructure valuation – Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
2. Infrastructure Asset Management - Frederic Blanc - Brude and Majid Hasan, EDHEC Risk Institute
3. Valuation techniques for infrastructure investment decisions, Michael J. Garvin, Department of Civil Engineering and Engineering Mechanics, Columbia University
7. Application of Real Options in Infrastructure Projects Charles Y.J. Cheah, PhD, CFA