



**Revised Syllabus with Credit based Semester and  
Grading System**

**For**

**The Master of Management Studies (MMS)**

**2Years full-time Degree Course**

**(Effective from the academic year 2012 – 2013)**

## MMS New Course Structure (Effective July 2012 onwards)

### MMS First Year: Semester I

<b>Subject/Paper</b>	<b>Maximum Marks</b>	<b>Number of Sessions of 90 Minutes</b>
<b>Core Papers</b>		
1.1 Perspective Management	50	18
1.2 Financial Accounting	100	30
1.3 Managerial Economics	100	30
1.4 Operations Management	100	30
1.5 Organisational Behaviour	100	30
1.6 Business Mathematics	100	30
1.7 Information Technology & Management	50	18
1.8 Communication Skills	100	30
1.9 Marketing Management	100	30
1.10 to 1.13 Elective 1	100	30
Elective 2	100	30
Total	1000	306
<b>Electives (Students need to opt for any two electives)</b>		
1.10 Selling & Negotiation Skills		
1.11 High Performance Leadership		
1.12 Indian Ethos in Management		
1.13 Corporate Social Responsibility Projects		

**Note 1:** All subjects/papers for semester I will be internally assessed by the institute.

**Note 2:** All new electives proposed to be introduced by the institute, apart from electives listed in the new syllabus; need to inform University in writing outlining the details of the course with learning objectives, learning outcomes, detail syllabus, teaching learning plan and course evaluation procedures within the pattern prescribed at least one semester in advance.

## Master of Management Studies

### First Year Semester I

Sl No	Code	Subject/Paper	No of Periods per week	Duration of Theory Papers	Marks		
					Examination	Continuous Assessment	Total
		<b>Core Papers</b>	<b>(90 Mins Each)</b>	<b>In Hours</b>			
	1.1	Perspective Management	2	2	30	20	50
	1.2	Financial Accounting	2	3	60	40	100
	1.3	Managerial Economics	2	3	60	40	100
	1.4	Operations Management	2	3	60	40	100
	1.5	Organisational Behaviour	2	3	60	40	100
	1.6	Business Mathematics	2	3	60	40	100
	1.7	Information Technology & Management	2	2	30	20	50
	1.8	Communication Skills	2	3	60	40	100
	1.9	Marketing Management	2	3	60	40	100
		<b>Electives</b>					
	1.10	Elective 1	2	3	60	40	100
	To						
	1.13	Elective 2	2	3	60	40	100
		<b>Total</b>	<b>22</b>		<b>600</b>	<b>400</b>	<b>1000</b>

## MMS – First Year - First Semester

### 1.1. Perspective Management – 50 marks (Total 9 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>• Introduction to Management – Science, Theory &amp; Practice</li> <li>• Environment of Management</li> <li>• Managers &amp; Entrepreneurs</li> <li>• Managerial Roles &amp; Skills</li> <li>• Manager's Social &amp; Ethical Responsibilities.</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>• Planning – Role</li> <li>• Need for planning</li> <li>• Types of planning</li> <li>• Levels of planning</li> <li>• Corporate Planning &amp; Long Range Planning</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"> <li>• Organizing – Nature, Types of organizations</li> <li>• Designing Organization structure</li> <li>• Delegation and Autonomy</li> </ul>	<b>1 Session of 3 Hours</b>
4	<ul style="list-style-type: none"> <li>• Leadership &amp; Management</li> <li>• Role of Committees</li> <li>• Group Decision Making in Management</li> <li>• Organizational Communication, Management of Change</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
5	<ul style="list-style-type: none"> <li>• Control Process &amp;- Techniques.</li> <li>• Use of Information Technology for Controlling</li> </ul>	<b>1 Session of 3 Hours</b>
6	<ul style="list-style-type: none"> <li>• Presentations and Case Studies</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

#### Reference Text

1. Management – A competency building approach – Heil Reigel / Jackson/ Slocum
2. Principles of Management – Davar
3. Good to Great – Jim Collins
4. Stoner, Freeman & Gulbert: Management (Prentice Hall India)
5. V.S.P. Rao & V. Hari Krishna: Management Text & Cases (Excel Books)
6. Heinz Weirich: Management (Tata McGraw Hill)
7. Certo: Modern Management (Prentice Hall India)

## 1.2. Financial Accounting 100 marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>• Introduction to Accounting</li> <li>• Concept and necessity of Accounting</li> <li>• An Overview of Income Statement and Balance Sheet.</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>• Introduction and Meaning of GAAP</li> <li>• Concepts of Accounting</li> <li>• Impact of Accounting</li> <li>• Concepts on Income Statement and Balance Sheet.</li> </ul>	<b>1 Session of 3 Hours</b>
3	<ul style="list-style-type: none"> <li>• Accounting Mechanics</li> <li>• Process leading to preparation of Trial Balance and Financial Statements</li> <li>• Preparation of Financial Statements with Adjustment Entries.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
4	<ul style="list-style-type: none"> <li>• Revenue Recognition and Measurement</li> <li>• Capital and Revenue Items</li> <li>• Treatment of R &amp; D Expenses</li> <li>• Preproduction Cost</li> <li>• Deferred Revenue Expenditure etc.</li> </ul>	<b>1 Session of 3 Hours</b>
5	<ul style="list-style-type: none"> <li>• Fixed Assets and Depreciation Accounting</li> <li>• Evaluation and Accounting of Inventory.</li> </ul>	<b>1 Session of 3 Hours</b>
6	<ul style="list-style-type: none"> <li>• Preparation and Complete Understanding of Corporate Financial Statements</li> <li>• 'T' Form and Vertical Form of Financial Statements.</li> </ul>	<b>2 Sessions of 3 Hours</b>
7	<ul style="list-style-type: none"> <li>• Important Accounting Standards.</li> </ul>	<b>1 Session of 3 Hours</b>
8	<ul style="list-style-type: none"> <li>• Corporate Financial Reporting – Analysis of Interpretation thereof with reference to Ratio Analysis. Fund Flow, Cash Flow.</li> </ul>	<b>3 Sessions of 3 Hours Each</b>
9	<ul style="list-style-type: none"> <li>• Inflation Accounting &amp; Ethical Issue in Accounting.</li> </ul>	<b>1 Session of 3 Hours</b>
10	<ul style="list-style-type: none"> <li>• Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

### Reference text:

1. Financial Accounting: Text & Case: Deardon & Bhattacharya
2. Financial Accounting for Managers – T.P.Ghosh
3. Financial Accounting – Reporting & Analysis – Stice & Diamond
4. Financial Accounting: R.Narayanaswamy
5. Full Text of Indian Accounting standard – Taxman Publication

### 1.3. Managerial Economics 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>The Meaning, Scope &amp; Methods of Managerial Economics</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>Economics Concepts relevant to Business</li> <li>Demand &amp; Supply</li> <li>Production, Distribution, Consumption &amp; Consumption Function</li> <li>Cost, Price, Competition, Monopoly, Profit,</li> <li>Optimisation, Margin &amp; Average, Elasticity, Macro &amp; Micro Analysis.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"> <li>Demand Analysis &amp; Business Forecasting</li> <li>Market Structures, Factors Influencing Demand</li> <li>Elasticities &amp; Demand Levels</li> <li>Demand Analysis for various Products &amp; Situations</li> <li>Determinants of Demands for Durable &amp; Non-durable Goods Long Run &amp; Short Run Demand</li> <li>Autonomous Demand Industry and Firm Demand.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
4	<ul style="list-style-type: none"> <li>Cost &amp; Production Analysis</li> <li>Cost Concepts, Short Term and Long Term</li> <li>Cost Output Relationship</li> <li>Cost of Multiple Products Economies of Scale Production Functions</li> <li>Cost &amp; Profit Forecasting</li> <li>Breakeven Analysis.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
5	<ul style="list-style-type: none"> <li>Market Analysis</li> <li>Competition, Kinds of Competitive Situations, Oligopoly and Monopoly,</li> <li>Measuring Concentration of Economic Power.</li> </ul>	<b>1 Session of 3 Hours</b>
6	<ul style="list-style-type: none"> <li>Pricing Decisions Policies &amp; practices</li> <li>Pricing &amp; Output Decisions under Perfect &amp; Imperfect Competition</li> <li>Oligopoly &amp; Monopoly, Pricing Methods</li> <li>Product-line Pricing</li> <li>Specific Pricing Problem</li> <li>Price Dissemination</li> <li>Price Forecasting.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

7	<ul style="list-style-type: none"> <li>• Profit Management</li> <li>• Role of Profit in the Economy</li> <li>• Nature &amp; Measurement of Profit, Profit Policies</li> <li>• Policies on Profit Maximisation</li> <li>• Profits &amp; Control</li> <li>• Profit Planning &amp; Control.</li> </ul>	<b>1 Session of 3 Hours</b>
8	<ul style="list-style-type: none"> <li>• Capital Budgeting</li> <li>• Demand for Capital</li> <li>• Supply of Capital</li> <li>• Capital Rationing</li> <li>• Cost of Capital</li> <li>• Appraising of Profitability of a Project</li> <li>• Risk &amp; Uncertainty</li> <li>• Economics &amp; probability Analysis.</li> </ul>	<b>1 Session of 3 Hours</b>
9	<ul style="list-style-type: none"> <li>• Macro Economics and Business</li> <li>• Business Cycle &amp; Business Policies</li> <li>• Economic Indication</li> <li>• Forecasting for Business</li> <li>• Input-Output Analysis.</li> </ul>	<b>1 Session of 3 Hours</b>
10	<ul style="list-style-type: none"> <li>• Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

### **Reference Text**

1. Managerial Economics – Joel Dean
2. Managerial Economics: Concepts & Cases – Mote, Paul & Gupta.
3. Fundamentals of Managerial Economics – James Pappas & Mark Hershey.
4. Managerial Economics – Milton Spencer & Louis Siegleman.
5. Economics - Samuelson

#### 1.4. Operations Management 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Operations Strategy</li> <li>• Competitive Advantage</li> <li>• Time Based Competition</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>• Product Decision and Analysis</li> <li>• Product Development</li> </ul>	<b>1 Session of 3 Hours</b>
3	<ul style="list-style-type: none"> <li>• Process Selection</li> <li>• Process Design</li> <li>• Process Analysis</li> </ul>	<b>1 Session of 3 Hours</b>
4	<ul style="list-style-type: none"> <li>• Facility Location</li> <li>• Facility Layout</li> </ul>	<b>2 Sessions of 3 Hours</b>
5	<ul style="list-style-type: none"> <li>• Capacity Planning</li> <li>• Capacity Decisions</li> <li>• Waiting Lines</li> </ul>	<b>1 Session of 3 Hours</b>
6	<ul style="list-style-type: none"> <li>• Aggregate Planning</li> </ul>	<b>1 Session of 3 Hours</b>
7	<ul style="list-style-type: none"> <li>• Basics of MRP / ERP</li> </ul>	<b>1 Session of 3 Hours</b>
8	<ul style="list-style-type: none"> <li>• Basics of Scheduling</li> </ul>	<b>1 Session of 3 Hours</b>
9	<ul style="list-style-type: none"> <li>• Basics of Project Management</li> </ul>	<b>1 Session of 3 Hours</b>
10	<ul style="list-style-type: none"> <li>• Basics of Work Study, Job Design and Work Measurement</li> </ul>	<b>1 Session of 3 Hours</b>
11	<ul style="list-style-type: none"> <li>• Basics of Quality Control, Statistical Quality Control And Total Quality Management</li> </ul>	<b>1 Session of 3 Hours</b>
12	<ul style="list-style-type: none"> <li>• Basics of Environmental Management</li> <li>• Basics of ISO 14000 / 9000</li> <li>• Basics of Value Engineering &amp; Analysis</li> </ul>	<b>1 Session of 3 Hours</b>
13	<ul style="list-style-type: none"> <li>• Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

#### Reference text

1. Production & Operations Management -S. N. Chary
2. Production & Operations Management -James. B. Dilworth
3. Modern Production Management -By E. S. BUFFA
4. Production and Operations Management -By Norman Gaither
5. Theory and problem in Production and operations Management -By S. N. Chary
6. Production and operation Management - By Chunawalla Patel
7. Production & operation Management – Kanishka Bedi – Oxford
8. Production & operation Management – R.C. Manocha
9. Production & operation Management – Muhlemann



**1.5. Organization behavior 100 Marks (15 Sessions of 3 Hours Each)**

<b>SL.No</b>	<b>Particulars</b>	<b>Sessions</b>
1	Introduction to OB Origin, Nature and Scope of Organisational Behaviour Relevance to Organisational Effectiveness and Contemporary Issues.	<b>1 Session of 3 Hours</b>
2	Personality: Meaning and Determinants of Personality Process of Personality Formation Personality Types Assessment of Personality Traits for Increasing Self Awareness.	<b>1 Session of 3 Hours</b>
3	Perception, Attitude and Value Perceptual Processes, Effect of perception on Individual Decision-Making, Attitude and Behaviour. Sources of Value Effect of Values on Attitudes and Behaviour. Effects of Perception, Attitude and Values on Work Performance.	<b>2 Sessions of 3 Hours Each</b>
4	Motivation Concepts : Motives Theories of Motivation and their Applications for Behavioural Change.	<b>2 Sessions of 3 Hours Each</b>
5	Group Behaviour and Group Dynamics Work groups formal and informal groups and stages of group development. Concepts of Group Dynamics, group conflicts and group decision making. Team Effectiveness : High performing teams, Team Roles, cross functional and self directed teams	<b>2 Sessions of 3 Hours Each</b>
6	Organisational Design: Structure, size, technology Environment of organisation; Organizational Roles: -Concept of roles; role dynamics; role conflicts and stress. Organisational conflicts	<b>2 Sessions of 3 Hours Each</b>
7	Leadership: Concepts and skills of leadership Leadership and managerial roles Leadership styles and effectiveness Contemporary issues in leadership. Power and Politics: sources and Uses of power; politics at workplace Tactics and strategies.	<b>2 Sessions of 3 Hours Each</b>

8	Organisation Development Organisational Change and Culture Environment, Organisational culture and climate Contemporary issues relating to business situations Process of change and Organizational Development	<b>1 Session of 3 Hours</b>
9	Case Studies and Presentations	<b>2 Sessions of 3 Hours Each</b>

### **Reference Text**

1. Understanding Organizational Behavior – Udai Pareek
2. Organizational Behavior – Stephen Robbins
3. Organizational Behavior – Fred Luthans
4. Organizational Behavior – L. M. Prasad (Sultan Chand)

## 1.6. Business Mathematics 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"><li>• Basic Statistical Concepts</li><li>• Summarisation of Data</li><li>• Frequency Distribution</li><li>• Measures of Central Tendency</li><li>• Measures of Dispersion</li><li>• Relative Dispersion, Skewness</li></ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"><li>• Elementary Probability Theory</li><li>• Relative Frequency Approach</li><li>• Axiomatic Approach</li><li>• Subjective Probability</li><li>• Marginal &amp; Conditional Probability</li><li>• Independence/Dependence of Events</li><li>• Bayes' Theorem</li><li>• Chebyseheff's Lemma</li></ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"><li>• Elementary Statistical Distributions</li><li>• Binomial, Poisson, Hypergeometric</li><li>• Negative Exponential, Normal, Uniform</li></ul>	<b>1 Session of 3 Hours</b>
4	<ul style="list-style-type: none"><li>• Sampling distributions</li><li>• For Mean, Proportion, Variance</li><li>• From Random Samples</li><li>• Standard Normal (3); Student's; Chi-Square</li><li>• And Variance ratio (F) Distribution</li></ul>	<b>2 Sessions of 3 Hours Each</b>
5	<ul style="list-style-type: none"><li>• Statistical Estimation</li><li>• Point &amp; Interval estimation</li><li>• Confidence Interval for Mean, Proportion &amp; Variance</li></ul>	<b>1 Session of 3 Hours Each</b>

6	<ul style="list-style-type: none"> <li>• Test of Hypothesis</li> <li>• Tests for specified values of Mean,</li> <li>• Proportion &amp; Standard Deviation</li> <li>• Testing equality of two Means,</li> <li>• Proportion &amp; Standard Deviation</li> <li>• Test of goodness - of fit</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
7	<ul style="list-style-type: none"> <li>• Simple Correlation &amp; Regression/Multiple Correlation &amp; Regression</li> <li>• Spearman's rank Correlation</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
8	<ul style="list-style-type: none"> <li>• Analysis of Variance</li> <li>• One-way &amp; Two-way Classification (for Equal Class)</li> </ul>	<b>1 Session of 3 Hours</b>
9	Elements of Integration & Differentiation	<b>1 Session of 3 Hours</b>
10	Elements of Determinants	<b>1 Session of 3 Hours</b>
11	Elements of Matrix algebra	<b>1 Session of 3 Hours</b>

### Reference Text

1. Statistics for Management – Richard L Levin
2. Statistics a fresh approach – D.H.Sanders
3. Statistics concepts & applications – H.C.Schefler
4. Practical Business Statistics – Andrew F. Siegel
5. Statistics for Business with Computer applications – Edward Minieka & Z.D.Kurzeja
6. Basic Statistics for Business & Economics – Mason, Marehas
7. An Introduction to statistical methods – C. B. Gupta & Vyay Gupta (Vikas)
8. R.S. Bhardway: Business Statistics(Excel Books)
9. Sharma : Business Statistics (Pearson)
10. Beri: Statistics for Management (TMH)

## 1.7 Information Technology for Management 50 Marks (9 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>Historical Perspective of Computer and Information Technology</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>How a Computer works – Hardware and Software components and their characteristics from a user/buyers perspective</li> </ul>	<b>1 Session of 3 Hours</b>
3	<ul style="list-style-type: none"> <li>Basics of Networking</li> <li>Components of networks</li> <li>LAN/WAN/MAN, various options for Networking for a business</li> <li>Dial Up, Leased Lines, DSL Lines, VSAT.</li> <li>Various medium for communication – terrestrial, satellite, copper, fiber optic etc</li> </ul>	<b>1 Session of 3 Hours</b>
4	<ul style="list-style-type: none"> <li>Basics of Internet – how internet works</li> <li>Familiarity with various components of the internet</li> <li>Browser, Web Server, DNS Server, Search Engine</li> <li>Applications of Internet – Websites,</li> <li>Blogs, email, FTP, Voice over Internet</li> </ul>	<b>1 Session of 3 Hours</b>
5	<ul style="list-style-type: none"> <li>Impact of IT on business and society</li> </ul>	<b>1 Session of 3 Hours</b>
6	<ul style="list-style-type: none"> <li>Role of IT – Overview of concepts such as ERP, SCM, CRM, Data Warehousing and Business Intelligence, e-commerce, e-Business, Knowledge management etc</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
7	<ul style="list-style-type: none"> <li>Case studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

### Reference Text

- e-Business: Roadmap for Success: Ravi Kalakota and Marcia Robinson
- The Seven Steps to Nirvana: Strategic Insights into eBusiness Transformation: Mohanbir Sawhney
- Competitive Strategy by Michael Porter
- Knowledge Management by Ganesh Natarajan and Sandhya Shekhar
- Business @ The Speed of Thought by Bill Gates
- TechVenture: New Rules on Value and Profit from Silicon Valley by Mohanbir Sawhney
- Alex Leon & Mathews Leon: Introduction to computers (Vikas)
- Rajaraman: Introduction to Information Technology(Prentice Hal India)
- Sanders, D. H. : Computers in Business: An Introduction (McGraw Hill)

## 1.8. Communication Skills 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"><li>• Process of Communication</li></ul>	<b>2 Sessions of 3 Hours Each</b>
2	<ul style="list-style-type: none"><li>• Communication in Organisation Nature, Function &amp; Scope.</li></ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"><li>• Management of Written &amp; Oral Communication</li></ul>	<b>2 Sessions of 3 Hours Each</b>
4	<ul style="list-style-type: none"><li>• Barriers to Effective Communication</li></ul>	<b>2 Sessions of 3 Hours Each</b>
5	<ul style="list-style-type: none"><li>• Report Writing</li></ul>	<b>2 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"><li>• Communication Technology &amp; its Impact on Office Procedures and Automation.</li></ul>	<b>2 Sessions of 3 Hours Each</b>
7	<ul style="list-style-type: none"><li>• Case Studies and Presentations</li></ul>	<b>3 Sessions of 3 Hours Each</b>

### Reference Text

1. Cottrell, S. (2003) The study skills handbook – 2nd Ed Macmillan
2. Payne, E. & Whittaker L. (2000) Developing essential study skills, Financial Times – Prentice Hall
3. Turner, J. (2002) How to study: a short introduction – Sage
4. Northledge, A. (1990) The good study guide The Open University
5. Giles, K. & Hedge, N. (1995) The manager's good study guide The Open University
6. Drew, S. & Bingham, R. (2001) The student skills guide Gower
7. O'Hara, S. (1998) Studying @ university and college Kogan Page
8. Buzan, T. & Buzan, B. (2000) The Mind Map Book BBC Books
9. Svantesson, I. (1998) Learning maps and memory skills, Kogan Page
10. Theosarus – Merrilium – Oxford
11. Sen: Communication Skills (Prentice Hall India)
12. J . V. Vilanilam: More effective Communication(Sage)
13. Mohan: Developing Communication Skills(MacMillan)

## 1.9 Marketing Management 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>• Introduction to Marketing concept</li> <li>• Evolution of marketing &amp; Customer orientation</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>• Marketing Environment and Evaluation of Market opportunities</li> </ul>	<b>1 Session of 3 Hours</b>
3	<ul style="list-style-type: none"> <li>• Market research &amp; Marketing Information Systems and Demand forecasting and Market potential analysis</li> </ul>	<b>1 Session of 3 Hours</b>
4	<ul style="list-style-type: none"> <li>• Consumer buying process &amp; Organizational buying behavior</li> </ul>	<b>1 Session of 3 Hours</b>
5	<ul style="list-style-type: none"> <li>• Pillars of Marketing - Market segmentation, Target marketing Positioning &amp; Differentiation</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"> <li>• Marketing Mix and Product decisions – Product Life cycle</li> </ul>	<b>1 Session of 3 Hours</b>
7	<ul style="list-style-type: none"> <li>• New Product development process</li> </ul>	<b>1 Session of 3 Hours</b>
8	<ul style="list-style-type: none"> <li>• Distribution decisions – Logistics &amp; Channel decisions</li> </ul>	<b>1 Session of 3 Hours</b>
9	<ul style="list-style-type: none"> <li>• Promotion decisions – Integrated Marketing communications concept, communication tools</li> </ul>	<b>2 Session of 3 Hours</b>
10	<ul style="list-style-type: none"> <li>• Personal selling &amp; Sales management</li> </ul>	<b>1 Session of 3 Hours</b>
11	<ul style="list-style-type: none"> <li>• Pricing decisions</li> </ul>	<b>1 Session of 3 Hours</b>
12	<ul style="list-style-type: none"> <li>• Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

### Reference Text

1. Marketing Management - Kotler, Keller, Koshy & Jha – 14th edition,
2. Basic Marketing, 13th edition, Perrault and McCarthy
3. Marketing management – Indian context Dr. Rajan Saxena
4. Marketing Management – Ramaswamy & Namkumari
5. R. L. Varshuey & S.L. Gupta: Marketing Management An Indian Perspective (Sultan Chand)
6. Adrich Palmer: Introduction to Marketing (Oxford)

## MMS First Year – Semester – I (Electives 1.10 – 1.13)

Students need to choose any two out of four electives

### 1.10 Selling & Negotiation Skills 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"><li>Types of Negotiation</li></ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"><li>Negotiation Strategies</li></ul>	<b>3 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"><li>Selling skills – Selling to customers</li></ul>	<b>3 Sessions of 3 Hours Each</b>
4	<ul style="list-style-type: none"><li>Selling to Superiors</li></ul>	<b>1 Session of 3 Hours</b>
5	<ul style="list-style-type: none"><li>Selling to peer groups, team mates &amp; subordinates</li></ul>	<b>2 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"><li>Conceptual selling, Strategic selling</li></ul>	<b>2 Sessions of 3 Hours Each</b>
7	<ul style="list-style-type: none"><li>Selling skills – Body language</li></ul>	<b>1 Session of 3 Hours</b>
8	<ul style="list-style-type: none"><li>Case Studies and Presentations</li></ul>	<b>2 Sessions of 3 Hours Each</b>

#### Reference Text

Organisational Behaviour by Fred Luthans (9th edition)

The Essentials of Negotiation – Harvard Business School Press

Getting to Yes by Roger Fisher & William Ury

Negotiation Selling by Sameer A Kulkarni



**1.11 High Performance Leadership 100 marks (15 Sessions of 3 Hours Each)**

<b>SL.No</b>	<b>Particulars</b>	<b>Sessions</b>
1	<ul style="list-style-type: none"> <li>• Leadership</li> <li>• Theories of Leadership</li> <li>• Leadership Styles and Leadership</li> <li>• Leadership Styles</li> <li>• Leadership Skills</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
2	<ul style="list-style-type: none"> <li>• Leadership Skills and Leadership Lessons through Literature</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"> <li>• Team work &amp; Team building</li> </ul>	<b>1 Session of 3 Hours</b>
4	<ul style="list-style-type: none"> <li>• Interpersonal skills – Conversation, Feedback, Feed forward</li> </ul>	<b>1 Session of 3 Hours</b>
5	<ul style="list-style-type: none"> <li>• Interpersonal skills</li> <li>• Delegation, Humor, Trust, Expectations, Values, Status, Compatibility</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"> <li>• Conflict Management</li> <li>• Types of conflicts and Conflict Management</li> <li>• Coping strategies and Conflict Management</li> <li>• Conflict Management Styles</li> </ul>	<b>3 Sessions of 3 Hours Each</b>
7	<ul style="list-style-type: none"> <li>• Positive thinking</li> <li>• Attitudes</li> <li>• Beliefs</li> </ul>	<b>1 Session of 3 Hours</b>
8	<ul style="list-style-type: none"> <li>• Positive thinking – Martin Seligman’s theory of Learned Helplessness</li> <li>• Learned Optimism</li> </ul>	<b>1 Session of 3 Hours</b>
9	<ul style="list-style-type: none"> <li>• Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

**Reference Text**

1. Organizational Behavior by Fred Luthans (9th edition)
2. How to Manage Conflict by Peg Pickering
3. High Performance Leadership – Vijayraghavan

## **1.12 Indian Ethos in Management 100 marks (15 Sessions of 3 Hours Each)**

### **Objectives:**

The objective is to sensitise participants of the programme to Indian culture and value systems and the impact of this on management thinking and action. Participants will do desk research papers. The institution will arrange guest lectures on various facets of this area. The evaluation will be through a project / term paper.

### **Reference Text**

1. Management and the Indian Ethes : G.D.Sharma
2. Indian Ethes for Modern Management : G.R.Krishna
3. Towards the optimal organizations (Indian Culture and Management) : Rayen. K.Gupta (Excel Books)
4. The seven spiritual Laws of Success: Deepak Chopra (Excel Books)
5. Blending the best of the East and the West in Management education: Subhir Chowdhury.
6. India's contribution to Management: Pravir Malik (Sri Aurobinds Institute of Research in Social Sciences, pondicherry)
7. Management Concepts from the Mahabarata: N.M.Khandelwar (New Century Publications, New Delhi)
8. Vedic management: Krishna Saigal (gyan Publishing House, New Delhi)

## **1.13 Corporate Social Responsibility Projects 100 marks (15 Sessions of 3 Hours Each)**

### **Objectives**

The objective of this subject is to familiarize students with concepts and practice of Corporate Social Responsibility, its significance and impact in the current scenario. Participants will do desk research papers. The institution will arrange guest lectures on various facets of this area. The evaluation will be through a project / term paper.

### **Reference Text**

1. Corporate Social Responsibility – Philip Kotler and Nancy Lee
2. Perspectives on Corporate Social Responsibility – David Crowther, Lez Rayman – Bacchus
3. Corporate Social Responsibility in India – Sanjay K Agarwal
4. Corporate Social Responsibility Concepts and Cases – The Indian Experience  
C.V Baxi, Ajit Prasad

## **Scheme of Assessments for Subjects of 50 Marks**

- ❖ The Semester end Examination will be conducted for 30 Marks.
- ❖ Internal Assessments will be conducted for 20 Marks.

**The allocation of 20 marks shall be on the following basis: -**

- a) Periodical class tests held in the given semester (10 Marks)
- b) Presentations throughout the semester (05 Marks)
- c) Attendance and Active participation in routine class instructional deliveries (03 Marks)
- d) Overall Conduct as a responsible student, mannerism and articulation and exhibition of leadership qualities in organizing related academic activities. (02 Marks)

**Note: A Student has to separately secure minimum 50% marks (i.e 10 out of 20) in the internal assessments and secure minimum 50% marks (i.e 15 out of 30) in the Semester End Examination in every subject to be declared as Pass.**

**Question Paper Pattern for Semester End Examination (30 Marks)**

**There will be Five Questions in all.**

Q1 would be compulsory and would carry 10 Marks

In addition to Q1, there would be four questions. Each question would carry 10 Marks. Each of these four Questions will have three sub – questions and each sub – question would carry 05 Marks

Students have to attempt any two out of the remaining four Questions and within each question; students have to attempt any two out of three sub – questions.

**Q1 – 10 Marks (Compulsory)**

**Attempt Any Two from the Remaining Four Questions**

Q2 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q3 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q4 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q5 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

## **Scheme of Assessments for Subjects of 100 Marks**

- ❖ The Semester end Examination will be conducted for 60 Marks.
- ❖ Internal Assessments will be conducted for 40 Marks.

**The allocation of 40 marks shall be on the following basis: -**

- a) Periodical class tests held in the given semester (20 Marks)
- b) Presentations throughout the semester (10 Marks)
- c) Attendance and Active participation in routine class instructional deliveries (05 Marks)
- d) Overall Conduct as a responsible student, mannerism and articulation and exhibition of leadership qualities in organizing related academic activities. (05 Marks)

**Note: A Student has to separately secure minimum 50% marks (i.e 20 out of 40) in the internal assessments and secure minimum 50% marks (i.e 30 out of 60) in the Semester End Examination in every subject to be declared as Pass.**

**Question Paper Pattern for Semester End Examination (60 Marks)**

**There will be Five Questions in all.**

Q1 would be compulsory and would carry 20 Marks

In addition to Q1, there would be six questions. Each question would carry 10 Marks. Each of these Six Questions will have three sub – questions and each sub – question would carry 05 Marks

Students have to attempt any four out of the remaining six Questions and within each question; students have to attempt any two out of three sub – questions.

**Q1 – 20 Marks (Compulsory)**

**Attempt Any Four out of the Remaining Six Questions**

Q2 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q3 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q4 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q5 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q6 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q7 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

## MMS First Year: Semester II

Subject/Paper	Maximum Marks	Number of Sessions of 90 Minutes
<b>Core Papers</b>		
2.1 Legal & Tax Aspects of Business	100	30
2.2 Cost & Management Accounting	100	30
2.3 Economic Environment of Business	50	18
2.4 Operations Research	100	30
2.5 Human Resources Management	100	30
2.6 Research Methodology & Fundamentals of MR	100	30
2.7 Management Information Systems (MIS)	50	18
2.8 Financial Management	100	30
2.9 Market Applications & Practices	100	30
2.10 to 2.13 Elective 1	100	30
Elective 2	100	30
Total	1000	306
<b>Electives (Students need to opt for any two electives)</b>		
2.10 Decision Science		
2.11 Managerial Process Skills		
2.12 Analysis of financial statements		
2.13 Foreign Languages (German, French and Japanese)		

**Note 1: All subjects/papers for semester II will be internally assessed by the institute.**

**Note 2:** All new electives proposed to be introduced by the institute, apart from electives listed in the new syllabus; need to inform University in writing outlining the details of the course with learning objectives, learning outcomes, detail syllabus, teaching learning plan and course evaluation procedures within the pattern prescribed at least one semester in advance.



## Master of Management Studies

### First Year Semester II

Sl No	Code	Subject/Paper	No of Periods per week	Duration of Theory Papers	Marks		
					Examination	Continuous Assessment	Total
		<b>Core Papers</b>	<b>(90 Mins Each)</b>	<b>In Hours</b>			
	2.1	Legal & Tax Aspects of Business	2	3	60	40	100
	2.2	Cost & Management Accounting	2	3	60	40	100
	2.3	Economic Environment of Business	2	2	30	20	50
	2.4	Operations Research	2	3	60	40	100
	2.5	Human Resources Management	2	3	60	40	100
	2.6	Research Methodology & Fundamentals of MR	2	3	60	40	100
	2.7	Management Information Systems (MIS)	2	2	30	20	50
	2.8	Financial Management	2	3	60	40	100
	2.9	Market Applications & Practices	2	3	60	40	100
		<b>Electives</b>					
	2.10	Elective 1	2	3	60	40	100
	To						
	2.13	Elective 2	2	3	60	40	100
		<b>Total</b>	<b>22</b>		<b>600</b>	<b>400</b>	<b>1000</b>

## MMS – First Year - Second Semester

### 2.1. Legal & Tax Aspects of Business 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>• Indian Contract Act</li> </ul>	<b>3 Sessions of 3 Hours Each</b>
2	<ul style="list-style-type: none"> <li>• Indian Sale of Goods act</li> </ul>	<b>1 Session of 3Hours</b>
3	<ul style="list-style-type: none"> <li>• Salient Features of Companies Act:</li> <li>• Characteristics of a company</li> </ul> <p>b. Formation of a company c. Types of companies – private, public, Government etc. d. Management of company – Directors, Meeting, Accounts &amp; Audits.</p>	<b>3 Sessions of 3 Hours Each</b>
4	<ul style="list-style-type: none"> <li>• Restrictive &amp; Unfair Trade Practices.</li> </ul>	<b>1 Session of 3 Hours</b>
5	<ul style="list-style-type: none"> <li>• Salient Features of Negotiable Instruments Act</li> <li>• Bill of exchange, cheque, promissory note,</li> <li>• Negotiation &amp; Endorsement</li> <li>• c. Dishonour of Instruments including noting and protest</li> </ul>	<b>1 Session of 3 Hours</b>
6	<ul style="list-style-type: none"> <li>• Elements Of Income Tax:</li> </ul> <p>a. Scope and charge of income tax b. Selected definitions relevant to computation of Total Income c. Residential status d. Heads of income &amp; computation thereof, with special reference to Business Income &amp; Capital Gains e. Exemptions from Total Income &amp; Deductions from Gross total Income</p>	<b>2 Sessions of 3 Hours</b>

7	<ul style="list-style-type: none"> <li>• Salient Features of Central Excise Act – including assessable value, CENCAT credit</li> </ul>	<b>2 Sessions of 3 Hours</b>
8	<ul style="list-style-type: none"> <li>• Salient features of Maharashtra Value added Tax Act</li> </ul>	<b>1 Session of 3 Hours</b>
9	<ul style="list-style-type: none"> <li>• Salient Features of Central Sales Tax Act</li> </ul>	<b>1 Session of 3 Hours</b>

**Reference Text:**

1. Business Law – N.D.Kapoor
2. Business Law – Bulchandani
3. Company Law – Avtar Singh
4. Income Tax – Dr. Singhania
5. Indian Taxes – V.S.Datey
6. S. S. Gulshan: Mercantile Law (Excel Books)
7. A. K. Majumdar & G.K. Kapoor: Students guide to Company Law(Taxmann)
8. S. K. Tuteja: Business Law for Managers (Sultan Chand)

## 2.2. Cost & Management Accounting 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>Terminology of cost – Cost classification by elements, variability, cash flow etc.</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>Preparation of cost sheet</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"> <li>Methods of costing – with special reference to job costing, process costing, services costing</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
4	<ul style="list-style-type: none"> <li>Distinction &amp; relationship among Financial Accounting, Cost accounting &amp; Management Accounting</li> </ul>	<b>1 Session of 3Hours</b>
5	<ul style="list-style-type: none"> <li>Marginal costing (Break – even analysis)</li> <li>Computation of break – even point, margin of safety</li> <li>Applications of Break even analysis to export pricing profit planning, Make v/s buy,</li> <li>Operate v/s shut down.</li> </ul>	<b>3 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"> <li>Budgetary Control – Functional Budgets, Cash Budgets, Master Budgets – Flexible Budgeting – Zero based Budgeting – Responsibility &amp; Performance Budgeting.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
7	<ul style="list-style-type: none"> <li>Responsibility Accounting – cost centers , profit centers &amp; investment centers Transfer pricing, Use of responsibility accounting in performance evaluation</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
8	<ul style="list-style-type: none"> <li>Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

### Reference Text:

1. Management Accounting for profit control – Keller & Ferrara
2. Cost Accounting for Managerial Emphasis – Horngreen
3. T. P. Ghosh: Financial Accounting for managers(Taxmann).

### 2.3. Economic Environment of Business 50 Marks (9 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<p><b>PART I : The Fundamentals</b></p> <ul style="list-style-type: none"> <li>• The Scope &amp; Subject Matter of Macroeconomics</li> <li>• An Introduction to the Economics of Growth &amp; Development</li> <li>• An Introduction to the Indian Economy - Its Salient Features</li> <li>• India's Gross Domestic Product &amp; Net National Product (its components &amp; the significance of the same to growth)</li> <li>• Inter-Sectoral Distribution of the Gross National Product over the Five Year Plans Period.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
2	<p><b>PART II: The Economic Markets</b></p> <ul style="list-style-type: none"> <li>• The Product Market &amp; How it Affects India's Growth Potential</li> <li>• The Money Market &amp; How it Behaves</li> <li>• The Capital Market &amp; its Variability</li> <li>• The Money Market &amp; the Role of Central Banking</li> <li>• How does Commercial Banking Effect Industry &amp; Business</li> <li>• The Indian Labor Market &amp; Levels of Unemployment &amp; Inflation since 1990</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
3	<p><b>PART III : Federal Budget</b></p> <ul style="list-style-type: none"> <li>• Objective is to expose the students to the various components of the national budget and how these impact on the business world.</li> </ul>	<b>1 Session of 3 Hours</b>

4	<p><b>PART IV: India &amp; the World</b></p> <ul style="list-style-type: none"> <li>• The capitalist world economy and India's position therein since 1990</li> <li>• The World Bank, and IMF conditionalities leading to the liberalisation – privatization – globalisation exercise and beyond</li> <li>• India's balance of trade and fluctuations since 1990. How do er figure in the world order.</li> <li>• India's balance of payments and how its study can assist corporate decision making. What is needed to improve the situation, if at all it is poor.</li> <li>• The Business Cycle and how it is perceived to behave in the immediate future. What business decision hinge on this analysis.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
5	<b>Case Studies and Presentations</b>	<b>2 Sessions of 3 Hours Each</b>

**Reference Text:**

1. Economic Environment of Business, S.K.Misra and V.K.Puri, Himalaya Publishing House, 2005
2. Business Environment, Francis Cherunilam, Himalaya Publishing House, 2005
3. Business Environment – Aswathappa, HPH
4. Raj Aggrawal: Business Environment (Exel)
5. Adhikary, M: Economic Environment of Business in India (Sultan Chand)

## 2.4. Operations Research 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>❖ Introduction to OR : Concepts, Genesis, Application Potential to Diverse Problems in Business &amp; Industry, Scope and Limitations.</li> <li>❖ Assignment Problem (AP) –               <ul style="list-style-type: none"> <li>➤ Concepts, Formulation of Model</li> <li>➤ Hungarian Method of Solution –</li> <li>➤ Maximisation / Minimisation –</li> <li>➤ Balanced / Unbalanced –</li> <li>➤ Prohibited Assignments - Problems.</li> </ul> </li> </ul>	<b>2 Sessions of 3 Hours Each</b>
2	<ul style="list-style-type: none"> <li>❖ Transportation Problem (TP) :-               <ul style="list-style-type: none"> <li>➤ Concepts, Formulation of Model - Solution Procedures for IFS and Optimality Check</li> <li>➤ Balanced / Unbalanced</li> <li>➤ Maximization / Minimization</li> <li>➤ Case of Degeneracy</li> <li>➤ Prohibited Routing Problems</li> <li>➤ Post-Optimal Sensitivity Analysis.</li> </ul> </li> </ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"> <li>❖ Linear Programming (LP) :-               <ul style="list-style-type: none"> <li>➤ Concepts, Formulation of Models</li> <li>➤ Diverse Problems – Graphical Explanation of Solution - Maximisation / Minimisation –</li> </ul> </li> <li>❖ Simplex Algorithm –               <ul style="list-style-type: none"> <li>➤ Use of Slack /Surplus / Artificial Variables –</li> <li>➤ Big M Method/Two-Phase Method –</li> <li>➤ Interpretation of the Optimal Tableau –</li> <li>➤ (Unique Optimum, Multiple Optimum, Unboundedness, Infeasibility &amp; Redundancy Problems.)</li> </ul> </li> </ul>	<b>2 Sessions of 3 Hours Each</b>
4	<ul style="list-style-type: none"> <li>❖ Linear Programming (LP) :-               <ul style="list-style-type: none"> <li>➤ Duality Principle - Primal /Dual Inter-relation</li> <li>➤ Post-Optimal Sensitivity Analysis for changes in b-vector, c-vector, Addition/Deletion of Variables/Constraints</li> <li>➤ Dual Simplex Method - Problems Limitations of LP vis-a-vis - Non-linear Programming Problems.</li> <li>➤ Brief introduction to Non-LP models and associated problems.</li> </ul> </li> </ul>	<b>1 Session of 3 Hours</b>

5	<ul style="list-style-type: none"> <li>❖ Network Analysis</li> <li>➤ Minimal Spanning Tree Problem - Shortest Route Problem</li> <li>➤ Maximal Flow in Capacitated Network - Concepts and Solution Algorithm as Applied to Problem</li> <li>➤ Project Planning &amp; Control by use of CPM/PERT Concepts. Definitions of Project</li> <li>➤ Jobs, Events - Arrow Diagrams - Time Analysis and Derivation of the Critical Path –</li> <li>➤ Concepts of Floats (total, free, interfering, independent) - Crashing of a CPM Network - Probability Assessment in PERT Network.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"> <li>❖ Queuing (Waiting-line) Models</li> <li>➤ Concepts - Types of Queuing Systems (use of 6 Character Code) - Queues in Series and Parallel –</li> <li>➤ Problems based on the results of following models (M/M/1) Single Channel Queue with Poisson Arrival Rate, and Negative Exponential Service Time, With and Without Limitations of Queue Size (M/G/1)</li> <li>➤ Single Channel with Poisson Arrival Rate, and General Service Time, PK-Formulae.</li> </ul>	<b>1 Session of 3 Hours</b>
7	<ul style="list-style-type: none"> <li>❖ Inventory Models</li> <li>➤ Types of Inventory Situations</li> <li>➤ Fixed Quantity/Fixed Review Period</li> <li>➤ Costs Involved - Deterministic Probability Models - Economic-Order-Quantity (EOQ) and</li> <li>➤ EBQ for Finite Production Rate - Sensitivity Analysis of EOQ-EOQ Under Price Break -</li> <li>➤ Determination of Safety Stock and Reorder Levels - Static Inventory Model - (Insurance Spares).</li> </ul>	<b>1 Session of 3 Hours</b>
8	<ul style="list-style-type: none"> <li>❖ Digital Simulation –</li> <li>➤ Concepts - Areas of Application - Random Digits and Methods of Generating Probability Distributions</li> <li>➤ Application to Problems in Queueing, Inventory, New Product, Profitability, Maintenance etc.</li> </ul>	<b>1 Session of 3 Hours</b>



9	<ul style="list-style-type: none"> <li>❖ Replacement and Maintenance Models :-</li> <li>➤ Replacement of Items Subject to Deterioration and Items Subject Random Total Failure</li> <li>➤ Group vs Individual Replacement Policies.</li> </ul>	<b>1 Session of 3 Hours</b>
10	<ul style="list-style-type: none"> <li>❖ Game Theory - Concepts - 2 – person</li> <li>➤ N-person games - Zero - sum and Non-zero-sum games</li> <li>Solution Procedures to 2-person zero sum games</li> <li>➤ Saddle point Mixed Strategy</li> <li>➤ Sub-games Method for <math>m \times 2</math> or <math>2 \times n</math> games - Graphical Methods</li> </ul>	<b>1 Session of 3 Hours</b>
11	<ul style="list-style-type: none"> <li>❖ Equivalence of Game Theory and Linear Programming Models</li> <li>➤ Solution of 3x3 Games by LP Simplex including Duality</li> <li>➤ Application for Maximising / Minimising Players' Strategy.</li> </ul>	<b>1 Session of 3 Hours</b>

**Note:** The teaching of the above subject is to be integrated with the most widely available software.

#### **Reference Text**

1. Operation Research - Taha
2. Quantitative Techniques in Management – N.D.Vohra
3. Quantitative Techniques in Management – J.K.Sharma
4. Operations Research, Methods & Problems – Sasieni M. & others
5. Principles of Operations Research – N.M. Wagher
6. Operation Research – V.K.Kapoor
7. C. R. Kothari: Introduction to Operations Research (Vikas)
8. Gupta & Khanna: Quantitative Techniques for decision making(Prentice Hall India)

**2.5. Human Resources Management 100 Marks (15 Sessions of 3 Hours Each)**

<b>SL.No</b>	<b>Particulars</b>	<b>Sessions</b>
1	<ul style="list-style-type: none"> <li>❖ Human Resource Management –</li> <li>➤ Its Scope, Relationship with other Social Sciences -</li> <li>➤ Approaches to Human Resource Management / Inter-Disciplinary Approach</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>❖ Organization of Personnel Functions –</li> <li>➤ Personnel Department, Its Organization, Policies, Responsibilities and Place in the Organization.</li> </ul>	<b>1 Session of 3Hours</b>
3	<ul style="list-style-type: none"> <li>➤ Manpower Planning</li> <li>➤ Job Analysis</li> <li>➤ Job Description</li> <li>➤ Scientific Recruitment and</li> <li>➤ Selection Methods.</li> </ul>	<b>2 Sessions of 3 Hours</b>
4	<ul style="list-style-type: none"> <li>❖ Motivating Employees –</li> <li>➤ Motivational Strategies</li> <li>➤ Incentives Schemes</li> <li>➤ Job-enrichment, Empowerment - Job-Satisfaction</li> <li>➤ Morale</li> <li>➤ Personnel Turnover.</li> </ul>	<b>2 Sessions of 3 Hours</b>
5	<ul style="list-style-type: none"> <li>❖ Performance Appraisal Systems</li> <li>➤ MBO Approach</li> <li>➤ Performance Counselling</li> <li>➤ Career Planning.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"> <li>❖ Training &amp; Development –</li> <li>➤ Identification of Training Needs</li> <li>➤ Training Methods</li> <li>➤ Management Development Programmes.</li> </ul>	<b>1 Session of 3 Hours</b>

7	<ul style="list-style-type: none"> <li>❖ Organisation Development –</li> <li>➤ Organisation Structures</li> <li>➤ Re-engineering, Multi-Skilling</li> <li>➤ BPR.</li> </ul>	<b>1 Session of 3 Hours</b>
8	❖ Management of Organizational Change.	<b>1 Session of 3 Hours</b>
9	❖ HRD Strategies for Long Term Planning & Growth. Productivity and Human Resource Management	<b>2 Sessions of 3 Hours Each</b>
10	❖ Case Studies and Presentations	<b>2 Sessions of 3 Hours Each</b>

### **Reference Text**

1. Human Resource Management – P.Subba Rao
2. Personnel Management – C.B. Mammoria
3. Dessler: Human Resource Management(Prentice Hall India)
4. Personnel/Human Resource Management: DeCenzo & Robbins (Prentice Hall India)
5. D. K. Bhattacharya: Human Resource Management (Excel)
6. VSP Rao – Human Resource Management(Excel)
7. Gomez: Managing Human Resource (Prentice Hall India)

**2.6. Research Methodology & Fundamentals of MR. 100 Marks (15 Sessions of 3 Hours Each)**

<b>SL.No</b>	<b>Particulars</b>	<b>Sessions</b>
1	Relevance & Scope of Research in Management and steps involved in the Research Process	<b>1 Session of 3 Hours</b>
2	Identification of Research Problem and Defining MR problems	<b>1 Session of 3 Hours</b>
3	Research Design	<b>1 Session of 3 Hours</b>
4	Data – Collection Methodology Primary Data – Collection Methods Measurement Techniques Characteristics of Measurement Techniques – Reliability, Validity etc. Secondary Data Collection Methods Library Research References Bibliography, Abstracts, etc.	<b>2 Sessions of 3 Hours Each</b>
5	Primary and Secondary data sources Data collection instruments including in-depth interviews, projective techniques and focus groups	<b>2 Sessions of 3 Hours</b>
6	Data management plan – Sampling & measurement	<b>1 Session of 3 Hours</b>
7	Data analysis – Tabulation, SPSS applications data base, testing for association	<b>1 Session of 3 Hours</b>

8	Analysis Techniques Qualitative & Quantitative Analysis Techniques Techniques of Testing Hypothesis – Chi-square, T-test Correlation & Regression Analysis Analysis of Variance, etc. – Making Choice of an Appropriate Analysis Technique.	<b>3 Sessions of 3 Hours Each</b>
9	Research Report Writing and computer Aided Research Methodology – use of SPSS packages	<b>1 Session of 3 Hours</b>
10	Case Studies and Presentations	<b>2 Sessions of 3 Hours Each</b>

### Reference Text

1. Business Research Methods – Cooper Schindler
2. Research Methodology Methods & Techniques – C.R.Kothari
3. D. K. Bhattacharya: Research Methodology (Excel)
4. P. C. Tripathy: A text book of Research Methodology in Social Science(Sultan Chand)
5. Saunder: Research Methods for business students (Pearson)
6. Marketing Research –Hair, Bush, Ortinau (2nd edition Tata McGraw Hill)
7. Marketing Research Text & Cases – (Wrenn, Stevens, Loudon Jaico publication)
8. Marketing Research Essentials – McDaniels & Gates (3rd edition SW College publications)
9. Marketing Research – Aaker, Kumar, Day (7<sup>th</sup> edition John Wiley & Sons)

## 2.7. Management Information System 50 Marks (9 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>❖ Basic Information Concepts and Definitions</li> <li>❖ Need for Information and Information Systems (IS) in an organization</li> <li>❖ Characteristics of Information and Organisation with respect to organization form, structure , philosophy, hierarchy etc</li> </ul>	<b>1 Session of 3 Hours</b>
2	<ul style="list-style-type: none"> <li>❖ Types of IS – Transaction</li> <li>❖ Operational Control</li> <li>❖ Management Control</li> <li>❖ Decision Support</li> <li>❖ Executive Information Systems</li> </ul>	<b>1 Session of 3 Hours</b>
3	<ul style="list-style-type: none"> <li>❖ Determining Information Needs for an Organisation/Individual Manager</li> <li>❖ Overview of use of data flow method, analysis of information for decision processes etc.</li> </ul>	<b>1 Session of 3 Hours</b>
4	<ul style="list-style-type: none"> <li>❖ Strategic use of Information and IS – Use of Information for Customer Bonding</li> <li>❖ For Knowledge Management</li> <li>❖ For innovation,</li> <li>❖ For Managing Business Risks</li> <li>❖ For Creating a new business models and new business reality.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
5	<ul style="list-style-type: none"> <li>❖ Information Security –</li> <li>❖ Sensitize students to the need for information security</li> <li>❖ Concepts such as confidentiality, Integrity and Availability. Types of threats and risk, overview of some of the manual, procedural and automated controls in real life IT environments.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"> <li>❖ Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

### Reference Text:

1. MIS a Conceptual Framework by Davis and Olson
2. Analysis and Design of Information Systems by James Senn
3. Case Studies : Case on ABC Industrial Gases – Author : Prof Pradeep Pendse  
Mrs Fields Cookies – Harvard Case Study  
Select Business Cases identified by each Group of Students for work thru the entire subject
- 2-3 Cases on Requirements Management – Author : Prof Pradeep Pendse
4. O'brien: MIS (TMH)
5. Ashok Arora & Bhatia: Management Information Systems (Excel)
6. Jessup & Valacich: Information Systems Today (Prentice Hall India)
7. L. M. Prasad : Management Information Systems (Sultan Chand)

## 2.8. Financial Management 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	❖ Objective of Financial Management	<b>1 Session of 3 Hours</b>
2	❖ Financial Performance Appraisal using ❖ Ratio Analysis ❖ Funds Flow Analysis & ❖ Cash Flow Analysis	<b>3 Sessions of 3 Hours Each</b>
3	❖ Sources of Finance – ❖ Short Term/Long Term, ❖ Domestic / Foreign ❖ Equity/Borrowings/Mixed etc.	<b>2 Sessions of 3 Hours Each</b>
4	❖ Cost of Capital & Capital - Structure Planning ❖ Capital Budgeting & Investment Decision ❖ Analysis (using Time Value for Money Theory)	<b>2 Sessions of 3 Hours Each</b>
5	❖ Working Capital Management - Estimation & Financing ❖ Inventory Management ❖ Receivable Management ❖ c) Cash Management	<b>4 Sessions of 3 Hours Each</b>
6	❖ Dividend Policy / Bonus - Theory & Practice	<b>1 Session of 3 Hours</b>
7	❖ Case Studies and Presentations	<b>2 Sessions of 3 Hours Each</b>

### Reference Text:

1. Financial Management - Brigham
2. Financial Management - Khan & Jain
3. Financial Management - Prasanna Chandra
4. Financial Management - Maheshwari
5. Financial Management – S.C.Pandey
6. Van Horne & Wachowiz: Fundamentals of Financial Management (Prentice Hall India)
7. Sharan: Fundamentals of Financial Management (Pearson)

## 2.9. Marketing Applications & Practices: 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	❖ Strategic marketing principles	1 Session of 3 Hours
2	❖ Preparation of marketing and business plans	1 Session of 3 Hours
3	❖ B2B marketing	1 Session of 3 Hours
4	❖ Fast moving consumer goods marketing	1 Session of 3 Hours
5	❖ Consumer Durables marketing	1 Session of 3 Hours
6	❖ Services marketing	1 Session of 3 Hours
7	❖ Rural marketing	1 Session of 3 Hours
8	❖ Retail management	1 Session of 3 Hours
9	❖ Internet marketing	1 Session of 3 Hours
10	❖ Direct marketing	1 Session of 3 Hours
11	❖ Event & Media marketing	1 Session of 3 Hours
12	❖ Field project involving preparation of marketing / business plan in any industry verticals.	1 Session of 3 Hours
13	❖ Case Studies and Presentations	3 Sessions of 3 Hours Each

### Reference Text

1. Marketing Management Kotler, Keller, Koshi & Jha – 14th edition - Pearson
2. Basic Marketing, 13th edition, Perrault and McCarthy – McGraw Hill India
3. Marketing management – Indian context Dr. Rajan Saxena – McGraw Hill India
4. Marketing Management – Ramaswamy & Namkumari – McMillan



## MMS First Year – Semester – II (Electives 2.10 – 2.13)

Students need to choose any two out of four electives

### 2.10 Decision Science 100 Marks (15 Sessions of 3 Hours Each)

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"><li>❖ Decision making under certainty, risk and under uncertainty stations</li><li>➤ Decision tree for decision making</li><li>➤ Bayesian approach in decision making</li><li>➤ Breakeven analysis under uncertainty'</li><li>➤ Investment analysis under uncertainty</li></ul>	<b>3 Sessions of 3 Hours Each</b>
2	❖ Competitive strategies	<b>3 Sessions of 3 Hours Each</b>
3	❖ Single equations models with one and two explanatory variables plus ANOVA in regression analysis.	<b>2 Sessions of 3 Hours Each</b>
4	❖ Statistical forecasting techniques	<b>1 Session of 3 Hours Each</b>
5	❖ Auto correlation, Heteroscedasticity, multicollinearity & distributed lag models, Simultaneous equations models	<b>2 Sessions of 3 Hours Each</b>
6	❖ Identification problems; Estimation of structural parameters by ILS, SLS & IV.	<b>2 Sessions of 3 Hours Each</b>
7	❖ Case Studies, Assignments and Presentations	<b>2 Sessions of 3 Hours Each</b>

#### Reference Text

Quantitative Techniques in Management – N.D.Vora

Quantitative Techniques in Management – J.K.Sharma

Econometrics – By Damodar Gujarathi Koutynuous.

## **2.11 Managerial Process Skills – 100 marks (15 Sessions of 3 Hours Each)**

<b>SL.No</b>	<b>Particulars</b>	<b>Sessions</b>
1	Dynamics of Entrepreneurship – Commitment & Determination; Leadership	<b>1 Session of 3 Hours</b>
2	Dynamics of Entrepreneurship – Opportunity Obsession; Tolerance of Risk	<b>1 Session of 3 Hours</b>
3	Dynamics of Entrepreneurship – Ambiguity & Uncertainty; Creativity, Self-Reliance & Ability to Adapt	<b>1 Session of 3 Hours</b>
4	Dynamics of Entrepreneurship – Support from Significant Others; Motivation to Excel	<b>1 Session of 3 Hours</b>
5	Methods for generating ideas	<b>2 Sessions of 3 Hours Each</b>
6	Creative Problem Solving Techniques	<b>2 Sessions of 3 Hours Each</b>
7	Lateral thinking	<b>2 Sessions of 3 Hours Each</b>
8	Analytical skills	<b>2 Sessions of 3 Hours Each</b>
9	Intrapreneurship, Entrepreneurship Project	<b>1 Session of 3 Hours</b>
10	Entrepreneurship Project	<b>2 Sessions of 3 Hours Each</b>

### **Reference Text**

1. Organisational Behaviour by Fred Luthans (9th edition)
2. The Essentials of Managing Change and Transition – Harvard Business School Press

**2.12 Analysis of financial statements 100 Marks (15 Sessions of 3 Hours Each)**

SL.No	Particulars	Sessions
1	<ul style="list-style-type: none"> <li>❖ Revision of Balance Sheet and P&amp;L statement fundamentals.</li> <li>➤ Indian Accounting Standards</li> <li>➤ Indian Accounting Standard vs US GAAP</li> <li>➤ (This would also cover the manipulations often done by companies to show higher profits)</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
2	<ul style="list-style-type: none"> <li>❖ Cash Flow Analysis</li> <li>➤ Measuring operating / financing and investing Cash flows.</li> <li>➤ Cash flows and life cycle state of a company</li> <li>➤ Cash flows and financial flexibility (linkages to dividend policy and over retention of profits)</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
3	<ul style="list-style-type: none"> <li>❖ Assessing Business Performance               <ul style="list-style-type: none"> <li>➤ Operational efficiency ratios (Gross profit, net profit margins and various turnover ratios)</li> <li>➤ Liquidity ratios – Current Ratio / Acid test</li> <li>➤ Profitability ratios, Valuation Ratios</li> <li>➤ EPS/ ROE/ ROCE/ Total Shareholder returns, Linkages between ROE &amp; ROCE &amp;</li> <li>➤ optimal capital structure and determinants of PE multiple, Price to book value, EV/EBDITA multiple.</li> </ul> </li> <li>➤ Capitalization ratios- Debt Equity, Debt to Assets.</li> <li>➤ Du-pont Analysis</li> <li>➤ Coverage ratios and credit analysis and ratings</li> <li>➤ (The emphasis will be on correct interpretation and correct measurement i.e. with necessary accounting adjustments for these ratios).</li> </ul>	<b>3 Sessions of 3 Hours Each</b>

4	<ul style="list-style-type: none"> <li>❖ Free Cash flows to Equity / Firm</li> <li>➤ From earnings to free cash flows</li> <li>➤ Adjustment from standard accounting to correctly measure free cash flow.</li> <li>➤ Capitalisation leasing expense and R&amp;D expenditure, correct treatment for amortization</li> <li>➤ expense and deferred taxes</li> <li>➤ Measuring correct ROE &amp; ROC after adjusting for inter-corporate investments.</li> <li>➤ Implication of the above mentioned adjustments on fundamental valuations / company and</li> <li>➤ PE or Price / Book Value or EBDITA multiple.</li> </ul>	<b>2 Sessions of 3 Hours Each</b>
5	<ul style="list-style-type: none"> <li>➤ Introduction to Advance Accounting Concepts</li> <li>➤ Merger and acquisition</li> <li>➤ Consolidation of balance sheets</li> <li>➤ Deferred taxes, minority interest</li> <li>➤ NOPAT and adjustments to NOPAT from EVA perspective to measure correct economic cash flows.</li> <li>➤ Economic value added (EVA) and linkages between value of a company and EVA.</li> <li>➤ Equity Analysis, Stock Splits and Buy back</li> <li>➤ Managing Productivity of Corporate Capital</li> <li>➤ Composite Index for measuring productivity</li> </ul>	<b>3 Sessions of 3 Hours Each</b>
6	<ul style="list-style-type: none"> <li>➤ Forecasting FCFE / FCFF and Security Valuation</li> </ul>	<b>1 Session of 3 Hours</b>
7	<ul style="list-style-type: none"> <li>➤ Case Studies and Presentations</li> </ul>	<b>2 Sessions of 3 Hours Each</b>

### Reference Text

Financial Management by Prasanna Chandra  
Financial Management by Khan and Jain.  
Corporate Finance by Brealey – Myers

## **2.13 Foreign Languages (German, French and Japanese)**

## **Scheme of Assessments for Subjects of 50 Marks**

- ❖ The Semester end Examination will be conducted for 30 Marks.
- ❖ Internal Assessments will be conducted for 20 Marks.

**The allocation of 20 marks shall be on the following basis: -**

- a) Periodical class tests held in the given semester (10 Marks)
- b) Presentations throughout the semester (05 Marks)
- c) Attendance and Active participation in routine class instructional deliveries (03 Marks)
- d) Overall Conduct as a responsible student, mannerism and articulation and exhibition of leadership qualities in organizing related academic activities. (02 Marks)

**Note: A Student has to separately secure minimum 50% marks (i.e 10 out of 20) in the internal assessments and secure minimum 50% marks (i.e 15 out of 30) in the Semester End Examination in every subject to be declared as Pass.**

**Question Paper Pattern for Semester End Examination (30 Marks)**

**There will be Five Questions in all.**

Q1 would be compulsory and would carry 10 Marks

In addition to Q1, there would be four questions. Each question would carry 10 Marks. Each of these four Questions will have three sub – questions and each sub – question would carry 05 Marks

Students have to attempt any two out of the remaining four Questions and within each question; students have to attempt any two out of three sub – questions.

**Q1 – 10 Marks (Compulsory)**

**Attempt Any Two from the Remaining Four Questions**

Q2 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q3 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q4 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q5 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

## **Scheme of Assessments for Subjects of 100 Marks**

- ❖ The Semester end Examination will be conducted for 60 Marks.
- ❖ Internal Assessments will be conducted for 40 Marks.

**The allocation of 40 marks shall be on the following basis: -**

- a) Periodical class tests held in the given semester (20 Marks)
- b) Presentations throughout the semester (10 Marks)
- c) Attendance and Active participation in routine class instructional deliveries (05 Marks)
- d) Overall Conduct as a responsible student, mannerism and articulation and exhibition of leadership qualities in organizing related academic activities. (05 Marks)

**Note: A Student has to separately secure minimum 50% marks (i.e 20 out of 40) in the internal assessments and secure minimum 50% marks (i.e 30 out of 60) in the Semester End Examination in every subject to be declared as Pass.**



**Question Paper Pattern for Semester End Examination (60 Marks)**

**There will be Five Questions in all.**

Q1 would be compulsory and would carry 20 Marks

In addition to Q1, there would be six questions. Each question would carry 10 Marks. Each of these Six Questions will have three sub – questions and each sub – question would carry 05 Marks

Students have to attempt any four out of the remaining six Questions and within each question; students have to attempt any two out of three sub – questions.

**Q1 – 20 Marks (Compulsory)**

**Attempt Any Four out of the Remaining Six Questions**

Q2 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q3 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q4 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q5 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q6 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

Q7 (a) ----- (5 Marks)

(b) ----- (5 Marks)

(c) ----- (5 Marks)

Any two from (a) or (b) or (c) ----- (5x2) = 10 Marks

## Proposed Grades for Post Graduate courses

### 7 Point Scale for POST GRADUATE Courses

Range of Scores	Grade	Grade Point	CGPA range
75 & above	O	7	6.5 - 7
70 - 74.99	A	6	5.5 - 6.49
65 - 69.99	B	5	4.5 - 5.49
60 - 64.99	C	4	3.5 - 4.49
55 - 59.99	D	3	2.5 - 3.49
50 - 54.99	E	2	2 - 2.49
< = 49.99	F (Fail)	1	< 2