

## **Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA**

**Note:**

➤ NSS/NCC/Sports proficiency/Community services/Professional society activities/placement activities/clubs/technical magazine/conferences/research papers/Technical activities related to the field of Engineering (1<sup>st</sup> to 3<sup>rd</sup> year, 1 credits to be earned in 7<sup>th</sup> semester; will be evaluated by a committee)

L: Lectures/Week, T: Tutorials/Week, P: Practical Hours/Week

Assessment will consist of the following components

1. Mid-Term
  - a. One best of two minor tests (50% of Mid-term marks)
  - b. Assignments (20% of Mid-term marks)
  - c. Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)
  - d. Attendance (10% of Mid-term marks)
2. End -Term
  - **As per UGC guidelines 40% of total courses can be run through MOOC s/Swayam platform.**

**BS- Basic Science, HSMC -Humanities, social science including management, ESC- Engineering Science Course, MC-Mandatory Course**

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### First Year

#### 1<sup>st</sup> SEMESTER

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	BS 101	Mathematics –I	3	1	-	50	50	100	4
2.	BS105	Chemistry II	3	-	-	50	50	100	3
3.	ESC103	Electrical & Electronics Engineering	3	1	-	50	50	100	4
4.	PCC101	Introduction to Engg and Technology	2	1	-	50	50	100	3
5.	HSMC 101	Communication Skills	2	-	-	50	50	100	2
6.	MBA 101	Management & Organizational Behavior	3	1	-	50	50	100	4
7.	ESC 154	Electrical & Electronics Engineering Lab.	-	-	3	50	-	50	1.5
8.	BS 153	Chemistry II Lab.	-	-	3	50	-	50	1.5
9.	HSMC 151	Communication Skills Lab.	-	-	2	50	-	50	1
10.	MC 102	Ethics and self awareness	2	-	-	50	50	100	NC*
<b>Total</b>			<b>184</b>	<b>8</b>		<b>500</b>	<b>350</b>	<b>850</b>	<b>24</b>

Credits – Chemical (20), MBA (4)

#### 2<sup>nd</sup> SEMESTER

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	BS104	Mathematics –II	3	1	-	50	50	100	4
2.	BS102	Physics	3	1	-	50	50	100	4
3.	BS103	Chemistry-I	3	-	-	50	50	100	3
4.	ESC 101	Computer Programming for problem solving	2	-	-	50	50	100	2
5.	ESC 102	Engineering Graphics	2	-	-	50	50	100	2
6.	MBA102	Managerial Economics	3	1	-	50	50	100	4
7.	ESC 151	Engineering Graphics	-	-	3	50	-	50	1.5
8.	ESC 152	Engineering Workshop	-	-	2	50	-	50	1
9.	BS 151	Physics Lab.	-	-	3	50	-	50	1.5
10.	BS 152	Chemistry I Lab.	-	-	3	50	-	50	1.5
11.	ESC 153	Computer Lab.	-	-	2	50	-	50	1
12.	MC 101	Introduction to Env. science	3	-	-	50	50	100	NC*
<b>Total</b>			<b>193</b>	<b>13</b>		<b>600</b>	<b>350</b>	<b>950</b>	<b>25.5</b>

Credits – Chemical (21.5), MBA (4)

\* For a non-credit course passing with 40% marks will be compulsory, otherwise student will get reappear and passing this course will be mandatory.

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### 3<sup>rd</sup>SEMESTER

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	PCC 102	Material and Energy Balance	3	1	-	50	50	100	4
2.	PCC 103	Fluid Flow	3	1	-	50	50	100	4
3.	PCC 104	Mechanical Operations	3	1	-	50	50	100	4
4.	PCC 107	Chemical Technology-I (Inorganic)	3	-	-	50	50	100	3
5.	ESC 106	Fuel Cell Technology	3	-	-	50	50	100	3
6.	MBA 201	Business Statistics	3	1	-	50	50	100	4
7.	MBA 202	Operations Research	3	1	-	50	50	100	4
8.	MBA 203	Workshop on Business Research	-	-	2	50	-	50	1
9.	PCC 154	Chemical Technology (Inorganic Lab.)	-	-	3	50	-	50	1.5
10.	PCC 151	Mechanical Operation Lab.	-	-	3	50	-	50	1.5
11.	PCC 152	Fluid Flow Lab.	-	-	3	50	-	50	1.5
<b>Total</b>			<b>21</b>	<b>5</b>	<b>11</b>	<b>550</b>	<b>350</b>	<b>900</b>	<b>31.5</b>

Credits – Chemical (22.5), MBA (9)

### 4<sup>th</sup>SEMESTER

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	PCC 105	Heat Transfer	3	1	-	50	50	100	4
2.	PCC 106	Chemical Engineering Thermodynamics	3	1	-	50	50	100	4
3.	ESC 104	Strength of Materials	3	1	-	50	50	100	4
4.	ESC 105	Engg. Materials	3	1	-	50	50	100	4
5.	PCC 110	Chemical Technology-II (Organic)	3	-	-	50	50	100	3
6.	MBA 204	Production & Operations Management	3	1	-	50	50	100	4
7.	PCC 154	Heat Transfer Lab.	-	-	3	50	-	50	1.5
8.	ESC 155	Process Equipment Design	-	-	3	50	-	50	1.5
9.	PCC 156	Chemical Technology (Organic Lab.)	-	-	3	50	-	50	1.5
10.	CHE 101	Comprehensive viva	-	-	-	50	-	50	1
<b>Total</b>			<b>18</b>	<b>5</b>	<b>9</b>	<b>500</b>	<b>300</b>	<b>800</b>	<b>28.5</b>

Credits – Chemical (24.5), MBA (4)

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### 5<sup>th</sup>SEMESTER

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	PEC 101	Deptt. Elective I	3	1	-	50	50	100	4
2.	PCC 109	Mass Transfer I	3	1	-	50	50	100	4
3.	PEC 102	Department Elective-II	3	-	-	50	50	100	3
4.	MBA 301	Total Quality Management	3	1	-	50	50	100	4
5.	PCC 114	Energy Technology	3	1	-	50	50	100	4
6.	PEC 151	Deptt. Elective Lab. I	-	-	3	50	-	50	1.5
7.	PEC 152	Department Elective II Lab.	-	-	3	50	-	50	1.5
8.	PEC 153	Process Plant Design I	-	-	3	50	-	50	1.5
<b>Total</b>			<b>15</b>	<b>4</b>	<b>9</b>	<b>400</b>	<b>250</b>	<b>650</b>	<b>23.5</b>

Credits – Chemical (19.5), MBA (4)

### 6<sup>th</sup>SEMESTER

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	PCC 108	Chemical Reaction Engineering-I	3	1	-	50	50	100	4
2.	PCC 112	Mass Transfer II	3	1	-	50	50	100	4
3.	MBA 302	Human Resource Management	3	1	-	50	50	100	4
4.	PEC 103	Department Elective III	3	1	-	50	50	100	4
5.	OEC I01	Open Elective I	3	-	-	50	50	100	3
6.	PCC 157	Mass Transfer Lab.	-	-	3	50	-	50	1.5
7.	PEC 154	Process Plant Design II	-	-	3	50	-	50	1.5
8.	PCC 155	Chemical Reaction Engineering Lab.	-	-	3	50	-	50	1.5
9.	CHE 102	Industrial Training*				-	-		
<b>Total</b>			<b>15</b>	<b>4</b>	<b>9</b>	<b>400</b>	<b>250</b>	<b>650</b>	<b>23.5</b>

Credits – Chemical (19.5), MBA (4)

\* There will be 6-8 weeks' compulsory industrial training after 6<sup>th</sup> semester theory examination during summer vacation. Every student will submit the Industrial Training report within one month from the start of teaching of the 7<sup>th</sup> semester. After that it will be evaluated by the team of Training & Placement Officers. The Credits for the Industrial Training will be awarded in the seventh semester

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### 7<sup>th</sup>SEMESTER

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	PCC 111	Chemical Reaction Engineering II	3	1	-	50	50	100	4
2.	PCC 113	Process Dynamics & Control	3	1	-	50	50	100	4
3.	PCC 115	Environmental Engineering	3	1	-	50	50	100	4
4.	OEC 102	Open Elective II	3	-	-	50	50	100	3
5.	MBA 401	Marketing Management	3	1	-	50	50	100	4
6.	PCC 159	Environmental Engineering Lab.	-	-	3	50	-	50	1.5
7.	PCC 158	Process Dynamics & Control Lab.	-	-	3	50	-	50	1.5
8.	CHE 103	Project Work**	-	-	2	-	-	-	-
9.	CHE 104	Literature Survey, Report Writing and Seminar	-	-	3	50	-	50	1.5
10.	CHE 102	Industrial Training	-	-	-	100	-	100	2
11.	CHE 105	<b>NSS/NCC/Sports proficiency/Community services/Professional activities</b>	-	-	-	-	-	-	1
<b>Total</b>			<b>15</b>	<b>4</b>	<b>11</b>	<b>500</b>	<b>250</b>	<b>750</b>	<b>26.5</b>

Credits – Chemical (22.5), MBA (4)

**\*\* Marks and Credits for Project work will be awarded in 8<sup>th</sup> Semester**  
**8<sup>th</sup>SEMESTER**

S. No.	Course code	Courses	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	OEC 103	Open Elective III	3	1	-	50	50	100	4
2.	OEC 104	Open Elective IV	3	-	-	50	50	100	3
3.	PEC 104	Department Elective IV	3	-	-	50	50	100	3
4.	HSMC 102	Process Engineering Economics	3	1	-	50	50	100	4
5.	MBA 402	Business Environment	3	1	-	50	50	100	4
6.	MBA 403	Project Management & Entrepreneurship	3	1	-	50	50	100	4
7.	MBA 404	Financial Accounting	3	1	-	50	50	100	4
8.	CHE 103	Project Work	-	-	2	50	50	100	2
9.	OEC 151	Open Elective III Lab. (Process Modelling & Simulation lab)	-	-	3	50	-	50	1.5
10.	CHE 106	Comprehensive Viva	-	-	-	-	50	50	1
<b>Total</b>			<b>21</b>	<b>5</b>	<b>5</b>	<b>450</b>	<b>450</b>	<b>900</b>	<b>30.5</b>

Credits – Chemical (18.5), MBA (12)

**TOTAL CREDITS OF ALL SEMESTERS (Chemical subjects)= 168.5**

**\*\* Marks and Credits for Project work will be awarded in 8<sup>th</sup> Semester**

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

S. No.	List of Departmental Electives	S. No.	List of Open Electives
1	Numerical Methods in Chemical Engineering	1.	Process Instrumentation
2	Petroleum Processing Engineering	2.	Industrial Safety and Hazards
3	Transport Phenomena	3.	Nanotechnology
4	Plant Utilities	4.	Polymer Science and Engineering
5	Petrochemical Technology	5.	Process Modelling & Simulation
6	Biochemical Engineering	6.	Supply Chain and Logistic Management
7	Food Processing	7.	<b>Environment Impact Assessment</b>
8	Corrosion Engineering	8.	Energy Management and Audit
9	Heterogeneous Catalysis and Reactor Design	9.	Applications of computational fluid dynamics
10	<b>Industrial Environmental Management</b>	10.	Chemical Process Optimization
11	Introduction to Multiphase Flow	11.	Fluidization Engineering
12	Natural Gas Engineering	12.	<b>MOOCS COURSES(all chemical engg subjects)</b>
13	Catalysis	13.	<b>Crystal physics</b>
14	Introduction to Colloids and Interfacial Science and Engineering	14.	Advance Physics
15	Biorefinery and Bioproducts Engineering	15.	Energy Materials
16.	<b>MOOCS COURSES(all chemical engg and allied subjects)</b>	16.	Functional Material
		17.	Material Characterization
		18.	Nano Materials

See MOOCs courses at: [www.swayam.gov.in](http://www.swayam.gov.in) and [www.nptel.ac.in](http://www.nptel.ac.in)

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### 9<sup>th</sup> semester

	Code	Name	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	MBA 501	Financial Management	3	1	-	50	50	100	4
2.	MBA 511	Legal Aspects of Business	3	1	-	50	50	100	4
3.	MBA 502	Functional Subject-1	3	1	-	50	50	100	4
4.	MBA 503	Functional Subject-2	3	1	-	50	50	100	4
5.	MBA 504	Functional Subject-3	3	1	-	50	50	100	4
6.	MBA 505	Functional Subject-4	3	1	-	50	50	100	4
7.	MBA 506 ***	Research Project (Management)	-	-	2	-	-	-	-
8.	MBA 507	Workshop on Multivariate Statistical Techniques		-	2	50	-	50	1
9.	MBA 508	Workshop on Communication and Soft Skills		-	2	50	-	50	1
10.	MBA 509	Industrial Training (Management)-II	-	-	-	100	-	100	6
	Total		18	6	6	500	300	800	32

<b>Group-A (Functional Subject-1&amp;2)</b>		<b>Group-B (Functional Subject-3&amp;4)</b>	
1.	Market Research and Product Management	1.	Services Operations Management
2.	Supply Chain and Logistics Management	2.	Technology Management
3.	Sales and Distribution Management	3.	Purchase and Materials Management
4.	International Human Resource Management	4.	Advertising and Consumer Behaviour
5.	Enterprise Resource Planning	5.	Manufacturing Systems Management

**Note: Students in the ninth semester will have to opt for four functional subjects, selecting TWO each from Group A&B.**

\*\*\*Marks and Credits for the Research Project (Management) (MBA 506) will be awarded in 9<sup>th</sup> Semester.

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### 10<sup>th</sup> semester

S. No.	Code	Name	Contact hrs per week			Mid Term	End Term	Total Marks	Credits
			L	T	P				
1.	MBA 510	Strategic Management	3	1	-	50	50	100	4
2.	MBA 512	Functional Subject-5	3	1	-	50	50	100	4
3.	MBA 513	Functional Subject-6	3	1	-	50	50	100	4
4.	MBA 514	Functional Subject-7	3	1	-	50	50	100	4
5.	MBA 515	Functional Subject-8	3	1	-	50	50	100	4
6.	MBA 506 ***	Research Project (management)	-	-	2	50	50	100	2
7.	MBA 516	Seminar on Corporate Governance	-	-	2	50	-	50	1
8.	MBA 517	Workshop on Management Information Systems	-	-	2	50	-	50	1
9.		Comprehensive Viva	-	-	-	-	50	50	1
	Total		15	5	6	400	350	750	25

<b>Group-C (Functional Subject-5&amp;6)</b>		<b>Group-D (Functional Subject-7&amp;8)</b>	
1.	Strategic Cost Management	1.	Management of Financial Services
2.	Industrial and Rural Marketing	2.	Human Values and Ethics
3.	Product Innovation in Technology Business	3.	Facilities and Location Management
4.	Performance Management	4.	Industrial Relations and Labour Laws
5.	International Business Management	5.	International Financial Management

Total Credits of Management subjects = 102

**Note: Students in the tenth semester will have to opt for four functional subjects, selecting TWO each from Group C&D.**

\*\*\*Marks and Credits for the Research Project (Management) (MBA 506) to be awarded in 9<sup>th</sup> & 10<sup>th</sup> Semester.



## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### FIRST YEAR

#### 1<sup>st</sup> SEMESTER

<b>Title</b>	<b>MANAGEMENT &amp; ORGANIZATIONAL BEHAVIOUR</b>				<b>Credits</b>	4
<b>Code</b>	MBA101	Course Type	Core	<b>Semester:-1<sup>st</sup></b>	<b>L T P</b>	3 1 -
<b>Max. Marks</b>	<b>End term- 50</b>		<b>Midterm- 50</b>	<b>Practical--</b>	<b>Elective</b>	N
<b>Pre requisites</b>	-					
<b>Course Objectives</b>	The objective of this course is to acquaint students with the basic theories and principles of management. This course emphasizes the importance of human capital in the organizations and gives an insight to the students into the dynamics of individual and group behavior in the organizations.					
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To recognize the role of manager and how it related to the organizational mission.</li> <li>2. To know critical management theories and philosophies and how to apply them</li> <li>3. To define core functions of management and required skills.</li> <li>4. To identify the stages of team development and skills required for an effective team.</li> <li>5. To recognize the role of communication in management function</li> <li>6. Define the concept of organizational development and change management and explain how it fits into the management function.</li> </ol>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one markeach or five questions of two marks each. Rest of paper will be divided into two parts(SECTIONS) having three questions each and candidate is required to attempt at least twoquestions from each part.The duration of End Term exam will be 3 hrs.					
<b>SECTION A</b>						<b>Hours</b>
<b>Unit-I:</b>	Concept, Nature and Evolution of Management Thought: Early contributors, Scientific, process, human behaviour and social system school; Decision theory school; Quantitative and system school; Contingency theory of management; Social and Ethical issues in management, Challenges of managing 21st century corporations/organization					5
<b>Unit-II:</b>	Managerial Functions: Planning -concept, significance, types; Organizing -concept, principles, theories, types of organizations, authority, responsibility, power, delegation. Decentralization; Staffing; Directing; Coordinating; Control -nature, process, and techniques.					6
<b>Unit-III:</b>	Organizational Behaviour: Organisational behaviour -concept and significance; Relationship between management and organisational behaviour; organizational culture, Attitudes; Perception; Learning; Personality and values; emotions and moods.					6
<b>Unit-IV:</b>	Motivation: Process of motivation; Theories of motivation - need hierarchy theory, theory X and theory Y, two factor theory, Alderfer's ERG theory, McClelland's learned need theory, Victor Vroom's expectancy theory, Stacy Adams equity theory.					5
<b>SECTION B</b>						
<b>Unit-V:</b>	Concept; Leadership styles; Theories -trait theory, behavioral theory, Fielder's contingency theory; Harsey and Blanchard's situational theory; Managerial grid; Likert's four systems of leadership, contemporary issues in leadership					5

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Unit-VI:	Group Dynamics and Team Development: Group dynamics -definition and importance, types of groups, group formation, group development, group composition, group performance factors; Principle-centred approach to team development.	6
Unit-VII:	Organizational Conflict and Negotiations: Dynamics and management; Sources, patterns, levels, and types of conflict; Traditional and modern approaches to conflict; Functional and dysfunctional organizational conflicts; Resolution of conflict.	6
Unit-VIII:	Organizational Development: Concept; Need for change, resistance to change; Theories of planned change; organization change and stress management, Organizational diagnosis.	6
<b>Text Books:</b>	<ol style="list-style-type: none"> <li>1. Koontz, Harold, Cyril O'Donnell, and Heinz Weihrich: Essentials of Management, Tata McGraw-Hili, New Delhi. Luthans, Fred: Organizational Behaviour, McGraw-Hili, New York.</li> <li>2. Robbins, Stephen P, and Mary Coulter: Management, Prentice Hall, New Delhi. Robbins, Stephen P: "Organizational Behavior" Prentice Hall, New Delhi.</li> <li>3. S. Stephen P. Robbins: Organizational Behaviour, Prentice Hall of India Private Limited, New Delhi.</li> <li>4. Stoner, Freeman &amp; Gilbert, Jr.: Management, Prentice Hall of India private Limited, New Delhi.</li> </ol>	
<b>Reference Books:</b>	<ol style="list-style-type: none"> <li>1. Griffin, Ricky W: Organisational Behaviour, Houghton Mifflin Co., Boston.</li> <li>2. Hellreigel, Don, John W. Slocum, Jr., and Richard W. Woodman: Organizational Behavior, South Western College Publishing, Ohio.</li> <li>3. Hersey, Paul, Kenneth H. Blanchard and Dewey E. Johnson: Management of Organisational Behaviour: Utilising Human Resources, Prentice Hall, New Delhi.</li> <li>4. Ivancevich; John and MicheeoIT.Matheson: Organisational Behaviour and Management, Business Publication Inc., Texas.</li> <li>5. Steers, Richard M. and J. Stewart Black: Organizational Behavior, Harper Collins College Publishers, New York. Sukla, Madhukar: Understanding Organisations: Organisation Theory and Practice in India, Prentice Hall, New Delhi.</li> <li>6. Govindarajan &amp; Natarajan: Principles of Management, Prentice Hall of India Private Limited, New Delhi.</li> <li>7. Stoner, Freeman &amp; Gilbert, Jr.: Management, Prentice Hall of India private Limited, New Delhi.</li> <li>8. Tripathy&amp; Reddy: Principles of Management, Tata McGraw-Hill Publications, New Delhi.</li> <li>9. Fred Luthans: Organizational Behaviour, Tata McGraw-Hill Publications, New Delhi.</li> <li>5. Udai Pareek: Understanding Organizational Behaviour, Oxford University Press, New Delhi.</li> </ol>	
<b>Course Assessment Methods</b>	<p>Assessment will consist of the following components</p> <ol style="list-style-type: none"> <li>1. Mid-Term Assessment: <ul style="list-style-type: none"> <li>One best of two minor tests (50% of Mid -term marks)</li> <li>Assignments (20% of Mid-term marks)</li> <li>Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)</li> <li>Attendance. (10% of Mid-term marks)</li> </ul> </li> <li>2.End –Term Assessment: University Examination</li> </ol>	

### FIRST YEAR

2<sup>nd</sup> SEMESTER

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>Title</b>	<b>MANAGERIAL ECONOMICS</b>				<b>Credits</b>	4
<b>Code</b>	MBA 102	Course Type	Core	<b>Semester:-2<sup>nd</sup></b>	<b>L T P</b>	3 1 -
<b>Max. Marks</b>	<b>End term -50</b>	<b>Midterm -50</b>	<b>Practical--</b>	<b>Elective</b>	N	
<b>Pre requisites</b>	-					
<b>Course Objectives</b>	The objective of this course is to equip students with necessary theory and techniques of managerial economics and to use them to examine how a firm can make optimal managerial decisions given the constraints facing it. It equips the students with economic tools for optimal allocation of resources, production and pricing decisions according to market structures.					
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To define the main economic tools and theories available for decision making.</li> <li>2. To distinguish between the different market structures and pricing practices available to and used by firms.</li> <li>3. To critically assess and describe the environment and determinants of demand and competition facing the firm.</li> <li>4. To use the tools of economic theory to estimate the optimal production and pricing decisions taken by the firm in each market structure.</li> <li>5. To use the tools of estimation and forecasting for business decision making.</li> </ol>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.					
<b>SECTION- A</b>						<b>Hours</b>
UNIT-I	<b>Introduction to Managerial Economics:</b> Nature Scope and Importance of Managerial Economics,The Firm and its Goal, Profit Maximizing Vs Wealth Maximizing, Five Fundamental Questions in Economics, opportunity costs , incremental principle , time perspective , discounts and equi-marginal principles.					5
UNIT-II	<b>Demand Concepts and Analysis:</b> Individual Demand, Market Demand, Kinds of Demand, Determinants of Demand, Demand Functions, Functions, Demand Schedule and Law of Demand.					6
UNIT-III	<b>Theory of Consumer Behavior:</b> Cardinal Utility Approach and Ordinal Utility (Indifference Curves) Approach; derivation of demand curve with the help of utility analysis, validity of utility analysis in modern times. <b>Elasticity of Demand:</b> Concept, Types, Measurement and importance.					8
UNIT-IV	<b>Demand Forecasting:</b> Sources of Data-Expert Opinions, Surveys and Market Experiments; <b>Time Series Analysis</b> -Trend Projection; Barometric Forecasting- Leading Indicators, Composite and diffusion Indices					3
<b>SECTION- B</b>						
UNIT-V	<b>Production Function:</b> Concept and types, Returns to Factor and Returns to Scale, Law of Variable Proportions.					3
UNIT-VI	<b>Cost concepts and Analysis:</b> Concept of Cost, Short run and Lung-run Cost Curves, Relationships among various costs, The Learning Curve, Economies of Scope and Economies of Scale, The Estimation of Cost, Break-Even Analysis,					4

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	Combining Break-Even Analysis with Demand, Degree of Operating Leverage, The Uses and Limitations of Break-Even Analysis. <b>Revenue Curves:</b> Concept and Types.	
UNIT-VII	<b>Perfect Competition:</b> Characteristics, Equilibrium Price, Profit Maximizing output in Short Run and Long Run; <b>Monopoly:</b> Characteristics, Equilibrium Price, Profit Maximizing output in Short Run and Lung Run; Price Discrimination;	8
UNIT-VIII	<b>Imperfect Competition:</b> Monopolistic Competition, oligopoly –types and Barriers to Entry.	8
<b>Text Books:</b>	1. H.L.Ahuja: Managerial Economics, S.Chand Publishers (Latest Edition) 2. Craig Peterson, Lewis and Jain: Managerial Economics, Pearson Education, 1 <sup>st</sup> ed. 3. Mark Hirshey: Managerial Economics, Thomson, 11th edition. 4. Dr.V.Panduranga Rao: Microeconomics-IBS Publication, 8th edition. 5. Keat: Economic Tools for Today's Decision Makers, 4th Edition, Pearson Education 6. William Samuelson and Stephen G. Mark, Managerial Economics, 5th & 6th Editions, John Wiley & Sons.	
<b>Reference Books:</b>	1. Managerial Economics Analysis: Problem Cases, 8th Edition, Truett&Truett, Wiley 2. K.K. Dewett: Modern Economic Theory, S. Chand & Sons, New Delhi, 14th ed. 3. Mote, Paul Gupta: Managerial Economics, Vikas Publisher, New Delhi, 1st ed. 4. A. Koutsoyiannis: Modern Microeconomics, McMillan, New Delhi, 2nd ed. 5. R.L. Varshney& K. L. Maheshwari: Managerial Economics, S.Chand& Sons, New Delhi, 4 <sup>th</sup> edition	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance- (10% of Mid-term marks) 2.End –Term Assessment: University Examination	

### SECOND YEAR

#### 3<sup>rd</sup> SEMESTER

<b>Title</b>	<b>BUSINESS STATISTICS</b>				<b>Credits</b>	4
<b>Code</b>	MBA 201	Course Type	Core	<b>Semester:-3<sup>rd</sup></b>	<b>L T P</b>	31 -
<b>Max.Marks</b>	<b>End-term 50</b>	<b>Midterm-50</b>	<b>Practical --</b>	<b>Elective</b>		N
<b>Pre requisites</b>	-					
<b>Course Objectives</b>	To develop the ability of students to deal with quantitative and numerical issues on business and enable them to use conceptualize business problems in statistical terms. This course attempts to enhance their understanding and application of fact and evidence based decision making.					
<b>Course Outcomes</b>	1. To describe and discuss the key terminology and concepts of statistics. 2. To know the practical application of selected statistical tools. 3. To understand and critically examine issues related to sampling and sampling design.					

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	4. To prepare statistical data for business decision making	
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.	
<b>SECTION- A</b>		<b>hours</b>
UNIT-I	<b>Introduction to Statistics and Data Presentation-</b> Definition of statistics-Types; Types of variables ;Organising data- histograms, stem-and-leaf displays, cross-tabulation, bar charts, pie charts, and scatter plots; Data Preparation: Editing, coding, data entry, cross-tabulation, and graphical displays; Descriptive measures-Construction of frequency distributions and their analysis in the form of measures of central tendency and variations, types of measures, skewness-meaning and coefficient of skewness, Kurtosis.	7
UNIT-II	<b>Overview of Probability and Probability distributions:</b> 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	3
UNIT-III	<b>Sampling distribution and estimation:</b> 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.	4
UNIT-IV	<b>Testing of hypothesis - parametric tests:</b> 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.	8
<b>SECTION- B</b>		
UNIT-V	<b>Non-parametric tests:</b> Chi-square test for single sample standard deviation. Chi-square tests for independence of attributes, Test of Homogeneity and goodness of fit. Sign test for paired data. Rank sum test. Kolmogorov-Smirnov – test for goodness of fit, comparing two populations. Mann – Whitney U test and Kruskal Wallis test. One sample run test, rank correlation.	5
UNIT-VI	<b>Correlation and regression :</b> meaning & types of correlation, Karl Pearson's coefficient of correlation and spearman's rank correlation, regression analysis-meaning and two lines of regression ,relationship between correlation and regression co-efficient.	7
UNIT-VII	<b>Time series analysis :</b> Time series analysis: Variations in time series, trend analysis, Least Square Method, cyclical variations, seasonal variations and irregular variations, forecasting errors;	6
UNIT-VIII	Index Numbers: Definition and Methods of Construction of Index Numbers; Tests of consistency, Base shifting, splicing and Deflation; Problems in construction, importance of index numbers in Managerial decision making	7
<b>Text Books:</b>	1.Zikmund, W.G., Business Research Methods, Cengage Learning, Singapore 2. Cooper, D.R. & Schindler, P.S., Business Research Methods, Tata McGraw Hill, New Delhi	
<b>Reference Books:</b>	1. Sekaran, U. Research Methods for Business-A Skill Building Approach, John Wiley,Singapore.	

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	<ol style="list-style-type: none"> <li>2. Kumar, R., Research Methodology- A Step by Step Guide for Beginners. , Pearson Education.</li> <li>3. Glyn Davis &amp; Branko Pecar “Business Statistics Using Excel” Oxford University Press, 2012.</li> <li>4. Levine, David M., Krehbiet, Timothy C. and Berenson, Mark L. Business Statistics, Pearson Education, Delhi 2004.</li> <li>5. J.K.Sharma” Business Statistics-Problems and Solutions” Pearson, 2010.</li> </ol>
<b>Course Assessment Methods</b>	<p>Assessment will consist of the following components</p> <ol style="list-style-type: none"> <li>1. Mid-Term Assessment: <ul style="list-style-type: none"> <li>One best of two minor tests (50% of Mid -term marks)</li> <li>Assignments (20% of Mid-term marks)</li> <li>Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)</li> <li>Attendance. (10% of Mid-term marks)</li> </ul> </li> <li>2. End –Term Assessment: University Examination</li> </ol>

<b>Title</b>	<b>OPERATIONS RESEARCH</b>				<b>Credits</b>	4
<b>Code</b>	MBA 202	Course type	Core	<b>Semester:-</b> 3 <sup>rd</sup>	<b>L T P</b>	3 1 -
<b>Max. Marks</b>	<b>End term -50</b>	<b>Midterm -50</b>	<b>Practical--</b>	<b>Elective</b>	N	
<b>Pre requisites</b>	-					
<b>Course Objectives</b>	The objective of this course is to acquaint students with scientific tools and techniques operations research for making effective business decisions.					
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To enable the students generate mathematical models for business scenario.</li> <li>2. To solve linear programming problems</li> <li>3. To be able to build and solve transportation and assignment problem using appropriate methods</li> <li>4. To be able to select best course of action out of alternative courses of action using game theory .</li> </ol>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part. The duration of End Term exam will be 3 hrs.					
<b>SECTION- A</b>						
UNIT-I	<b>Operations research:</b> Evolution, methodology and role in managerial decision making.					4
UNIT-II	<b>Linear programming:</b> Meaning, assumptions, advantages, scope and limitations, formulation of problem and its solution by graphical and simplex methods, special cases in simplex method, infeasibility, degeneracy, unboundedness and multiple optimal solutions, duality sensitivity analysis.					8
UNIT-III	<b>Transportation problems including trans-shipment problems:</b> Special cases in transportation problems, unbalanced problems, degeneracy, maximization objective and multiple optimal solutions, assignment problems including travelling salesman’s problem, special cases in assignment problems:					10

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	unbalanced problems, maximization objective and multiple optimal solutions	
<b>SECTION- B</b>		
UNIT-IV	<b>Theory of Games:</b> Pure strategy games, principle of dominance; mixed strategy games (Algebraic, Graphical & Linear programming method), 2-person, non-zero-sum games.	8
UNIT-V	<b>Queuing Theory:</b> Introduction, elementary queuing system; single channel queuing model, queuing cost behaviour, multiple channel queuing model, Poisson arrivals and Erlang service distribution; benefits and limitations of queuing theory.	8
UNIT-VI	<b>Inventory models, simulation and decision theory</b> - Inventory Models – EOQ and EBQ Models (With and without shortages), Quantity Discount Models. Decision making under risk – Decision trees – Decision making under uncertainty. Application of simulation techniques for decision making.	7
<b>Text Books:</b>	1.Vohra, N.D.: Quantitative Techniques in Management; 2 <sup>nd</sup> Edition, Tata McGraw Hill. 2.Gupta, P.K. and Hira, D.S.: Operation Research, S. Chand, New Delhi. 3.SwarupKanti, Gupta, P.K. and Man Mohan: Operation Research, 12 <sup>th</sup> revised Edition, Sultan Chand & Sons, New Delhi;	
<b>Reference Books:</b>	1.Mittal, K. V, Mohan, C. Optimization Methods in Operations Research and Systems Analysis, New Age, 2003. 2. Ravindran, A, Phillips, D. T, Solberg, J. J, Operations Research: Principles and Practice, John Willey and Sons, 2nd Edition, 2009. 3. P. SankaraIyer, Operations Research, Tata McGraw-Hill, 2008. 4. Paneerselvam R., Operations Research, Prentice Hall of India, Fourth Print, 2008.	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid-term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination	

<b>Title</b>	<b>WORKSHOP ON BUSINESS RESEARCH</b>			<b>Credits</b>	2
<b>Code</b>	MBA 203	<b>Semester:-3<sup>rd</sup></b>		<b>L T P</b>	00 2
<b>Max.Marks</b>	<b>End term</b> -	<b>Mid term</b>	<b>Practical</b> 50	<b>Elective</b>	N
<b>Pre requisites</b>	-				
<b>PRACTICAL</b>					
<b>Note for the Examiner</b>	-				
<b>SECTION- A</b>					<b>hours</b>
UNIT-I	<b>Introduction to business research:</b> Definition, characteristics, types; research process –				6

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	an overview, review of literature – its role and significance in the stages of research process, theory building, ethical issues in business research; formulation of the research problem and research proposal; hypothesis - definition, formulation and types	
UNIT-II	<b>Research Design:</b> Meaning, Characteristics and various concepts relating to research design and classification of research design, Importance.	5
<b>SECTION- B</b>		
UNIT-III	<b>Data Collection:</b> Primary/Secondary data – definition, types, sources, evaluation and searches, primary data collection methods - surveys, observation and experiments, direct personal interview, indirect oral interview, information through local agencies, mailed questionnaire method, schedule sent through enumerators; questionnaire and its designing and characteristics of a good questionnaire; measurement and scaling concepts, measurement scales.	5
UNIT-IV	sampling design and sampling procedures, sample size estimation ,fieldwork, processing of data, data analysis -basic data analysis , hypothesis testing –t test ,chi square test, test of proportion, <b>bivariate analysis</b> -tests of differences and measures of association through use of parametric and non parametric tests, report writing, use of computers in research.	6
<b>Text&amp; Reference Books:</b> <ol style="list-style-type: none"> <li>1. Zikmund, W.G., Business Research Methods, Cengage Learning, Singapore</li> <li>2. Cooper, D.R. &amp; Schindler, P.S., Business Research Methods, Tata McGraw Hill, New Delhi</li> <li>3. Sekaran, U. Research Methods for Business-A Skill Building Approach, John Wiley,Singapore.</li> <li>4. Kumar, R., Research Methodology- A Step by Step Guide for Beginners. , PearsonEducation.</li> <li>5. Glyn Davis &amp;BrankoPecar “Business Statistics Using Excel” Oxford University Press, 2012.</li> <li>6. Levine, David M., Krehbiet, Timothy C. and Berenson, Mark L. Business Statistics, Pearson Education, Delhi 2004.</li> <li>7. J.K.Sharma” Business Statistics-Problems and Solutions” Pearson, 2010.</li> </ol>		

### SECOND YEAR

#### 4<sup>th</sup> SEMESTER

<b>Title</b>	<b>PRODUCTION AND OPERATION MANAGEMENT</b>			<b>Credits</b>	4
<b>Code</b>	MBA 204	Course Type	Core	<b>Semester:-4<sup>th</sup></b>	<b>L T P</b> 3 1 -
<b>Max.Marks</b>	<b>End term- 50</b>	<b>Midterm-50</b>	<b>Practical -</b>	<b>Elective</b>	N
<b>Pre requisites</b>	<b>Operations Research</b>				
<b>Course Objectives</b>	The objective of this course is to introduce the major concepts and tools used in design and use of operations systems in organizations. The course emphasises on familiarization of various production processes and service systems.				
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. Identify the elements of operations management and various transformation processes to enhance productivity and competitiveness.</li> <li>2. To analyse and evaluate facility location decisions and capacity planning decisions.</li> <li>3. To develop aggregate plans and material resource planning.</li> <li>4. Plan and implement suitable materials handling principles and practices in the operations.</li> <li>5. Plan and implement suitable quality control measures in Quality Circles to TQM.</li> </ol>				
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or				



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	five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part. The duration of End Term exam will be 3 hrs.	
<b>SECTION – A</b>		<b>hours</b>
UNIT-I	<b>Introduction to operations management:</b> An overview of Operations Management; Operations Management Strategy framework; Understanding similarities and difference among products, goods and services; Historical evolution of operations management-Changes & Challenges	<b>3</b>
UNIT-II	<b>Product Design &amp; Development:</b> Product Design and its Characteristics; Product Development Process (Technical); Product Development Techniques. <b>Process Selection:</b> Project, Job, Batch, Mass & Process types of Production Systems; Product-Process Mix; Design of Process Flows	<b>3</b>
UNIT-III	<b>Facility Location:</b> importance; location planning process; Factors in Location Analysis; Location Analysis Techniques. <b>Facility Layout:</b> Introduction, Objectives of Layout, Types of Layouts, Importance of layout decisions and nature of layout problems, Assembly Line Balancing, Material handling.	<b>8</b>
UNIT-IV	<b>Capacity Planning:</b> Concepts; Factors Affective Capacity; Planning; Capacity Planning Decisions. <b>Production Planning &amp; Control (PPC):</b> Concepts; Objectives; Functions and Advantages of Aggregate Plan, Steps in Developing an Aggregate Plan, , Aggregate Planning Strategies; <b>Work Study:</b> Productivity; Method Study; Work Measurement	<b>8</b>
<b>SECTION – B</b>		
UNIT-V	<b>Materials Management:</b> Concepts; Objectives <b>Functions of Purchasing Management:</b> Objectives; Functions; Methods; Procedure <b>Stores Management:</b> Types of Stores; Functions; Coding Methods	<b>9</b>
UNIT-VI	<b>Introduction to modern Productivity techniques:</b> Just in time; Kanban System; Total quality management & six sigma. <b>Value Engineering:</b> Introduction, Value Engineering/Value Analysis, Relevance of VE in Modern Manufacturing, Process of Value Analysis, VE – Approaches and Aim, Providing Value to the Customers, Benefits	<b>7</b>
UNIT-VII	<b>Inventory Management:</b> Concepts; Classification; Objectives; Factors Affecting Inventory Control Policy; Inventory Costs; Basic EOQ Model; Re-order Level; ABC Analysis.	<b>3</b>
UNIT-VIII	<b>Maintenance Management:</b> Concepts; Objectives; Functions; Types of Maintenance	<b>3</b>
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. Nair: Production &amp; Operation Management, Tata McGraw Hill</li> <li>2. Adam &amp; Ebert: Production &amp; Operation Management, Prentice Hall India</li> <li>3. Krajewski&amp;Ritzman:Operations Management, Pearson Education Asia</li> <li>4. Buffa&amp;Sarin: Modern Production/Operations Management, John Wiley</li> <li>5. SN Chary: Production &amp; Operations Management, Tata McGraw Hill</li> </ol>	
<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. Operations Management: Process and Supply Chains, Eleventh Edition, Lee J. Krajewski, Manoj K. Malhotra, Larry P. Ritzman&amp; Samir K. Srivastava,Pearson</li> </ol>	

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<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination
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### THIRD YEAR

#### 5<sup>th</sup> SEMESTER

<b>Title</b>	<b>TOTAL QUALITY MANAGEMENT</b>				<b>Credits</b>	4
<b>Code</b>	MBA 301	Course Type	Core	<b>Semester:-5<sup>th</sup></b>	<b>L T P</b>	3 1 -
<b>Max.Marks</b>	<b>End term- 50</b>		<b>Midterm-50</b>	<b>Practical --</b>	<b>Elective</b>	N
<b>Pre requisites</b>	-					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.					
<b>SECTION – A</b>						
UNIT-I	<b>Introduction to quality management:</b> A conceptual framework of quality management, Quality-Vision , Mission and Policy statements, Customer Focus- Customer perceptions of quality, Translating needs into requirements ,Dimensions of product and service quality, Strategic quality management , Benchmarking.					4
UNIT-II	<b>Principles and Philosophies of quality management :</b> Overview of contribution of Deming , Juran ,Crosby, Massaki Imai , Feigenbaum , Ishikawa , Taguchi Techniques , Comparing the quality gurus-loss function , parameter and tolerance design , signal to noise ratio , Japanese 5S principles and 8D methodology. Quality system standards , bureau of Indian standards , Agmark Grading and standardization , quality council of India , International organization for standardization , conformance to specifications, quality assurance , Quality circles , quality Audits , ISO 14000 ,Customer operations and performance centre (COPC) 2000					9
UNIT-III	<b>Service quality Management and cost of Quality :</b> Products and services , classification of services , service quality , measuring service quality , prevention costs , appraisal costs , internal and external failure costs , cost of quality models , India's quality journey so-far , quality related priorities of Indian Companies					9
<b>SECTION – B</b>						
UNIT-IV	<b>Statistical quality/process control –</b> Meaning and significance of statistical process control, Introduction to Quality control and its benefits , Variation in processes , Process capability – meaning ,significance, measurement and its analysis , control charts for variables and attributes , establishing and interpreting control charts ,					5
UNIT-V	<b>Reliability concepts –</b> Definition , reliability in series and parallel , product life characteristics curve , Total productive maintenance (TPM) , Business process improvement principles. Concept of acceptance sampling , sampling by attributes , single and double sampling plans , inspection by samples ,AQL ,LTDP , consumers and producer's risk , construction and use of operating characteristic curves , using of standard sampling tables , sampling by variables , continuous sampling plans , vendor ratings.					13

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UNIT-VI	<b>Six Sigma</b> : meaning , seven magnificent quality tools , introduction to experimental method and Taguchi method , Concept ,Process and application of Quality Function deployment (QFD ) , building House of quality , FMEA analysis-stages ,design , process and documentation , benchmarking	5
<b>Text Books:</b>	<ol style="list-style-type: none"> <li>1. ShridharaBhat K , Total Quality Management -Test and Cases , Himalaya Publishing House.</li> <li>2. Total Quality Management, Subburaj , TMH</li> <li>3. Dale H. Besterfield , Carol Besterfield – Michna, Glen H. Besterfield- Sacre, Hermant – Urdhwareshe , RashiUrdhwareshe , Total Quality Management, Revised 3rd Edition , Pearson Education</li> </ol>	
<b>Reference Books:</b>	<ol style="list-style-type: none"> <li>1. Probability and Reliability with Statistics , Trivedi , PHI</li> <li>2. Statistical Quality Control ,M.Mahajan</li> <li>3. TQM in Service Sector , R.P. Mohanty and R.R. Lakhe</li> <li>4. Total Quality Management , Arora and Kataria</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:                          One best of two minor tests (50% of Mid -term marks)                          Assignments (20% of Mid-term marks)                          Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)                          Attendance. (10% of Mid-term marks)</li> <li>2. End –Term Assessment: University Examination</li> </ol>	

### THIRD YEAR

#### 6<sup>th</sup> SEMESTER

<b>Title</b>	<b>HUMAN RESOURCE MANAGEMENT</b>				<b>Credits</b>	04
<b>Code</b>	MBA 302	Course Type	Core	<b>Semester:-5<sup>th</sup></b>	<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Midterm 50</b>	<b>Practical --</b>	<b>Elective</b>		N
<b>Pre requisites</b>	-					
<b>Course Objectives</b>	The objective of this course is to familiarize the students with different aspects of managing human resources in an organization from acquisition to development to retention.					
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To understand the basic concepts , functions and processes of human resource management and its role in effective business administration.</li> <li>2. To understand and design various human resource management processes such as recruitment, selection, training, development, performance appraisals, reward systems, compensation, and ethical behavior.</li> <li>3. To implement various labor legislations related to human resource management and also to ensure that the organization adheres to legal standards and in-house policies.</li> <li>4. Maintain healthy industrial relations and be able to handle employee issues</li> </ol>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.					

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SECTION- A		hours
UNIT-I	<b>Introduction:</b> Meaning, scope, objectives and functions of HRM; Importance & Strategic Role of Human Resource Management; HRM & HRD a comparative analysis;	5
UNIT-II	<b>Environment of HRM:</b> Role of government, internal and external forces; Human Resource Management practices in India.	5
UNIT-III	<b>Human Resource Planning:</b> Definition, objectives, process and importance; Job analysis, description, specification & job evaluation; Recruitment, selection, placement and induction process;	6
UNIT-IV	<b>Human Resource Development:</b> Concept, Employee training & development; Career Planning & development, Managing Career and Fair Treatment; Promotions, demotions, transfers, separation, absenteeism & turnover;	6
SECTION- B		
UNIT-V	<b>Job Compensation:</b> Wage & salary administration, incentive plans & fringe benefits. <b>Labour Legislations:</b> Factories Act, International Labor Organization Labor Management Cooperation/Workers' Participation in Management, Payment of Wage Legislation Minimum Wage Legislation, Equal Remuneration Legislation	8
UNIT-VI	<b>Performance Management:</b> Concept & process, performance appraisal, Potential appraisal;	3
UNIT-VII	<b>Quality of work life (QWL):</b> Meaning, techniques for improving QWL.	3
UNIT-VIII	<b>Industrial Relations:</b> Concept and theories, trade unions; Health, Safety & Employee welfare measures; Employee grievances and discipline, participation & empowerment; Introduction to collective bargaining, Methods of settling Industrial Disputes, Legislations Concerning Settlement of Industrial Disputes	9
<b>Text Books:</b>	<ol style="list-style-type: none"> <li>GargyDessler and BijuVarkkery– Human Resources Management Prentice Hall India / Pearson Education – 2003 Indian Reprint Eleventh Edition ( or later )</li> <li>S.C.Srivastava Industrial Relations &amp; Labor Laws Vikas Publishing House Pvt Ltd Delhi. Fourth Revised Edition</li> <li>P. Jyothi and D. N. Venkatesh Human Resource Management Oxford University Press Latest Edition</li> <li>C.B.Mamoria&amp;S.V.Gankar ;A Text book of Human Resource Management Himalaya Publishing House Pvt. Ltd Latest Edition</li> <li>M. Lall Human Resource Management ;Excel Books Latest Edition</li> </ol>	
<b>Reference Books:</b>	<ol style="list-style-type: none"> <li>Chandra, Prasanna (2008) Human Resource Management First Indian Print 2004 ( or later) Sinha, Sinha and Shekhar – Pearson Education Second Edition, 2006.</li> <li>Gomez-Mejia, Balkin and Cardy Managing Human Resources Pearson Education Third Edition</li> <li>David Lepak, Many Gowar ;Human Resource Management ;Pearson Latest Edition</li> <li>Fisher, Schoenfeldt, Shaw Managing Human Resource Cengage Learning Latest Edition</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>Mid-Term Assessment:               <ul style="list-style-type: none"> <li>One best of two minor tests (50% of Mid -term marks)</li> <li>Assignments (20% of Mid-term marks)</li> <li>Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)</li> <li>Attendance. (10% of Mid-term marks)</li> </ul> </li> <li>2.End –Term Assessment: University Examination</li> </ol>	

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### FOURTH YEAR

#### 7<sup>th</sup> SEMESTER

<b>Title</b>	<b>MARKETING MANAGEMENT</b>			<b>Credits</b>	4
<b>Code</b>	MBA 401	Course Type	Core	<b>Semester:-7<sup>th</sup></b>	<b>L T P</b> 3 1 -
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical --</b>		<b>Elective</b> N
<b>Pre requisites</b>	-				
<b>THEORY</b>					
<b>Course Objective</b>	The course aims at making participants understand concepts, philosophies, processes and techniques of managing the marketing operations of a firm with a view to better understand and appreciate the complexities associated with the marketing function.				
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To familiarize the students with the fundamentals of marketing and enable them to make better marketing decisions.</li> <li>2. Discuss and analyze the marketing environment, marketing research process and customer value.</li> <li>3. To employ the concepts consumer behavior for implementing relevant segmentation, targeting and positioning strategy.</li> <li>4. To develop the skills needed to take better distribution decisions and critically analyze the promotion mix and design promotional campaigns.</li> <li>5. To understand the role of services marketing and develop customer relationship management systems.</li> <li>6. To identify suitable pricing strategy for a given market.</li> </ol>				
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION-A</b>					<b>Hours</b>
UNIT-I	<b>Introduction to Marketing:</b> Meaning, Nature & Scope as the key business function in Organizations – Marketing for New Realities –Concepts/Philosophies of Marketing; Holistic Marketing Concept – Extended Marketing Mix – Key Customer Markets: Consumer, Business, Global, Non-profit & Government – Market Space – Meta Markets. Concept of Value chain.				5
UNIT-II	<b>Marketing Environment:</b> Marketing Environment; New Marketing Realities; New Consumer Capabilities; Demographic Environment; Social-Cultural Environment; Natural Environment; Technological Environment and Political-Legal Environment; Concept of Big Data – Marketing Intelligence Market Strategic Planning – Elements of Marketing Plan, SWOT analysis.				5
UNIT-III	<b>Analyzing Markets:</b> Marketing Research Process; Sources of data collection; factors influencing consumer behavior; buying decision process; post-purchase behavior; Organizational Buying; Stages in the Buying Process.				6

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

UNIT-IV	<b>Market Segmentation:</b> Levels of market segmentation; segmenting consumer markets; Niche Marketing; segmenting business markets; Michael Porter's five forces model; Analyzing competitors; Competitive Market Strategies – Leaders, Challengers, Followers & Nichers; Targeting and Positioning.	6
<b>SECTION-B</b>		
UNIT-V	<b>Product Decisions:</b> Creating Value: The Product – Goods & Services Continuum – Classification & Levels of Product – Product Decisions: Product Mix and Product Lines – Concepts. Product Life Cycle Strategies – Brand Concepts – Marketing of Services – Extended Marketing Mix for services – Packaging & Labeling Decisions – Warranties & Guarantees – New Market Offering – Types of new Product – New Product Development: Stages – New Product Success & Failure – Diffusion of Innovation.	6
UNIT-VI	<b>Pricing Strategies:</b> Understanding Pricing- pricing decisions, determinants of price.; Setting the Price, policies and strategies; Initiating and Responding to Price Changes; Reactions to Competitor's Price Changes	4
UNIT-VII	<b>Marketing Channels:</b> Marketing Channels; Role of Marketing Channels; Identifying Major Channel Alternatives; Types of Intermediaries; Channel-Management Decisions, Retailing, Wholesaling, selection and management of intermediaries. <b>Marketing Communication:</b> The Role of Marketing Communications; Communications Mix- Advertising, Sales Promotion, Public Relations and Publicity, Events and Experiences, Direct and Interactive Marketing, Personal Selling	7
UNIT-VIII	<b>Marketing organization and control:</b> organizing for marketing; marketing implementation & control-Concept, Process & Types of Marketing Control – Marketing Audit –Marketing Challenges in Globalized Era – Marketing through Social Network & Digital platforms – Social Marketing – Elements of Social Marketing Plan – Green Marketing – Consumerism – Introduction to Marketing Analytics; ethics in marketing.	6
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. Kotler, P. Keller K.I. et al: Marketing Management, A South Asian Perspective,(Latest edition), Pearson.</li> <li>2. Ramaswamy, V.S. &amp; Namakumari, S: Marketing management, planning, implementation and control, (Latest edition), Mechmillan.</li> </ol>	
<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. Kotler, P. Keller K.I. et al: Marketing Management, A South Asian Perspective,(Latest edition), Pearson.</li> <li>2. Ramaswamy, V.S. &amp; Namakumari, S: Marketing management, planning, implementation and control, (Latest edition), Mechmillan.</li> <li>3. Hepner H.W.: Modern Marketing- Dynamics and Management.11<sup>th</sup> , UBS. James M. Carman and Kenneth P. Phillips and Duncan: Marketing Principles and Methods.</li> <li>4. Britt and Boyd (ed): Marketing Management and Administration, 2<sup>nd</sup> , PHI.</li> <li>5. Cundiff, W.F. and Still R,: Basic Marketing, webedi, 1999, PHI.</li> <li>6. Converse Paul and Harvey W.Hugg: Elements of Marketing, 7<sup>th</sup> ed., PHI.</li> <li>7. Kotler, Philip and Armstrong: Principles of marketing, New Delhi, PHI, 11<sup>th</sup> ed., 2005.</li> <li>8. Hoffman, Douglas, K., et al: Marketing, Best Practices, 2<sup>nd</sup> ed., Thomason South Western.</li> <li>Saxena, R: Marketing Management, 2<sup>nd</sup> edition, TMH.</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:               <ul style="list-style-type: none"> <li>One best of two minor tests (50% of Mid -term marks)</li> <li>Assignments (20% of Mid-term marks)</li> <li>Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)</li> <li>Attendance. (10% of Mid-term marks)</li> </ul> </li> </ol>	

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	2.End –Term Assessment: University Examination
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### FOURTH YEAR

#### 8<sup>th</sup> SEMESTER

<b>Title</b>	<b>BUSINESS ENVIRONMENT</b>			<b>Credits</b>	4
<b>Code</b>	MBA 402	Course type	Core	<b>Semester:</b> 8 <sup>th</sup>	<b>L T P</b> 3 1 -
<b>Max.Marks</b>	<b>End term 50</b>	<b>Midterm 50</b>	<b>Practical --</b>	<b>Elective</b>	N
<b>Pre requisites</b>	-				
<b>Course Objectives</b>	This course aims at orienting the students with all the external environmental forces which affect the decision making process of an organization.				
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To understand the relationship between business and environment.</li> <li>2. Acquire knowledge about various components of business environment.</li> <li>3. To apply the techniques for internal and external environmental analysis.</li> <li>4. To know and understand various state policies, economic legislation and economic reforms laid down by the government.</li> <li>5. To introduce the key elements in international business environment.</li> </ol>				
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION – A</b>					<b>HRS</b>
<b>UNIT-I</b>	<b>Concept of business environment:</b> its significance and nature, interaction matrix of different, environment factors, process of environmental scanning, Economic Environment of Business, Politico-legal environment of business, environmental scanning of important industries of India;				<b>5</b>
<b>UNIT-II</b>	<b>Economic environment:</b> The philosophy, strategy and planning in India, monetary policy and their impact on Indian business, industrial policy foreign trade policy and their impact on Indian business, political environment: relation between business and government of India. constitutional provisions related to business, concept of state intervention in business, ideology of different political parties, bureaucracy and Indian business.				<b>6</b>
<b>UNIT-III</b>	<b>Economic Planning in India:</b> Objectives, Strategies and Evaluation of Five Year Plan; Public Sector in India; Privatization and Disinvestment; New Economic Policy-Liberalization and Structural Adjustment Programmes; Economic Systems.				<b>5</b>
<b>UNIT-IV</b>	<b>Economic Policies in India:</b> Monetary Policy as an instrument of growth; Fiscal Policy and Indian business; Industrial Policy and Industrial Licensing in India; EXIM Policy, MRTP Act, FERA, FEMA				<b>7</b>
<b>SECTION – B</b>					
<b>UNIT-V</b>	<b>Technological environment:</b> Policy for research and development in India,				<b>5</b>



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	appropriate technology, debate of technology v/s labour, MNC as a source of transfer to technology and its implication, institutional infrastructure for exports in India, India's export-import policy, global business environment, significance of foreign investment in India, opportunities and threats in WTO and the new international trading regime, tariff and non tariff barriers in global trade.	
<b>UNIT-VI</b>	<b>Socio-cultural environment in India:</b> Critical elements of socio – cultural environment-salient features of Indian culture values and their implication for Indian business, middle class in India and its implications on industrial growth in India, consumerism as emerging force,	<b>5</b>
<b>UNIT-VII</b>	Social responsibility of business, business ethics and Indian business, impact of mass media on Indian business; Emerging rural sector in India and Indian Business; changing role of rural sector in India: rural income and rural demand of consumer durable.	<b>6</b>
<b>UNIT-VIII</b>	<b>International Economic Environment:</b> Globalization - concept and emergence of globalization; Foreign Direct Investment; Benefits and Problems from MNCs; WTO-its role and functions, implications for India; Devaluation of Rupee	<b>6</b>
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. RuddarDatt&amp; K.P.M. Sundaram: Indian Economy, Sultan Chand and Sons.</li> <li>2. R.V. Badi: Indian Business Environment, Himalaya Publishing House.</li> <li>3. Francis Cherunilam: Global Economy and Business Environment, Himalaya Publishing House.</li> </ol>	
<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. G.Rama Krishna &amp; A.G. Moss V.Suguna: Economic Reforms in India- Retrospect and Prospect, Himalaya Publishing House.</li> <li>2. M.R. Das: WTO Opportunities and Challenges for Indian Banking, Himalaya Publishing House.</li> <li>3. Misra&amp;Puri: Economic Environment of Business, Himalaya Publishing House.</li> <li>4. I.J. Ahluwalia: Industrial Growth in India, Oxford University Press.</li> <li>5. S. Chakravarthy: Development Planning, Oxford University Press.</li> <li>6. Adhikari, A., Economic environment of business, Sultan Chand &amp; Sons</li> <li>7. Adhikary, M., Business Economics, Excel Books, New Delhi.</li> <li>8. Aswathappa, K., Essentials of business environment, Himalaya Publishing House.</li> <li>9. Cherulinum, F., Business Environment, Himalaya Publishing House</li> <li>Puri, V.K. and Misra, S.K., Indian economy, Himalaya Publishing House.</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:                          One best of two minor tests (50% of Mid -term marks)                          Assignments (20% of Mid-term marks)                          Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)                          Attendance. (10% of Mid-term marks)</li> <li>2. End –Term Assessment: University Examination</li> </ol>	

<b>Title</b>	<b>PROJECT MANAGEMENT &amp; ENTREPRENEURSHIP</b>			<b>Credits</b>	04
<b>Code</b>	MBA 403	Course type	Core	<b>Semester:-8<sup>th</sup></b>	<b>L T P</b> 3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>		<b>Practical --</b>	<b>Elective</b> N
<b>Pre requisites</b>					

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>Course Objectives</b>	<ol style="list-style-type: none"> <li>1. This course is aimed at introducing the primary important concepts of project management, project life cycle, scheduling, evaluation, analysis and reporting.</li> <li>2. To acquire necessary knowledge and skills required for organizing and carrying out entrepreneurial activities, to develop the ability of analysing and understanding business situations in which entrepreneurs act and to master the knowledge necessary to plan entrepreneurial activities</li> </ol>	
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. Use theories, models and concepts within project organisation and the implementation of projects and account for the function of the project and its relationship to surrounding organisations based on analysis of the influence of external parties and stakeholders on the project</li> <li>2. To plan and organize a project quickly and efficiently and develop a short, accurate project schedules.</li> <li>3. Use analysis tools and planning models linked to project management and using metrics to track project status, detect problems early ,and control a project</li> <li>4. Analyse the conditions for entrepreneurship and how a business plan is drawn up.</li> <li>5. Knowledge about various schemes promoting entrepreneurship.</li> </ol>	
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.	
<b>SECTION- A</b>		Hours
UNIT-I	Project Formulations and Planning ,Private commercial criteria for project choice, project cycle, feasibility, marketing feasibility, Financing for Projects and financial feasibility, Project Implementation. Brief outline of social cost benefit analysis: rationale, UNIDO and little Mirrlees approaches, UNIDO IDCAS manual.	8
UNIT-II	<b>Project appraisal:</b> time value of money, project appraisal techniques: payback period, accounting rate of return, net present value, internal rate of return, benefit cost ratio, social cost benefit analysis, effective rate of protection, risk analysis: measures of risk, sensitivity analysis, simulation analysis, decision tree analysis.	8
UNIT-III	<b>Project scheduling/network techniques in project management:</b> CPM and PERT analysis, float times, crashing of activities, contraction of network for cost optimization, updating, cost analysis of resources allocation, multiple projects: project dependence, capital rationing, ranking methods of projects, mathematical programming approach, linear programming model, post project evaluation.	7
<b>SECTION- B</b>		
UNIT-IV	Entrepreneur- Concept on percent - Functions and clarifications of entrepreneurs - Characteristics of entrepreneur - Nature and importance of ,entrepreneur – Entrepreneur vs. professional manager - Women entrepreneurs.	11
UNIT-V	Concept of Entrepreneurship - Entrepreneurship and environment-Policies governing entrepreneurs, entrepreneurial development programmes - Institutions for - entrepreneurship development, entrepreneurship. Entrepreneurship -Entrepreneurship development in other countries. Institutions for Entrepreneurial Development - Role of constancy organizations - Role of financial institutions -Bank finance to entrepreneurs Entrepreneurship development: Role of development financial institutions.	11

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>Text books</b>	1. Prasanna Chandra: Projects: Preparation, Appraisal Budgeting and Control, 7th edition, TMH. 2. Vasanta Desai: Dynamics of entrepreneurial development and management, 11th edition, Himalaya publishing.
<b>Reference books</b>	1. UNIDO: Guidelines for Project Evaluation, United Nations, reprinted, 1993.. 2. Manual for the preparation of Industrial Feasibility Studies, United Nations 1995. 3. Manual for Evaluation of Industrial Projects, United Nations, reprinted on 1993.. 4. IMD little and J.A. Mirrlees: Project Appraisal and Planning in Developing Countries, 5. Vasanta Desai: Entrepreneurial development, and Management, 13th edition, Himalaya pub., Harper Collins, edition- Paperback. Peter F. Drucker: Innovation and development
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid-term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination

<b>Title</b>	<b>Financial Accounting</b>				<b>Credits</b>	4
<b>Code</b>	MBA 404	Course Type	Core	<b>Semester-8<sup>th</sup></b>	<b>L T P</b>	3 1 -
<b>Max.Marks</b>	<b>End term 50</b>		<b>Midterm 50</b>	<b>Practical --</b>	<b>Elective</b>	N
<b>Pre requisites</b>	-					
<b>Course Objective</b>	The objective of this course is to enable students make financial statements, analyse them and evaluate the financial performance of firms.					
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. Understand the process of accounting as taken up in the organizations</li> <li>2. Identify the main elements of financial statements</li> <li>3. Explain the differences between management, financial and cost accounting</li> <li>4. Analyse the financial statements and point out areas of concern in the financial statements.</li> <li>5. Identify the differences between traditional accounting and contemporary areas of accounting such as social and human resource accounting.</li> </ol>					
<b>THEORY</b>						
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question, which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part. The duration of End Term exam will be 3 hrs.					
<b>SECTION-A</b>					<b>Hours</b>	
UNIT-I	<b>Accounting:</b> Accounting and its functions; Accounting as an information system; Basic Accounting Concepts and Accounting Conventions; Accounting Principles; Generally Accepted Accounting Policies (GAAP); Accounting Standards, Branches of Accounting: Financial Accounting; Cost Accounting; Management Accounting;				5	
UNIT-II	<b>Accounting cycle:</b> Accounting Equation; Accounting Structure; Types of				10	

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	Accounts. Rules regarding Journal Entries; Recording of Journal Entries; Ledger Posting; Cash book; Trial Balance; Preparation of Final Accounts; Trading Account; Profit & Loss Account; Balance Sheet; Treatment of Adjustments into trial balance.	
UNIT-III	<b>Meaning of Management Accounting:</b> Nature; Scope; Objectives; Functions of Management Accounting; Relationship between Financial and Management Accounting; Meaning of Financial Statement; Importance and Limitations of Financial Statement; Meaning and Objectives of Financial Statement Analysis; Limitation of Financial Analysis.	8
<b>SECTION-B</b>		
UNIT-IV	<b>Tools of financial analysis:</b> Ratio analysis; Common size statements; Trend analysis; Fund flow and cash flow statement.	8
UNIT-V	<b>Cost Accounting:</b> Meaning, scope and classification of costs; Absorption costing; Marginal costing and break even analysis; Use of cost data in managerial decision making, Preparation of budgets and their control	8
UNIT-VI	<b>New branches of accounting:</b> Responsibility Accounting- Responsibility Centre; Price Level Accounting, Social Accounting, Human Resource Accounting	6
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. Charles T. Horngren, Gary L. Sundem, John A. Elliott and Donna Philbrick: Introduction to Financial Accounting, Prentice Hall India.</li> <li>2. Hanif Mukherjee: Financial Accounting, Tata McGraw Hill</li> </ol>	
<b>Reference books:</b>	<ol style="list-style-type: none"> <li>1. Charles T. Horngren, Jeff Schatzberg, Gary L. Sundem and William O. Ostratton: Introduction to Management Accounting, Pearson Education.</li> <li>2. Hilton Ronald: Managerial Accounting, McGraw Hill Professional</li> <li>3. Charles T. Horngren, Srikant M. Datar and George Foster: Cost Accounting- A Managerial Emphasis, Prentice Hall India.</li> <li>4. N.R. Swamy: Financial Accounting-A managerial Perspective, Prentice Hall India.</li> <li>5. J.R. Williams, S.F. Haka, M.S. Bettner and R.F. Meigs: Financial and Managerial Accounting – The Basis for Business Decisions, Tata McGraw Hill.</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:               <ul style="list-style-type: none"> <li>One best of two minor tests (50% of Mid -term marks)</li> <li>Assignments (20% of Mid-term marks)</li> <li>Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)</li> <li>Attendance. (10% of Mid-term marks)</li> </ul> </li> <li>2. End –Term Assessment: University Examination</li> </ol>	

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### FIFTH YEAR

#### 9<sup>th</sup> SEMESTER

<b>Title</b>	<b>FINANCIAL MANAGEMENT</b>				<b>Credits</b>	04
<b>Code</b>	MBA 501	Course type	Core	<b>Semester:-9<sup>th</sup></b>	<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid- term 50</b>	<b>Practical -</b>		<b>Elective</b>	N
<b>Pre requisites</b>	<b>Financial Accounting</b>					
<b>Course Objectives</b>	The objective of this course is to inform the students about the basic concepts of financial management and contemporary theory and policy in order to master the concepts, theories and technique of financial management					
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. Apply measures of cost of capital and financial leverage to form long-term financial policies for business.</li> <li>2. Explain the management of corporate capital structure and dividend policy</li> <li>3. Apply techniques to project financial statements for forecasting long-term financial needs.</li> <li>4. Explain the role of short-term financial management, and the key strategies and techniques used to manage cash, marketable securities, accounts receivable and inventory.</li> <li>5. Understand the concept of corporate restructurings in present environment.</li> </ol>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.					
<b>SECTION- A</b>						Hours
UNIT-I	<b>Introduction to Financial Management:</b> Meaning; Scope; Finance Function; Financial Goals; Agency Problem; Relationship of Finance with Accounts and Economics					3
UNIT-II	<b>Sources of Finance: Features;</b> Advantages and Limitations of Equity Shares; Preference Shares; Debentures; Term-Loans; Right Issue, Venture Capital, Private Equity GDR, ADR.					3
UNIT-III	<b>Cost of Capital: Meaning;</b> Calculation of Cost of Debt Capital; Equity Capital; Preference Capital; Retained Earnings; Weighted Average Cost of Capital.					3
UNIT-IV	<b>Capital Structure: Meaning;</b> Determinants; Assumptions; Net Income and Operating Income Approach; Traditional Position; M-M Position; EBIT and EPS Analysis; Capital Structure and Taxation.					4
UNIT-V	<b>Leverage Analysis: Meaning; Types;</b> Estimation of Financial; Operating and Combined Leverage; Relation of Financial Leverage with Risk and Return.					4
UNIT-VI	<b>Management of Working Capital :</b> Meaning of WC; Need of WC Management; Determinants of WC; Operating Cycle; Estimation of WC; Working Capital Financing; Trade Credit, Bank finance, commercial paper, factoring, money market instruments.					4
<b>SECTION- B</b>						
UNIT-VII	<b>Cash Management:</b> Meaning; Facets of Cash Management; Motives for Holding Cash; Optimal Cash Balance; Short-term and Long-Term Cash Forecasting.					3
UNIT-VIII	<b>Receivable Management:</b> Meaning; Credit Policy Variable; Credit Evaluation; Credit Decisions; Control of Account Receivable.					3

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UNIT-IX	<b>Inventory Management:</b> Meaning; Need to hold Inventory; Objective of Inventory Management; Inventory Investment Analysis; Inventory Control System.	4
UNIT-X	<b>Capital Budgeting;</b> Meaning; Basic Principles of Costs and Benefits; Investment Criteria; Pay back Method; Accounting Rate of Return method; Net Present Value Method; Benefit-Cost Ratio; Internal Rate of Return; Capital Rationing; Introduction to Basic Techniques of Risk Analysis in Capital Budgeting.	4
UNIT-XI	<b>Dividend Decisions:</b> Meaning and Types of Dividend; Issues in Dividend Policy; Traditional Model; Walter Model; Gordon Model; Miller and Modigliani Model; Bonus Shares and Stock Splits.	4
UNIT-XII	<b>Corporate Restructuring :</b> Meaning and forms of corporate restructuring, merger and amalgamation takeover and acquisition, types or forms of mergers and takeovers, their benefits and motives.	5
<b>Text books</b>	1. I.M.Pandey: Financial Management, Vikas Publishing House 2. Prasanna Chandra: Financial Management, Tata McGraw-Hill Publishing 3. M.Y.Khan and P.K.Jain: Financial Management-Text and Problems, McGraw-Hill	
<b>Reference books</b>	1. James C.Van Horne: Financial Management, Pearson Education 2. Richard A. Brearley and Stewart C.Myres: Principles of Corporate Finance, McGraw Hill 3. John J. Hampton: Financial Decision Making-Concepts, Problems and Cases, Prentice Hall India 4. P.V. Kulkarni and B.G.Satyaprasad: Financial Management, Himalaya Publishing House. 5. Lawrence J.Gitman: Principles of Management, Pearson Education. 6. Jonathan Berk, Peter De Marzo, Ashok Thampy: Financial Management, Pearson Education. 7. VyuptakeshSharan: Fundamentals of Financial Management, Pearson Education	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination	

<b>Title</b>	<b>LEGAL ASPECTS OF BUSINESS</b>			<b>Credits</b>	04
<b>Code</b>	MBA 511	<b>Semester:-10<sup>th</sup></b>		<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid-term 50</b>	<b>Practical</b>	<b>Elective</b>	N
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<b>Pre requisites</b>					
<b>Course Objectives</b>	1. The course is designed to understand the formation, management and other activity of the companies. In view of the changing facts of global governance corporate governance plays a vital role in the development of an economy both national and international level. 2. To introduce to the students the nuance of corporate law and the obligations of it towards society in discharging its trade relations and to be a good corporate citizen.				

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	<p>3. To understand the fundamentals of patent law, know the requirements of patentability learn how to read and interpret patent specifications, analyse patent office procedures and court cases and develop the basic understanding for drafting a patent specification.</p> <p>4. To understand that immovable property is precious and transactions in connection with immovable property are to be authenticated by the government via registration</p>	
<b>Course Outcomes</b>	<p>1. Students will have a comprehensive understanding about the existing law on Consumer protection in India.</p> <p>2. Students will be conversant with major international instruments on consumer protection</p> <p>3. Students will be aware of the basic procedures for handling consumer dispute.</p> <p>4. Students will be able to appreciate the emerging questions and policy issues in consumer law for future research</p> <p>5. Student get an insight on Copyrights, Patents and Software patents which are instrumental for further advancements</p>	
<b>THEORY</b>		
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part. The duration of End Term exam will be 3 hrs.	
<b>SECTION- A</b>		
UNIT-I	<p><b>Company Law :</b> Definition and nature of a company, kinds of companies , formation of a company, memorandum of association, articles of association, prospectus, membership in a company, shares , transfer and transmission of shares, meetings and proceedings.</p>	<b>12</b>
UNIT-II	<p><b>Information Technology Act-2000 :</b>Objective of the act, documents excluded from the scope of the act, digital signatures, types of digital signatures in India, certifying authorities in India, regulation of certifying authorities, duties of subscribers, offences, appellate tribunal, penalties and adjudication</p>	<b>12</b>
<b>SECTION- B</b>		
UNIT-II-	<p><b>Patents Law :</b>Patents Act 1970 as amended by the The Patents (Amendment) Act 2005, The Patents rules, 2003 as amended by The Patents (Amendment) Rules ,2006, Inventions not patentable, applications for patents, publication and examination of applications, grant of patents and rights conferred thereby, Patent Cooperation Treaty (PCT), Trade Related Intellectual Property Rights (TRIPS).</p> <p>A brief introduction to trademarks, geographical indications, industrial Designs, trade secrets, copy rights – Definition and functions</p>	<b>10</b>
UNIT-IV	<p><b>Consumer Protection Act 1986 :</b> Definitions under the act : complaint , consumer, defect, deficiency , unfair trade practice, consumer protection councils, redressal machinery under the act, district forum, state commission, national commission</p>	<b>10</b>
<b>Text books</b>	<p>1. K.C.Garg, V.K.Sareen , Mercantile Law, Kalyani Publishers, 14th ed.(2008).</p> <p>2. Mamoria CB, Mamoria, Gankar - Dynamics of Industrial Relations (Himalaya Publications, 15th Ed.)</p>	
<b>Reference books</b>	<p>3. Manish Arora , Guide to Patents Law, Universal Law Publishing Co., 4th ed.</p> <p>4.Srivastava SC - Industrial Relations and Labour Laws (Vikas, 2000, 4th Ed.)</p>	

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<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid-term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination)
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### GROUP-A: FUNCTIONAL SUBJECTS 1& 2

<b>Title</b>	<b>MARKET RESEARCH AND PRODUCT MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>				<b>Semester:-9<sup>th</sup></b>	<b>L T P</b>
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	<b>Marketing Management</b>				
<b>Course Objective</b>	The objective of the course is to equip the students with skills to conduct, evaluate and research marketing mix elements in particular. It also seeks to develop an understanding of the innovation process, method of analysis and evaluation used in the product development process.				
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To define basic and contemporary concepts related to marketing research and various research designs.</li> <li>2. To develop knowledge and skills to help in diagnosing and measuring marketing problems.</li> <li>3. To learn the use of statistical tools to study the relationship between various marketing variables.</li> <li>4. To apply the fundamental concepts of product and brand development and management</li> <li>5. Use portfolio analysis and the product life cycle to understand how a firm manages its product mix.</li> <li>6. Apply an understanding of the product manager's role in product pricing, sales, and promotion.</li> </ol>				
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>HRS</b>
<b>UNIT-I</b>	<b>An overview of marketing research</b> -definition and scope; phases, changes due to technology including the internet; the marketing research industry, experimental research design,				5
<b>UNIT-II</b>	<b>Application of marketing research and multivariate analysis techniques to marketing mix elements viz.</b> Factor analysis, cluster analysis, multidimensional scaling and conjoint analysis, product research, advertising research-setting advertising objectives, concept testing, audience profiling, copy research, media research.				6
<b>UNIT-III</b>	<b>Pricing research</b> including use of conjoint analysis for this purpose, package				5



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	research distribution research, research for market segmentation including the use of cluster analysis for this purpose,	
<b>UNIT -IV</b>	Scale validation-relationship of validity and reliability-their types and their estimation, qualitative research tools including ethnography and laddering	6
<b>SECTION- B</b>		
<b>UNIT-V</b>	<b>Product management</b> : in context of business strategy, the relationship of product management to the marketing concept, product mix concept, product classification, product planning: marketing plan, portfolio analysis, market potential and forecasting, product market strategies, product life cycle : stages and corresponding strategies, product evaluation,	5
<b>UNIT-VI</b>	Product positioning : concept, product differentiation, positioning strategies, preference analysis, benefit segmentation, new products : the importance of innovation, new product categories, organization for product management, prototyping, new product development process, test marketing.	6
<b>UNIT-VII</b>	<b>Socio cultural meaning of brands:</b> understanding the social psychology of brands,emotions and brands,symbolic meaning of brands, cultural meaning systems and brands,	5
<b>UNIT-VIII</b>	Brand equity:introduction and definition, name value, model of brand equity synthesis, auditing and measuring brand equity managing brands, branding strategies for functional and symbolic brands, brand stretching and retrenching, branding services and managing the corporate brand, brands and advertising	7
<b>Text books</b>	1.Malhotra, N. K., Marketing Research: An applied orientation,PearsonPrentice Hal, New Jersey. 2.Ulrich, K.T. and S.D. Eppinger, Product Design and Development, McGraw Hill	
<b>Reference books:</b>	1.Churchill, Gillert, Iacobucci, Dawn, Marketing Research, Thomson 2.Elliott, R. and Percy, L., Strategic brand management, Oxford UniversityPress. 3.Kinncar, T.C. and Taylor J. R., MarketingResearch: an Applied Approach, McGraw Hill Inc. 4.Trott, Paul, Innovation Management and New Product Management, Prentice Hall	
<b>Course Assessment Methods:</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination	

<b>Title</b>	<b>SUPPLY CHAIN &amp; LOGISTICS MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>		Course type	Deptt. Elective	<b>Semester:-9<sup>th</sup></b>	<b>L T P</b> 3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>		<b>Practical -</b>	<b>Elective</b> Y
<b>Pre</b>	<b>Production and Operation Management, Operations Research</b>				

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<b>requisites</b>			
<b>Course Objectives</b>	To provide an understanding and knowledge of individual processes of supply chain management, tools and techniques useful in implementing supply chain management, functions and scope of sub-components of logistics management		
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To understand the major functions, major business processes, performance metrics, and major decisions (strategic, tactical, and operational) in supply chain networks</li> <li>2. Demonstrate a clear understanding of the key concepts applied in logistics</li> <li>3. An understanding of the individual processes such as inventory management of supply chain management and their interrelationships within individual companies and across the supply chain</li> <li>4. Planning and implementing demand and supply side forecasting in a supply chain</li> </ol>		
<b>THEORY</b>			
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question, which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part. The duration of End Term exam will be 3 hrs.		
<b>SECTION- A</b>			Hours
UNIT-I	<b>Introduction to Supply Chain Management:</b> Scope & Importance of Supply Chain Management; Key drivers Of the SCM; Features of Supply Chain Management; Supply Chain Network – 1st Tier, 2nd Tier; Network decisions in SCM; Suppliers and Customers; Customer Service Dimension (Seven “R” Principles, Service after sale, Customer delight)		11
UNIT-II	<b>Role of Logistics in Supply Chains:</b> Components of Logistics Management; Scope and role of Transportation, Traffic & transportation; Relationship between transportation and other business functions, Transport Economics: Distance – volume-density, Freight Cost, Handling, Liability, market factors; Third party logistics (3 PL) & fourth party logistics service provider (4 PL), Logistics equipment; Reverse Logistics, Government rule & regulations related to Logistics; Purchase Cycle, Make or Buy, Price analysis, Negotiations.		11
<b>SECTION- B</b>			
UNIT-III	<b>Inventory Management:</b> Inventory Control, Planning & Managing Inventories; Warehouse Management (Receipt, issue, storage and preservation, stock verification, In bound and out bound distribution operations); Order Management; Competitive advantage through logistics and supply chain management; Responsive Supply Chain; Supply chain process integration, performance measurement; Value Chain, Value System and Supply Chain.		11
UNIT-IV	<b>Planning demand and supply:</b> Planning & Sourcing in Supply Chain, Demand forecasting, Type and Time horizon of forecast and category of forecasting, aggregate planning; Financial issues in Supply Chain - Macro and micro view, Asset management, Du Pont Model, Supply Chain Costing; Decision environment in SCM; Global supply chain perspectives - New business models, role of IT in SCM.		12
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. Harald Dyckhoff et al, Ed.: Supply Chain Management and Reverse Logistics, Springer (India).</li> <li>2. Jayashree Dubey and M.L. Saikumar Ed.: Supply Chain Management, IPE Hyderabad and New Century Publication.</li> </ol>		

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. Sarika Kulkarni, Ashok Sharma: Supply Chain Management-Creating Linkages for Faster Business Turnaround, McGraw Hill.</li> <li>2. RP Mohanty: Supply Chain Management-Theories and Practice, Biztantra.</li> <li>3. Robert B. Handfield, Ernest L. Nicholas, Jr.: Introduction to Supply Chain Management, Pearson Education.</li> <li>4. Ronald H. Ballou, Samir K. Srivastava: Business Logistics/Supply Chain Management, Pearson Education.</li> <li>5. John Mentzer: Supply Chain Management, Response Books.</li> <li>6. Janat Shah: Supply Chain Management, Pearson Publications.</li> <li>7. 9. N. Chandrasekaran: Supply Chain Management - Process, System and Practice, Oxford Press.</li> </ol>
<b>Course Assessment Methods</b>	<p>Assessment will consist of the following components</p> <ol style="list-style-type: none"> <li>1. Mid-Term Assessment: <ul style="list-style-type: none"> <li>One best of two minor tests (50% of Mid -term marks)</li> <li>Assignments (20% of Mid-term marks)</li> <li>Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)</li> <li>Attendance. (10% of Mid-term marks)</li> </ul> </li> <li>2. End –Term Assessment: University Examination</li> </ol>

<b>Title</b>	<b>SALES AND DISTRIBUTION MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>	Course Type: Elective	<b>Semester:-9<sup>th</sup></b>		<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	<b>Marketing Management</b>				
<b>Course Objective</b>	The objective of this course is to familiarize the students with fundamentals of sales and distribution management and to enable them to effectively manage the sales and distribution process.				
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To be able to understand &amp; appreciate the diverse variables affecting the sales &amp; distribution function.</li> <li>2. To analyse the roles and responsibilities of sales and marketing manager</li> <li>3. To be able to develop and implement sales and distribution plans and strategies.</li> <li>4. To be able to link distribution with other marketing variables.</li> <li>5. To apply concepts related to improving sales team performance.</li> </ol>				
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>HRS</b>
<b>UNIT-I</b>	Selling and Marketing concept – theories of selling, Classification of salespeople – Characteristics of salespeople – Personal selling: Selling Process- Prospecting: Steps – Preapproach: Objectives, Sources – The Approach: objectives, methods – The presentation: strategies, developing, situational selling – Handling objections:				6

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	Attitude, strategy, Methods, Types of objections, Specific situations – Closing: tactics methods – follow up.	
<b>UNIT-II</b>	Sales organization: Types sales potential – Determining the sales force profile – Product market analysis – Determining the sales force size – Territory management: Accounts and sales potential salesperson workload, designing territories, reasons and procedures and assigning to sales persons-routing –time management.	5
<b>UNIT-III</b>	<b>Sales force management:</b> Recruitment and Selection: Job analysis, Manpower Planning, Job specification and Job description, sources of sales recruits, Problems in screening and selecting the applicants – Sales targets: Quantitative & Quantitative methods.	6
<b>UNIT-IV</b>	Planning sales force training methods, content, and execution, training the dealer salespersons and evaluating the training programmes – Leadership and supervision – Compensation: Objectives, remuneration methods, incentives – Motivating the sales force – Sales meetings and Sales Contents.	5
<b>SECTION- B</b>		
<b>UNIT-IV</b>	Evaluation and control: Performance Appraisal – Sales budget – Sales Quotes – Systems approach – Sales Management audit – Sales analysis: sales related, cost related, activity related, activity related – Determinants of salesperson performance.	7
<b>UNIT-V</b>	<b>Distribution Objective/Strategy</b> - Interface between Salesforce and Channel, Channel Design, Implementing Channel Design, Managing the Channel Members, Channel Power and Conflict Channel Evaluation ;	5
<b>UNIT-VI</b>	Distribution planning, costs and control- Functions of intermediaries (wholesaler & retailers), Selection and motivation of intermediaries, Need, criterion and establishing objectives for intermediaries;	6
<b>UNIT-VII</b>	Control issues- Major cost centers in distribution, Establishing standards for control, Controlling channel members and tools for control	5
<b>Text books</b>	1. Sales and Distribution Management by Tapan Panda and Sunil Sahadev. Latest edition, Oxford University Press 2.Sales & Distribution Management by Krishna K Harvadkar&Cavale, McGraw Hill	
<b>Reference books:</b>	1. Cundiff, Still &Govoni : Sales Management – Decision, Strategies & Cases – PHI. 2. Johnson, Kurtz & Scheuing : Sales Management Concept, Practices & Cases – McGraw Hill. 3.Laicester&Jobber : Selling & Sales Management - Macmillan (India).	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination	

<b>Title</b>	<b>INTERNATIONAL HUMAN RESOURCE MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>	<b>Semester:-9<sup>th</sup></b>			<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	Organizational behaviour, Human Resource Management				

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<b>Course Objectives</b>	The objective of the course is to acquaint the students with the influence of cross-cultural issues on organisations, and examines factors involved in selecting and managing an international workforce. The course seeks to look at HRM in a broader, comparative and international perspective to deal with complex issues and manifold risks	
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To develop an understanding of the factors underlying globalisation of human resource management.</li> <li>2. Identify and Understand issues and practices pertaining to the major HRM functions within the context of a multinational environment.</li> <li>3. Describe, Recognize and value cultural differences</li> <li>4. Develop successful programs for international assignees (short term/long term).</li> <li>5. Evaluate “best practices” across cultures</li> </ol>	
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.	
<b>SECTION- A</b>		
<b>UNIT-I</b>	<b>International HRM:</b> Concept, Defining International HRM, Differences between domestic and international HRM, Variables moderating the difference between domestic and International HRM, Developments leading to global HRM, Issues in global organizations, Management of external environment, Relevance and importance of IHRM.	5
<b>UNIT-II</b>	<b>Sustaining International Business Operations:</b> Approaches to staffing- ethnocentric, polycentric, geocentric, regiocentric, reasons and types of international assignments, role of expatriates, role of non expatriates.	5
<b>UNIT-III</b>	<b>Recruiting and selecting staff for international assignments:</b> issues in staff selection, reasons for expatriate failure, factors moderating performance, selection criteria. <b>Training and development:</b> Role of expatriate training, effective pre-departure training programmes, effectiveness of pre departure training, developing staff through international assignments.	6
<b>UNIT-IV</b>	<b>Compensation:</b> Objectives of International compensation, key components of international compensation programme, approaches to international compensation. <b>Re-entry and Career Issues:</b> Repatriation Process, individual reactions to re-entry, Multinational responses, designing repatriation programme.	6
<b>SECTION- B</b>		
<b>UNIT-V</b>	<b>HRM in host country context:</b> standardisation and adaptation of work practices, retaining, developing and retrenching staff. <b>Industrial Relations:</b> Key issues in international Industrial relations, trade unions and international industrial relations, response of trade unions to multinationals.	6
<b>UNIT-VI</b>	<b>Performance Management:</b> Multinational performance management, performance management of international employees, Performance appraisal of international employees, Appraisal of HCNs.	5
<b>UNIT-VII</b>	<b>Culture and IHRM:</b> Concept of Culture, Cross Cultural Studies, Hofstede’s Model of National Culture <b>Cross Cultural Communication:</b> Cultural Variables Affecting Communication, Managing Cross-Cultural Communication.	6

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<b>UNIT-VIII</b>	<b>IHRM Trends and future challenges:</b> International business ethics and HRM, research issues and theoretical developments in international HRM. <b>GHRM in Select Countries:</b> America, Japan, China, Korea, Africa, Europe, India.	6
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. <u>K. Aswathappa</u>, D. Sadhna: International Human Resource Management, Tata Mcgraw-Hill.</li> <li>2. <u>Monir H. Tayeb</u>: International Human Resource Management, Oxford University Press.</li> </ol>	
<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. <u>Chris Brewster</u>: International Human Resource Management, Orient Longman.</li> <li>2. <u>Tony Edwards</u> and <u>Chris Rees</u>: International Human Resource Management, Pearson Education.</li> <li>3. F. Luthans: Organizational Behaviour, Tata McGraw Hill.</li> <li>4. D.R. Brisloe and R.S. Schuler: International Human Resource Management: Policy and Practice for the Global Enterprise, Routledge.</li> <li>5. J.W. Newstorm and K. Davis: Organizational Behaviour – Human Behaviour at Work, Tata McGraw Hill.</li> <li>6. V. Nilakant and C.S. Ramnarayan: Change Management – Altering Mindsets is a Global Context, Response Books</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:                One best of two minor tests (50% of Mid-term marks)                Assignments (20% of Mid-term marks)                Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)                Attendance. (10% of Mid-term marks)</li> <li>2. End –Term Assessment: University Examination)</li> </ol>	

<b>Title</b>	<b>ENTERPRISE RESOURCE PLANNING</b>			<b>Credits</b>	04
<b>Code</b>			<b>Semester:-9<sup>th</sup></b>	<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical</b>	<b>Elective</b>	Y
<b>Pre requisites</b>					
<b>Course Objective</b>	The objective of this course is to acquaint the students with the knowledge of computerized productions, Materials distribution system of a manufacturing organization and impart knowledge to the students in the conceptual and operational aspects of ERP				
<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. To enable the students to make basic use of enterprise software and its role in integrating business functions.</li> <li>2. To analyze the strategic options for ERP identification and adoption</li> <li>3. To design the ERP implementation strategies.</li> <li>4. To create reengineered business processes for ERP implementation</li> </ol>				
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					

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<b>UNIT-I</b>	Introduction: overview to ERP, Typical Business Process Workflow, Fundamentals, Functionalities, Benefits, Modern Business Concepts, E-Commerce, Advance Planning and Scheduling, Business Analytics, Service oriented architecture.	11
<b>UNIT-II</b>	Issues, Concerns and Purchasing: Disadvantages of ERP Solutions, users, developers, customers of ERP, purchasing or outsourcing, planning, purchasing and selection of ERP, Managing implementation partners; ERP strategy options and risk mitigation.	11
<b>SECTION- B</b>		
<b>UNIT-III</b>	Implementation of ERP: Implementation plan of ERP, Methods and tools, business process mapping, gap analysis, risks and dependencies, project timeline plan, project organization plan, structure and coding, data migration and historical record, prototype testing, user training program, knowledge management, disaster recovery plan, RDBMS, data communication system, hardware requirements, sample system architecture.	12
<b>UNIT-IV</b>	ERP Project Success and failure: Introduction to ERP Project success and failure with case studies, Current and future ERP market, key players and market shares, market issues; Continuous business improvement in ERP.	11
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. A. Pandey: Enterprise Resource Planning, Variety Publishers.</li> <li>2. <u>Vinod Kumar</u>Garg and R.K. Venkita Krishnan: Enterprise Resource Planning: Concepts and Practice, Prentice Hall India.</li> </ol>	
<b>Reference books:</b>	<ol style="list-style-type: none"> <li>3. <u>Mary Sumner</u>: Enterprise Resource Planning, Pearson Education.</li> <li>4. A. Leon: Enterprise Resource Planning, Tata McGraw Hill.</li> <li>5. M.E. Wagner: Concepts in Enterprise Resource Planning, Cengage Learning.</li> <li>6. S. Sadagopan: ERP – A Management Perspective, Tata McGraw Hill.</li> <li>7. V.K. Garg and R.K. Venkita Krishnan: ERPWARE and ERP Implementation Framework, Prentice Hall India.</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:                          One best of two minor tests (50% of Mid -term marks)                          Assignments (20% of Mid-term marks)                          Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)                          Attendance. (10% of Mid-term marks)</li> <li>2. End –Term Assessment: University Examination)</li> </ol>	

### GROUP-B: FUNCTIONAL SUBJECTS 3 & 4

<b>Title</b>	<b>SERVICES OPERATIONS MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-</b>	<b>L T P</b>	31	0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	<b>Production and Operation Management; operations research</b>				
<b>Course Objective</b>	This course provides a careful study of service operations from the point of view of designing and managing a system that is efficient and effective in the "realization" of the service deemed by its customer. To course seeks to developing a clear understanding of service operations, and service systems, and how to improve them, and/or to build them better.				
<b>Course</b>	1. To critically analyze the types of services operations and operational parameters that are				

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<b>Outcomes</b>	<p>imperative for organizational success.</p> <p>2. To evaluate and compare the strategies for improving the services operations.</p> <p>3. To analyse the important aspects of service systems that control the provision of capacity to meet customer requirements</p> <p>4. To implement statistical methods and management techniques to monitor control, and improve the service operations.</p>	
<b>THEORY</b>		
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.	
<b>SECTION- A</b>		<b>HRS</b>
<b>UNIT-I</b>	<b>Introduction:</b> 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.	7
<b>UNIT-II</b>	<b>Service Design :</b> New Service Development – Design elements – Service Blue-printing - process structure – generic approaches –Value to customer; Retail design strategies – store size – Network configuration ; Managing Service Experience –experience economy, key dimensions ; Vehicle Routing and Scheduling.	7
<b>UNIT-III</b>	<b>Service Quality :</b> Service Quality- Dimensions, Service Quality Gap Model; Measuring Service Quality –SERVQUAL - Walk-through Audit; Quality service by design - Service Recovery - Service Guarantees; Service Encounter – triad, creating service orientation, service profit chain; Front-office Back-office Interface – service decoupling.	8
<b>SECTION- B</b>		
<b>UNIT-IV</b>	<b>Service Facility :</b> 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	11
<b>UNIT-V</b>	<b>Managing Capacity And Demand :</b> 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.	12
<b>Text books</b>	<p>1. James A. Fitzsimmons, Service Management – Operations, Strategy, Information Technology, Tata McGraw-Hill – 7th Edition 2013.</p> <p>2. Richard Metters, Kathryn King-Metters, Madeleine Pullman, Steve Walton Successful Service Operations Management, South-Western, Cengage Learning, 2nd Edition ,2012</p>	
<b>Reference books</b>	<p>1. CengizHaksever, Barry Render, Roberta S. Russell, Rebert G. Murdick, Service Management and Operations, Pearson Education – Second Edition.</p> <p>2. Robert Johnston, Graham Clark, Service Operations Management, Pearson Education, 2nd Edition, 2005.</p>	



## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	<p>3. Bill Hollins and Sadie Shinkins, Managing Service Operations, Sage, 2006</p> <p>4. J.Nevan Wright and Peter Race, The management of service operations, Cengage, 2nd Edition, 2004</p>
<b>Course Assessment Methods</b>	<p>Assessment will consist of the following components</p> <p>1. Mid-Term Assessment:            One best of two minor tests (50% of Mid-term marks)            Assignments (20% of Mid-term marks)            Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)            Attendance. (10% of Mid-term marks)</p> <p>2. End –Term Assessment: University Examination)</p>

<b>Title</b>	<b>TECHNOLOGY MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-9<sup>th</sup></b>	<b>L T P</b>		3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	-				
<b>THEORY</b>				<b>Time</b>	
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>				<b>HRS</b>	
<b>UNIT-I</b>	<b>Technology management Concepts</b> - Scope, components, and overview. Technology and environment, Technology and society, Technology Impact analysis, environmental, social, legal, political aspects, methods or techniques for analysis - steps involved. Technology policy strategy: Science and technology Policy of India, implications to industry.			6	
<b>UNIT-II</b>	<b>Technology forecasting and Selection</b> - Forecasting need, methodology and methods - trend Analysis, Analogy, Delphi, Soft System Methodology, Mathematical Models, Simulation, and System Dynamics.			5	
<b>UNIT-III</b>	<b>Technology Choice and Evaluation</b> :Methods of analyzing alternate technologies, Techno-economic feasibility studies, Need for multi-criteria considerations such as, social, environmental, and political, Analytic hierarchy method, Fuzzy multi-criteria decision making, and other methods.			5	
<b>UNIT-IV</b>	<b>Technology Transfer and Acquisition</b> - Import regulations, Implications of "Uruguay Round", and WTO, Bargaining process, Transfer option, MOU - Technology Adoption and Productivity, Organizational redesign and re-engineering, Technology productivity.			6	
<b>SECTION- B</b>					
<b>UNIT-V</b>	<b>Technology Absorption and Innovation:</b> present status in India, Need for new outlook, Absorption strategies for acquired technology, Creating new/improved technologies, Innovations- Technology Audit.			5	

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<b>UNIT-VI</b>	<b>Technological Excellence</b> - Technology and its importance in global manufacturing, Manufacturing innovations: Productivity & Incremental Innovation. Crucial issues of Flexible Technology- Strategic Evaluation of Technological Investments-Technology Development .	6
<b>UNIT-VII</b>	<b>Technological environment in India</b> - technology policy, role of various governmentorganisations such as DST, CSIR in development and dissemination of technology,technology development at organisation level, role of information system, quality systemsand market feedback.	6
<b>UNIT-VIII</b>	<b>Development Cycle</b> - Integration of Design & Manufacturing- Management of Technological Innovation-Technology Fusion & the new R&D Core competencies in Technology and its Commercialization, Building Organization Culture, Cooperation between Government and Industry, Coping with continuous change, The structure of the Japanese Innovation System.	6
<b>Text books</b>	1. P N Rastogi, Management Of Technology And Innovation : Competing Through Technological Excellence 2nd Edition, Response Books 2. Alan L. Porter, Scott W. Cunningham, Jerry Banks, A. Thomas Roper, Thomas W. Mason, Frederick A. Rossini, Forecasting and Management of Technology, 2nd Edition, Wiley 3. Urdhwarashe, Six Sigma for Business Excellence : Approach Tools andApplications, Pearson Education.	
<b>Reference books</b>	1. Carl M. Chang, C. M. Chang, Achieving Service Excellence: Maximizing Enterprise Performance Through Innovation and Technology, Business Expert Press 2. Frankel Ernst G. Professor, In Pursuit of Technological Excellence: Engineering Leadership, Technological Change, and Economic Development, Praeger 3. Frederick A. Fredruck Betz, Managing Technology, Prentice Hall. 4. MaukDudgson, Technology Strategy and the Firm, Longman Publications. 5. Sharif Nawaz, Management of Technology Transfer and Technology, APCTT Bangalore. 5. UN-ESCAP: Technology for Development, ESCAP Secretaria	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination)	

<b>Title</b>	<b>PURCHASE AND MATERIALS MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-9<sup>th</sup></b>		<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>					
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>HRS</b>

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<b>UNIT-I</b>	<b>Introduction to Purchasing Management</b> - Responsibilities of Purchase Department – Purchase Cycle – Purchase Order – Relevant positions of State / Central Sales Tax Act, Central Excise Act and Import/Export Procedures, Role of Purchasing Manager.	5
<b>UNIT-II</b>	<b>Creative Purchasing</b> –Importance, Goals of purchasing, Negotiation, Purchase Budget, Bill Market Scheme. <b>Purchasing Under Uncertainty</b> – Classification of Decision problems, Uncertainty Situations, Principles of Rationality, Principle of Mini-max, Principle of Maxi-max, Principle of Optimum, Principle of Regret	6
<b>UNIT-III</b>	<b>Purchase systems</b> – Introduction - Pre purchase systems, Ordering System, Post Purchase system, Special purchasing systems. Purchasing under fluctuating Prices, Conservative & Hand Sight Policy, Determining the optimal buying strategy.	6
<b>UNIT-VI</b>	<b>International Purchasing</b> -Procedures and Documentation; Purchasing of Capital Equipment – Appraisal Methods, Evaluating Suppliers Efficiency, Stores Layout, Classification and Codification; Legal Aspects of Purchasing, Public Purchasing and Tendering.	5
<b>SECTION- B</b>		
<b>UNIT-V</b>	<b>Materials Management</b> Introduction - Evolution, Scope and Objectives - Interface with other functions. Scope of Profitability through MM - Primary and secondary objectives of MM.	5
<b>UNIT-VI</b>	<b>Forecasting</b> - Methods of forecasting - Moving Average Method, Regression Analysis, Exponential Smoothing Method <b>Inventory</b> - Types of Inventory - Need of Inventory - Costs associated with Inventory - Basic EOQ Model - EOQ with discounts - Classification of material - ABC Analysis - VED, FSN, GOLF, SOS.	6
<b>UNIT-VII</b>	<b>Material Logistics</b> – Warehousing Management, Material handling, Traffic and Transportation, Disposal of Scrap, Surplus and Obsolete Materials; Inventory Control of Spare Parts, Materials Information System – Advantages over conventional planning (Order Point Material Requirement Planning Method)- Master Production Schedule – Bill of Materials – Material flow in MRP.	5
<b>UNIT-VIII</b>	<b>Stores Management &amp; Surplus, Obsolete and Scrap Management:</b> Materials identification: classifying materials - Codification of materials – Standardization: Simplification and variety reduction of materials - Stores Management: Different types of stores - Stores issues and receipts: Procedures, forms - Policies in stores transactions: Stores accounting, Stores organization, Materials safety and security - Store Layout and Design - Introduction to Material Handling Equipments - General Duties and Responsibilities of Stores Management - Stores Productivity.	7
<b>Text books</b>	1. Menon, K. S., Purchasing Management, Macmillan 2. Menon, K. S., Stores Management, Macmillan 3. Gopalakrishnan, Sundaresan.M, Materials Management – An Integrated Approach, PHI. 4. Datta.A.K, Materials Management – Procedures, Text & Cases , PHI	
<b>Reference books</b>	1. Ansari A and Modarress B. JIT Purchasing. New York, Free Press, 1990. 2. Baily P etc. Purchasing Principles and Management. London, Pitman, 1994. 3. Burt, David N. Proactive Procurement. Englewood Cliffs, New Jersey, Prentice Hall Inc., 1994. 4. Dobler, D W. etc. Purchasing and Materials Management, New York, McGraw Hill,	

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	1990. 5. Datta, A. K, Materials Management: Procedures, Text & Cases, PHI
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination)

<b>Title</b>	<b>ADVERTISING AND CONSUMER BEHAVIOUR</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester: -9<sup>th</sup></b>		<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>					
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					
<b>UNIT-I</b>	<b>Advertising:</b> concepts, types, forms, importance and role of advertising in the marketing process, legal, ethical and social aspects of advertising, the advertising plan and setting of objectives, DAGMAR approach, determination of target audience.				<b>11</b>
<b>UNIT-II</b>	<b>Developing advertising programmes</b> -message, headlines, copy, logo, illustration, appeal, layout, campaign planning; media planning, budgeting; evaluation -opinion and attitude tests, measurement of advertising effectiveness, advertising organisation –selection, compensation and appraisal of an agency, role of creativity in advertising.				<b>11</b>
<b>SECTION- B</b>					
<b>UNIT-III</b>	<b>Consumer behaviour and marketing strategy;</b> consumer involvement and decision making, information search process, evaluative criteria and decision rules, consumer motivation, information processing and consumer perception, Indian consumer market-economic, social, cultural and psychographic aspects.				<b>11</b>
<b>UNIT-IV</b>	Consumer attitudes and attitude change, influence of personality and self concept on buying behaviour, psychographics and lifestyle, influence of culture, subculture and social class, reference group influence, diffusion of innovation and opinion leadership, family decision making, industrial buying behaviour, consumer behaviour audit.				<b>12</b>
<b>Text books</b>	1.Batra R., Myers, J. G. and Aaker D. A., Advertising Management Prentice Hall of India, New Delhi.				

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	2.Schiffman, L. G. and Kanuk, L. L. Consumer Behavior, Prentice Hall of India, New Delhi.
<b>Reference books</b>	1.Arens W.A., Contemporary AdvertisingTata McGraw Hill, New Delhi. 2.Belch, G.E. and Belch M. A., Introduction to Advertising and PromotionIrwin Publishers, Chicago (USA). 3.Laudon, D.L. &Bitta, A. J. D. Consumer Behavior,Tata McGraw HillNew Delhi. 4.Sandage, C.H., Fryberger V. and Rotzoll K., Advertising, AITBS, Delhi.
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination)

<b>Title</b>	<b>MANUFACTURING SYSTEMS MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-9<sup>th</sup></b>	<b>L T P</b>	3 1 0	
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	-				

### THEORY

<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>				Hrs	
UNIT-I	Introduction : The challenge and Requirements of Manufacturing, Various methodologies, Cellular Manufacturing			5	
UNIT-II	Cell Formation - Early methods: Production Flow Analysis, Rank Order Clustering, Similarity based methods.			6	
UNIT-III	Cell formation algorithms: P median formulation, Assignment formulation, ZODIAC algorithm, Metaheuristics, Considering sequence, Considering workload.			5	
UNIT-IV	Minimizing intercell movement: Remainder cells, Machine duplication, Part subcontracting;Product based cell formation.			6	
<b>SECTION- B</b>					

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UNIT-V	Operator Allocation: Rabbit chasing, Dedicating operators, Static operator allocation problems, Network Models.	5
UNIT-VI	Cell scheduling and sequencing: Part Family sequencing, Dispatching rules; Cell layout.	6
UNIT-VII	Just In Time Manufacturing: Concepts and definitions Implementation issues', Kanban, CONWIP and Kanban	6
UNIT-VIII	Synchronous Manufacturing: The Goal, Principles of SM, TOC and LP, Scheduling. Flexible Manufacturing Systems: Concepts, FMS loading problems, FMS scheduling problems.	6
<b>Text books &amp; Reference books:</b>	1. Askin R G and Strandridge C R (1993), Modelling and Analysis of Manufacturing. 2. Askin R G and Goldberg J B (2002), Design and Analysis of Lean Production Systems, John Wiley and Sons.	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination)	

<b>Title</b>	<b>WORKSHOP ON MULTIVARIATE STATISTICAL TECHNIQUES</b>			<b>Credits</b>	01
<b>Code</b>	MBA 507	<b>Semester:-9<sup>th</sup></b>		<b>L T P</b>	0 0 2
<b>Max.Marks</b>	<b>End term -</b>	<b>Mid term</b>	<b>Practical – 50</b>	<b>Elective</b>	N
<b>Pre requisites</b>					
<b>Practical -</b>					
<b>SECTION- A</b>					
Introduction- Classification of statistical techniques, Classification of multivariate techniques, Application of multivariate techniques in research in different functional areas of business. Specific Techniques of MVA – MANOVA , Discriminant Analysis					
<b>SECTION- B</b>					
Specific Techniques of MVA contd. -Factor Analysis, Cluster Analysis, Multidimensional Scaling, Conjoint Analysis. Multiple Regression					
<b>Text books &amp; Reference books:</b> 1.Carver Robert H. and Jane Gradwohl Nash, Doing Data Analysis with SPSS 10.0, Duxbury Thomson Scanning. 2. Cooper, D. R. and Schindler, P. S., Business Research Methods, Tata McGraw Hill Publishing Co.					

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3. Hair, Joseph, F., Jr. M. Rolph E. Anderson, Ronald L. Tatham, William C. Black . Multivariate Data Analysis, Pearson Education.
4. Johnson, Richard A. and Dean W. Wichern (2003). Applied Multivariate Statistical Analysis, . Prentice Hall of India Ltd., Eastern Economy Edition.
5. Malhotra, N. and Dash, S., Marketing Research: An Applied Orientation, Pearson Education.
6. Sharma, Subhas . Applied Multivariate Techniques, John Wiley and Sons Ltd.

<b>Title</b>	<b>WORKSHOP ON BUSINESS COMMUNICATION &amp; SOFT SKILLS</b>			<b>Credits</b>	01
<b>Code</b>	MBA 508	<b>Semester:-9<sup>th</sup></b>		<b>L T P</b>	0 0 2
<b>Max.Marks</b>	<b>End term -</b>	<b>Mid term</b>	<b>Practical</b> 50	<b>Elective</b>	N
<b>Pre requisites</b>	-				
<b>Practical</b>					
<b>SECTION- A</b>					
<b>Meaning and importance of communication in business:</b> Process, types of communication: formal and informal and their characteristics, essentials of effective business communication, Channels of communication, their effectiveness, limitations, Barriers of communication, approaches to effective Communication, Negotiation skills and participating decision making in Management Presentations, Book Reviews and Summaries					
<b>Time Management and Goal Setting:</b> Identification of Time Wasters, Prioritisation of Work (ABC Method), Goal Setting.					
<b>Listening Skills:</b> Listening to Specific Information, Identifying Main Issues, Seeing Beyond the Surface					
<b>Team Assignment:</b> Effects of Competition on Individual and Group Behaviour, Competitive and Collaborative Team Behaviour; Team/ Group Dynamics, Team Assignment					
<b>SECTION- B</b>					
<b>Stress Management:</b> Symptoms of Stress, Coping Approaches.					
<b>Report Writing:</b> Process, Structure and Layout. Principles of clear writing, often misused words, applications and requests, positive and negative responses to requests, routine messages, memos, organizing meetings, preparation of agenda and minutes, business etiquette, telephone etiquette, e-mail etiquette.					
<b>Interpersonal Skills:</b> Negotiations, social skills, assertive skills, cross-cultural communications.					
<b>Leadership Skills:</b> Concepts of leadership, leadership styles, insights from great leaders.					
<b>Text books &amp; Reference books:</b>					
1. Lesikar, Petit & Lesikar's: Basic Business Communication , Tata McGraw Hill					
2. Poe & Fruchling: Basic Communication, AITBS.					
3. Taylor: English Conversion Practice, Tata McGraw Hill.					
4. Diwan & Aggarwal: Business Communication, Excel Books.					
5. Baugh, Frayer & Thomas: How to write first class Business Correspondence, Viva Books.					

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

### SYLLABUS OF B.E. (Chemical)-MBA 2020-2025 FIFTH YEAR

#### 10<sup>th</sup> SEMESTER

<b>Title</b>	<b>STRATEGIC MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>	MBA 510	<b>Semester:-</b> 10 <sup>th</sup>		<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term</b> <b>50</b>	<b>Practical</b> --	<b>Elective</b>	N
<b>Pre requisites</b>	Marketing Management; Business Environment				
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					
UNIT-I	<b>Basic Concepts of Strategic Management and Business Policy</b> - Evolution of strategic management - strategic management process - levels of strategy - constitution of board - role and functions of corporate board and top management in strategic management.				5
UNIT-II	<b>Environmental Scanning</b> - External and internal analysis – SWOT - industry analysis - Porter's five force model and strategies groups- resource based view and value chain analysis - core competency and competitive advantage - VRIO model				6
UNIT-III	<b>Strategy Formulation:</b> SWOT analysis, Strategies Factor Analysis Summary (SFAS), TOWS matrix, Corporate Strategy: Stability, Profit, Growth, Concentration, Diversification, Cost leadership, Differentiation, Focus, Life cycle effects, Tactics.				6
UNIT-IV	<b>Functional Strategy:</b> Marketing, Financial, Operation, Human resource, Research and development, Risk culture, Strategy in global environment.				5
<b>SECTION- B</b>					
UNIT-V	<b>Building and Restructuring Business:</b> Start up route, Acquisition, Joint venture, Merger, Takeover, Restructuring, Retrenchment, Divestment, Harvest, Liquidation, Turnaround strategy				6
UNIT-VI	<b>Strategic Choice:</b> Concept, Process, BCG Matrix, GE matrix, Corporate parenting, Process of strategic choice, Balance scorecard.				5
UNIT-VII	<b>Implementation of Strategy:</b> Designing of structure, Designing of effective control system, ISO 9000, Strategic system, Strategic change process,McKinsey 7S framework				5
UNIT-VIII	<b>Strategic Evaluation and Control:</b> Techniques of strategic evaluation and control, Strategic issues in technology management, Entrepreneurial ventures, Issues in non-profit organization issues, Issues in evaluation and control, Popular strategies of non-profit organizations.				7
<b>Text books</b>	1. J. David Hunger, Thomas L. Wheelen and tom Wheelen: Essentials of Strategic				



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	<p>Management, Prentice Hall India</p> <p>2. Charles W.L. Hill and Gareth P. Jones: Strategic Management, Dreamtech Press.</p>
<b>Reference books</b>	<p>1. Michael Hitt and Robert E. Hoskisson: Strategic Management – Competitiveness and Globalization, South Western Thomson.</p> <p>2. Glueck: Business Policy and Strategic Management, Tata McGraw Hill.</p> <p>3. Thomas: Strategic Management, Harper and Row.</p> <p>4. Jeyarathnam: Strategic Management, Himalaya Publishing House.</p> <p>5. Sharplin: Strategic Management, Tata McGraw Hill.</p> <p>6. Francis: Strategic Management, Himalaya Publishing House.</p> <p>7. Colin White: Strategic Management, Palgrave Macmilan.</p> <p>8. M.E. Porter: Competitive Advantage, The Free Press.</p>
<b>Course Assessment Methods</b>	<p>Assessment will consist of the following components</p> <p>1. Mid-Term Assessment:              One best of two minor tests (50% of Mid -term marks)              Assignments (20% of Mid-term marks)              Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)              Attendance. (10% of Mid-term marks)</p> <p>2. End –Term Assessment: University Examination)</p>

### GROUP-C: FUNCTIONAL SUBJECTS 5& 6

<b>Title</b>	<b>STRATEGIC COST MANAGEMENT</b>				<b>Credits</b>	04
<b>Code</b>		Course type	Deptt. Elective	<b>Semester-10<sup>th</sup></b>	<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>		<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	<b>Financial Accounting</b>					
<b>Course objective</b>	Help students develop an understanding of various costing systems in different strategic decision situations, explain contemporary issues in costing systems such as activity-based costing and pricing, target costing, etc and comprehensive view on management control covering control structure issues					
<b>Course outcomes</b>	<p>1. Understand and apply cost drivers</p> <p>2. Apply alternative cost accounting methods</p> <p>3. Analyze cost, variance and value generated</p> <p>4. Analyze and evaluate cost management strategies</p>					
<b>THEORY</b>						
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.					
<b>SECTION- A</b>						<b>Hours</b>
UNIT-I	<b>Strategic Cost Management:</b> Meaning, Nature and Significance of Strategic Cost Management, Limitations of Traditional Costing, Difference between Conventional					8

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	Cost Analysis and Strategic Cost Analysis, Financial, Operational and Strategic Views of Cost, Contemporary Cost Management Tools, Activity Based Costing and Activity Based Management: Treatment of Cost, Steps, Advantages, Disadvantages.	
UNIT-II	<b>Value Analysis:</b> Meaning of Value Analysis and value addition, Strategic Application of Value Chain Analysis. <b>Strategic Positioning Analysis:</b> Critical Success Factors and SWOT Analysis.	7
UNIT-III	<b>Cost Volume Profit Analysis:</b> Cost Behaviour Pattern, Cost Estimation Methods, Assumptions of CVP Analysis, Applications of CVP, Break Even Analysis, CVP Analysis in the choice of Cost Structure, Multiple Product Analysis.	7
<b>SECTION- B</b>		
UNIT-IV	<b>Variance Analysis:</b> Basics of Standard Costs, Material Variances, Labour Variances, Overhead Variances, Difficulties in Measuring Variances, Evaluation of Control based on Standard Costing, Numerical Problems. <b>Valuation of Intangible Assets:</b> Meaning of Intangible Assets, Acquired and Generated Assets, Importance, Methods of Valuation for Goodwill, Human Resource, Brands, Patent, Relevant Indian and International accounting standards, Current Scenario in India, Numerical Problems.	8
UNIT-V	Responsibility Accounting, centres, Activity based Responsibility Accounting, Behavioural aspects of responsibility accounting, Transfer Pricing.	7
UNIT-VI	Performance Evaluation: Traditional Framework of Performance Evaluation, Performance Measurement System, Balanced Scorecard, Implementation, Strengths and Weaknesses of Balance Scorecard, Behavioral Views, Rewards to performance, Incentive Compensation <b>Productivity improvement:</b> Various tools and techniques including Kaizen and Six Sigma.	8
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. John K. Shank, Vijay Govindarajan: Strategic Cost Management, Free Press.</li> <li>2. Callie Berliner: Cost Management for Today's Advanced Manufacturing - The CAM-1 Conceptual Design, Harvard Business School Press.</li> </ol>	
<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. Robert S. Kaplan and Robin Cooper: Cost &amp; Effect, Harvard Business School Press</li> <li>2. Blocheret. al.: Cost Management-A Strategic Emphasis, McGraw-Hill.</li> <li>3. Govindarajan Shank: Strategic Cost Management, Free Press.</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:                One best of two minor tests (50% of Mid -term marks)                Assignments (20% of Mid-term marks)                Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)                Attendance. (10% of Mid-term marks)</li> <li>2. End –Term Assessment: University Examination</li> </ol>	

<b>Title</b>	<b>INDUSTRIAL &amp; RURAL MARKETING</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-10<sup>th</sup></b>		<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid-term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	<b>Marketing Management</b>				
<b>THEORY</b>					

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.	
<b>SECTION- A</b>		HRS
UNIT-I	<b>Introduction to Industrial Marketing:</b> Definition of Industrial & Consumer Product, Basis of Classification; Difference between Industrial & Consumer Marketing, Concept of Derived Demand, Classification of Industrial Consumers, Industrial goods, Key Characteristics of Organizational Buying Process.	7
UNIT-II	<b>Purchasing Organization:</b> Structure / Functions; Commercial Enterprises - Government / Institutional Markets Industrial Buying Process.	6
UNIT-III	<b>Marketing Strategies:</b> Buying Situation Analysis with Marketing, Buying Motivations of Organizational Buyers Rational / Emotional Motives, Purchaser's Evaluation of Potential Suppliers, Environmental Influences on Organizational Buying, Segmenting the Industrial Market, Targeting & Positioning, New Industrial Product Development, Managing Business Marketing Channels, Industrial Pricing Process, Industrial Advertising, Managing Industrial Personal Selling Function.	9
<b>SECTION- B</b>		
UNIT-IV	<b>Introduction to Rural Marketing:</b> Definition, concept, scope, nature, etc., Size and Nature of Indian Rural Markets Rural Demand. Buying Characteristics, Decision Process, Behavior and Evaluation, Segmenting the Rural Market, Targeting and Positioning, Product Strategy: Significance, concepts and product mix decisions, Pricing Strategy: Objectives, Policies and Strategies.	11
UNIT-V	Promotion Strategies: Advertising, Sales Promotion, Communication in Rural Marketing - Language and Culture Distribution Strategies for rural Marketing and channels of distribution, Role of Co-operative, Government, financial institutions, public sector undertaking, regulated markets and public distribution systems, Intervention of IT in rural Markets	12
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. Krishana K Hawaldar: Industrial Marketing, Tata McGraw Hill.</li> <li>2. Francis Cherunilam: Industrial Marketing Text and Cases, Himalaya Publishing House</li> <li>3. B. Dogra and K. Ghuman: Rural Marketing – Concepts and Practice, Tata McGraw Hill.</li> </ol>	
<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. Reeder et al: Industrial Marketing: Analysis, Planning &amp; Control, Prentice Hall India.</li> <li>2. Hory Shankar Mukerjee: Industrial Marketing, Excel Books.</li> <li>3. T.P. Gopalswamy: Rural Marketing, Environment problems and strategies, Wheeler Publishing.</li> <li>4. C.S.G. Krishnamacharulu and LalithaRamkrishnan: Rural Marketing, Text and Cases, Pearson Education.</li> <li>5. R. Dwyer and J.F. Tanner: Business Marketing, Tata McGraw Hill.</li> <li>6. P.K. Ghosh: Industrial Marketing, Oxford University Press.</li> <li>7. P. Kashyap and S. Ravi: Rural Marketing, Biztantra.</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:               <ul style="list-style-type: none"> <li>One best of two minor tests (50% of Mid -term marks)</li> <li>Assignments (20% of Mid-term marks)</li> <li>Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)</li> </ul> </li> </ol>	

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination
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<b>Title</b>	<b>PRODUCT INNOVATION IN TECHNOLOGY BUSINESS</b>	<b>Credits</b>	04
<b>Code</b>	<b>Semester:-10<sup>th</sup></b>	<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>
<b>Pre requisites</b>	<b>Marketing Management</b>		
<b>THEORY</b>			
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.		
<b>SECTION- A</b>			<b>HRS</b>
UNIT-I	Production function: production function & the organization, five Ps of production, production strategy, planning & controlling the operations - product selection linking the product with marketing, planning the operation, setting up production system, controlling the production,		7
UNIT-II	Manufacturing system design: organization of manufacturing operation, job batchand flow production methods, group technology - coding composite component, product flow analysis, group technology and just-in-time.		7
UNIT-III	Just-in-time manufacturing: JIT manufacturing, people involvement, total quality control, advantage of JIT manufacturing, elements that support JIT flow, the kanban system optimized production technology OPT.).		8
<b>SECTION- B</b>			
UNIT-IV	manufacturing & service strategies: manufacturing as a competitive advantage, corporate strategy & manufacturing strategy, production planning and inventory control in manufacturing strategy.		7
UNIT-V	Theory of constraints & synchronous manufacturing: introduction, theory of constraints, the goal of performance measures, synchronous manufacturing, speed to market, bench marking, simultaneous engineering, reverse engineering, technology audit, strategic alliances.		8
UNIT-VI	Technological innovation in manufacturing: automated design support, computer numerical control (CNC) machines, computer aided manufacturing (CAM), flexible manufacturing system (FMS), computer integrated manufacturing (CIM), artificial intelligence (AI), automation in services.		8
<b>Text books &amp; Reference books:</b>	1. Dilworth, J.B., Production & Operations Management, McGraw-Hill. 2. Narasimhan, S.L., Mcleavey, D.W. and Billington, D.W., Production Planning & Inventory Control, Prentice Hall of India.		
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks)		

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	Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination
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<b>Title</b>	<b>PERFORMANCE MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-9<sup>th</sup></b>		<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	<b>Human Resource Management</b>				
<b>THEORY</b>				<b>Time</b>	
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>Hrs</b>
<b>UNIT-I</b>	<b>Performance Management:</b> Definition, Disadvantages of poorly implemented Performance Management (PM) Systems - aims and role of PM Systems, Characteristics of ideal PM Systems.				<b>5</b>
<b>UNIT-II</b>	<b>Process of Performance Management:</b> Prerequisites, Performance Planning, performance execution, performance assessment, performance review, performance renewal and recontracting. <b>Performance Management Theatre:</b> Concept, pillars of Performance management theatre, planning managee performance and development, monitoring managee performance and development, annual stocktaking.				<b>6</b>
<b>UNIT-III</b>	<b>Planning Management Performance and Development:</b> Setting objectives, Organisational and individual performance plans, Components of Managee performance and development plan, setting mutual expectations and performance criteria				<b>5</b>
<b>UNIT-IV</b>	<b>Monitoring and Mentoring Manager Performance and Development:</b> Introduction, Supervision, Objectives and Principles of Monitoring, monitoring process, periodic reviews, problem solving, process and principles of managee development, role efficacy.				<b>6</b>
<b>SECTION- B</b>					
<b>UNIT-V</b>	<b>Annual Stocktaking:</b> Stock taking performance, stock taking discussions, stocktaking potential, Tools for stocktaking potential (assessment centres, 360 degree feedback, managee career development window).				<b>5</b>
<b>UNIT-VI</b>	<b>Appraising for Recognition and Rewards:</b> Pros and cons of appraising, appraiser and appraisee concerns, common rating errors, purposes for appraising, methods of appraisal, implementing the appraisal system				<b>6</b>
<b>UNIT-VII</b>	<b>Reward Management:</b> Definition, foundations of reward management, financial and non-financial rewards, factors affecting level of pay, developing reward processes.				<b>5</b>

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>UNIT-VIII</b>	<b>Pay Structures:</b> fixed vs variable pay, graded pay structures, broadbanding, developing pay structures. <b>Pay systems:</b> team based pay, performance related pay, short term incentives, long term incentives, executive compensation, international compensation, benefits	<b>7</b>
<b>Text books</b>	<ol style="list-style-type: none"> <li>1. Michael Armstrong and Angela Baron: Performance Management, Jaico Publishing House.</li> <li>2. Chadha, Prem: Performance Management :It's about performing, Not just appraising, Macmillan.</li> <li>3. T.V. Rao: Performance Management and Appraisal Systems, Sage Publication</li> </ol>	
<b>Reference books</b>	<ol style="list-style-type: none"> <li>1. Michael Armstrong and Helen Murlis: Handbook of Reward Management, Crest Publishing House.</li> <li>2. S.R. Kandula: Performance Management – Strategies, Interventions, Drivers, Prentice Hall India.</li> <li>3. D. Goel: Performance Appraisal and Compensation Management – A Modern Approach, Prentice Hall India.</li> <li>4. R.I. Henderson: Compensation Management – Rewarding Performance in the Modern Organization, Reston Publishing.</li> <li>5.D.R. Marshall: Successful Techniques for Solving Employee Compensation Problems, John Willey &amp; Sons.</li> </ol>	
<b>Course Assessment Methods</b>	Assessment will consist of the following components <ol style="list-style-type: none"> <li>1. Mid-Term Assessment:                One best of two minor tests (50% of Mid -term marks)                Assignments (20% of Mid-term marks)                Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks)                Attendance. (10% of Mid-term marks)</li> <li>2. End –Term Assessment: University Examination</li> </ol>	

<b>Title</b>	<b>INTERNATIONAL BUSINESS MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>			<b>Semester:-9<sup>th</sup></b>	<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>					
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>HRS</b>
<b>UNIT-I</b>	<b>Introduction to International Business:</b> Dynamics of International Business, International Trade Theories and Business Implications, Process of Globalization, Global Business Environment, World Marketing Environment, Political/ Legal/ Cultural/ Social/Psychological dimensions.			<b>11</b>	
<b>UNIT-II</b>	<b>Strategies and Structures of International Business:</b> International			<b>11</b>	

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	Business Strategies, Organizational Structures and Strategies of International Business, International Entry Strategies, Strategies Alliances, Role of GATT / WTO.	
<b>SECTION- B</b>		
<b>UNIT-III</b>	<b>Marketing:</b> Planning for International Marketing - Overseas Marketing Research and Information System, Foreign Market Entry Strategies, International Operations Management, Planning for International Marketing-Overseas MR, IS, Foreign Market ,entry strategies, International marketing. Decisions-Product Branding, Packaging, Pricing, Distribution, Sales, Sales & Promotion Decision & strategies.	11
<b>UNIT-IV</b>	<b>Emerging Issues:</b> Emerging Economies, e-business, Operating in a Borderless World, Export Promotion, Export documents and Procedures, Export Risk Insurance; Major problems of Indian Export Sector.	12
<b>Text books</b>	1. John D. Daniels, Radebaugh and Sullivan: International Business Environment and operations, Pearson Education. 2. Michael RC Zinkola, A. Ronkainen and Michael H. Moffett: International Business.	
<b>Reference books</b>	1. S. TomerCavesgit, Gary Knight and John R. Riesenberger: International Business strategy - Management and the new realities, Pearson Education. 2. Rakesh Mohan Joshi: International Business, Oxford University Press. 3. M.K. Bhat: International Trade and Financial Environment, Anne Books. 4. Alan M. Rugman, Richard M. Hodgetts: International Business – Strategic Management Approach, Tata McGraw Hill. 5. John Matinussan: Transnational Corporations in a Developing Economy – The Indian Experience, Sage Publications. 6. Bennett Roger: International Business, Pitman Publishing. 7. Francis Cherunilam: International Economics, Tata McGraw Hill. 8. M.R. Dixit: Environmental Factors Relevant for Strategy Formulation, Indian Management Association. 9. T. Glueek: Business Policy and Strategic Management, McGraw Hill. 10. C.P. Nindleberger: International Economics, R.D. Irwin.	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination	

### GROUP-D: FUNCTIONAL SUBJECTS 7 & 8

<b>Title</b>	<b>MANAGEMENT OF FINANCIAL SERVICES</b>			<b>Credits</b>	04
<b>Code</b>		Course type	Deptt. Elective	<b>Semester-10<sup>th</sup></b>	<b>L T P</b>
<b>Max.Marks</b>	<b>End term 50</b>	<b>Midterm 50</b>		<b>Practical -</b>	<b>Elective</b>
<b>Pre requisites</b>					<b>Contact Hours</b>
<b>Course Objectives</b>					

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>Course Outcomes</b>	<ol style="list-style-type: none"> <li>1. Acquire the skills necessary in managing the financial components of personal and business finances</li> <li>2. Assess consumer financial needs and the mechanisms available for fulfilling these needs.</li> <li>3. Evaluate the role of technology and the legal, ethical and economic environment as it relates to financial services.</li> </ol>	
<b>THEORY</b>	<b>Time</b>	3 hours
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question, which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part. The duration of End Term exam will be 3 hrs.	
<b>SECTION- A</b>		
UNIT-I	<p><b>Financial Services:</b> Introduction of Financial Intermediaries and Financial Services, Organisation of the Financial Service Industry, Various Financial Intermediaries, Financial Services in India.</p> <p><b>Financial Regulation:</b> Need for Regulation of Financial Market, Theoretical and Economic Perspective of Regulation, International Regulatory Framework, Deregulation of Indian Financial System, Revolution of Financial Services, Financial System and Securitised Financial System, Financial Market, Functions of Stock Exchange, Debt Market, Government Securities Market, Regulations for Primary Market, Regulations for Secondary Market.</p>	<b>8</b>
UNIT-II	<p><b>Depository Services:</b> Introduction to Depository Services, Depository Participants in India, Role of NSDL and CDSL, Difference Between NSDL and Bank, Services Offered By Depository Participants, Products Offered By Depository Participants, Process of Dematerialisation, Difference Between Physical and Electronic Holding of Securities.</p> <p><b>Broking:</b> Broking Services and Trading in Equity Broking and Trading in Debt;</p>	<b>8</b>
UNIT-III	<p><b>Mutual Funds:</b> Concept of Mutual Funds, Types of Mutual Funds, Advantages, Structure of Mutual Funds and tax treatment, SEBI and Mutual Funds Regulations;</p> <p><b>Insurance Services:</b> Introduction, Types of Insurance, Life Products, Non-Life Products.</p>	<b>7</b>
<b>SECTION- B</b>		
UNIT-IV	<p><b>Debt Securitisation:</b> Securitisation as a funding Mechanism, Securitisation of Mortgaged and Non- Mortgaged Assets Issue Management;</p> <p><b>Credit Rating:</b> Meaning of Credit Rating, Process of Credit Rating, and Factors affecting Rating, Types of Rating, Advantages and Disadvantages of Credit Rating, Methodology of Credit Rating, Credit Rating Agency Regulation Act 1974, Credit Rating in India.</p> <p><b>Housing Finance:</b> Procedure of Loan disbursement, Legal Framework of Housing Finance;</p>	<b>7</b>
UNIT-V	<p><b>Venture Capital:</b> Nature, Scope, Regulatory Framework, Investment Process, Factors Affecting Venture Capitalist, Major Trends, Reasons for Slow Growth, Limitations of Venture Capital.</p> <p><b>Credit Cards,</b> Types, Settlement Process, Mechanism, Member Establishment, Member Affiliates.</p> <p><b>Leasing:</b> Definition, Types of Leases, Advantages, Disadvantages, Leasing and Commercial Banking Sector, Risk in Leasing, Lease Proposal Analysis, Legal Aspects of leasing</p>	<b>8</b>
UNIT-VI	<p><b>Innovation in Fin-tech:</b> Cryptocurrency and blockchain – concept and regulation; payment banks – concept and regulations; UPI payments – concept,</p>	<b>7</b>



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	participants and regulation; new umbrella entity for retail payments – concept, participants, RBI regulation	
<b>Text books</b>	1. M.Y. Khan: Indian Financial Services, Tata McGraw Hill. 2. V. A. Avdhani: Marketing of Financial Services, Himalaya Publishing House.	
<b>Reference books</b>	1. Lalit K. Bansal: Merchant Banking and Financial Services, Unistar Publications. 2. V. K. Bhalla: Management of Financial Services, Anmol Publications. 3. G.S. Batra and B.S. Bhatia: Management of Financial Services, Deep & Deep Publications 4. Priyanka Singh: Management of Financial Services, Thakur Publications. 5. Satish K. Matta: Management of Financial Institutions and Services, Vrinda Publications P.S. Rose and S.C. Hudgins: Bank Management and Financial Services, Tata McGraw Hill.	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination	

<b>Title</b>	<b>HUMAN VALUES AND ETHICS</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-</b> 10 <sup>th</sup>	<b>L T P</b>	3 1 0	
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical</b> -	<b>Elective</b>	Y
<b>Pre requisites</b>					
<b>THEORY</b>				<b>Time</b>	
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					
UNIT-I	<b>Human Values:</b> importance, sources, types, frameworks. Relationship of values with ethics. Prominent human values-based teachings of Vedas,Gita,GuruGranth Sahib, Bible, Quran. Value-based management. Spiritualityand the corporation. Moral muteness. Philosophers: Vidur, Plato, Aristotle, Chanakya.				11
UNIT-II	<b>Business Ethics:</b> nature, characteristics and need. Ethical theories and approaches: traditional, deontological and teleological theories, Gandhian philosophy of wealth management, philosophy of trusteeship.				11
<b>SECTION- B</b>					
UNIT-III	Indian value system and values, Indian ethos in management, creating ethical corporate structures, ethical leadership, law and ethics, work ethics: nature and scope, ethical issues at workplace, cross cultural ethics, ethical dilemmas.				11

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UNIT-IV	Ethics in business disciplines: HRM (downsizing, balance of power, compensation, conflicts), marketing (commodity culture, pricing, advertising), finance and accounting (stock market, financial reporting, insider trading), technology (privacy at workplace, genetically modified foods).	12
<b>Text books &amp; Reference books:</b>	1.Chakraborty, Managerial Transformation by Values, Sage, New Delhi. 2.Hartman, Business Ethics, Tata McGraw-Hill, New Delhi. 3.HartmanandChatterjee, Business Ethics, Tata McGraw-Hill, New Delhi.	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination	

<b>Title</b>	<b>FACILITIES AND LOCATIONS MANAGEMENT</b>			<b>Credits</b>	04
<b>Code</b>	Semester:-10 <sup>th</sup>			<b>L T P</b>	31 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>				<b>Contact Hours</b>	60
<b>THEORY</b>				<b>Time</b>	3 Hours
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>HRS</b>
UNIT-I	Basics of Facilities Location Selection – basic concepts, importance of site selection for facilities, factors affecting site selection - objective and subjective factors, considerations in site selection,			6	
UNIT-II	different types of facilities layout – product, process, combination, fixed, and cellular layouts – comparison of layouts and the factors affecting the layout decisions			5	
UNIT-III	Location Selection Schemes and Layout Schemes – methods to select location for single facility problems and multiple facility problems - tools to analyse the flow requirements in a facility,			6	
UNIT-IV	systematic layout planning – examples, assembly lines, line balancing methods			5	
<b>SECTION- B</b>					
UNIT-V	Design of Auxiliary Service Spaces – receiving and shipping, storage, aisles, warehousing and employee services – office layout techniques and space requirements, environmental aspects like lighting, ventilation, dust control, humidity - different types of plant			6	

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	services like steam, compressed air etc.	
UNIT-VI	<b>Materials Handling System and Equipment</b> – principles, materials handling in plants, stores, and warehouses, receiving and dispatch area – choice of material handling equipment – cost control in material handling - automatic guided vehicles – basic concept, design and operational control of an AVG system	5
UNIT-VII	<b>Elements of Industrial Safety</b> – health hazards and health standards, NIOSH guidelines and health standards - accidents – causes and prevention of accidents,	6
UNIT-VIII	safety measures and standards, fire and fire fighting equipment, heat stress and prevention, pollution and environmental considerations, occupational safety and health norms	5
<b>Text books</b>	1. Facility Layout and Location: An Analytical Approach, 2nd ed, Francis McGinnis, and White, Prentice Hall, Englewood Cliffs, New Jersey, 1992 2. Manufacturing Facilities Design and Materials Handling, 2nd ed, Mathew P. Stephens, Fred E. Meyers, Purdue University Press 2013	
<b>Reference books</b>	1. Facilities Planning, Tompkins and White, 4th ed, Wiley, 2013 2. Plant Layout and Materials Handling, 2nd ed, S. C. Sharma, Khanna Publishers 3. Plant Layout and Materials Handling – James A. Apple, e-book	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid-term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination	

<b>Title</b>	<b>INDUSTRIAL RELATIONS AND LABOUR LAWS</b>			<b>Credits</b>	04
<b>Code</b>		<b>Semester:-10<sup>th</sup></b>		<b>L T P</b>	3 1 0
<b>Max.Marks</b>	<b>End term 50</b>	<b>Mid term 50</b>	<b>Practical -</b>	<b>Elective</b>	Y
<b>Pre requisites</b>	<b>Human Resource Mangement</b>				
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>Hrs</b>
<b>UNIT-I</b>	<b>Overview of Industrial Relations:</b> Concept of IR, Nature of IR, Objectives of IR, Evolution of IR in India, Theories of IR, Systems approach to IR.			<b>5</b>	
<b>UNIT-II</b>	<b>Trade Unionism:</b> Concept of Trade Unions , Functions of Trade Unions , Approaches , Structures of Trade Unions. <b>The Trade Unions Act, 1926:</b> Trade Union, Registration of Trade Unions,			<b>6</b>	

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

	Rights and Liabilities of registered trade unions.	
<b>UNIT-III</b>	<b>Grievance Handling:</b> Grievance, Causes/Sources of Grievances, Grievance Redressal Machinery, Legislative Aspects of the Grievance Redressal Procedure in India, Domestic enquiry.	<b>5</b>
<b>UNIT-IV</b>	<b>The Industrial Disputes Act, 1947:</b> Industry, workman, Industrial Dispute - methods and authorities for the settlement of industrial disputes, Strikes and Lockouts, Lay off and Retrenchment. <b>inings:</b> Concept, meaning - objectives of collective bargaining, Negotiating techniques and skills, process of collective bargaining, Impact of Collective Bargaining.	<b>6</b>
<b>SECTION- B</b>		
<b>UNIT-V</b>	<b>The Workmen's Compensation Act, 1923:</b> Workman, employer's liability to pay compensation, disablement, amount of compensation. <b>Tripartite and bipartite bodies:</b> Workers Participation in Management.	<b>5</b>
<b>UNIT-VI</b>	<b>Factories Act, 1948:</b> Factory, worker, manufacturing process, provisions of health, safety and welfare, working hours of adults, special provisions relating to children, annual leave with wages.	<b>6</b>
<b>UNIT-VII</b>	<b>Industrial Relations and emerging scenario:</b> Industrial Relations and technological change, International Labour Organisation (ILO): Objectives and Structure, Future of Industrial Relations <b>Standing Orders Act, 1948:</b> Standing orders, certification of draft standing orders, duration and modification of certified orders.	<b>7</b>
<b>UNIT-VIII</b>	<b>Employee's State Insurance Act, 1948:</b> Contribution, principle employer, immediate employer, different benefits.	<b>6</b>
<b>Text books</b>	1. Meenu Paul: Labour & Industrial Law, Allahabad Law Agency. 2. S.N. Mishra: Labour & Industrial Law, Central Law Publications. 3. C.B. Mamoria and Gankar Mamoria, - Dynamics of Industrial Relations, Himalaya Publishing House.	
<b>Reference books</b>	1. VenkataRatnam: Industrial Relations, Oxford University Press. 2. A. Monappa: Industrial Relations, Tata McGraw Hill. 3. S.N. Dhayani: Industrial Relations System, Sultan Chand and Sons 4. K.K. Ahuja: Industrial Relations – Theory and Practice, Deep and Deep Publications. 5. J.T. Dunlop: Industrial Relations System, Harvard Business Press. 6. E.A. Ramaswamy and U. Ramaswamy: Industry and Labour Oxford University Press 10. G.P. Sinha and P.R. N. Sinha: Industrial Relations and Labour Legislation, Oxford and IBR Publishing.	
<b>Course Assessment Methods</b>	Assessment will consist of the following components 1. Mid-Term Assessment: One best of two minor tests (50% of Mid-term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2. End –Term Assessment: University Examination	

<b>Title</b>	<b>INTERNATIONAL FINANCIAL MANAGEMENT</b>	<b>Credits</b>	04
<b>Code</b>	<b>Semester:-10<sup>th</sup></b>	<b>L T P</b>	3 1 0

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

Max.Marks	End term 50	Mid term 50	Practical -	Elective	Y
<b>Pre requisites</b>	<b>Financial Accounting;FinancialManagement</b>				
<b>THEORY</b>					
<b>Note for the Examiner</b>	The examiner will set seven questions of equal marks. The first question ,which is compulsory, will cover the entire syllabus, having ten conceptual questions of one mark each or five questions of two marks each. Rest of paper will be divided into two parts (SECTIONS) having three questions each and candidate is required to attempt at least two questions from each part.The duration of End Term exam will be 3 hrs.				
<b>SECTION- A</b>					<b>HRS</b>
<b>UNIT-I</b>	<b>Internationalization of financial function:</b> International financial management - An overview, Objectives of international firm and impact of risk; Financial function in multinational corporation.			7	
<b>UNIT-II</b>	<b>Foreign Exchange Risk:</b> Foreign exchange market, foreign exchange risk and exposure, exposure information system, strategies for exposure management and techniques for foreign exchange rate projections, devices for foreign exchange risk and exposure devices.			7	
<b>UNIT-III</b>	<b>Managing Short-term Assets and Liabilities:</b> International working capital management, Investment of international money market; Euro currency and other important international money market, International ranking and payment settlement mechanism.			8	
<b>SECTION- B</b>					
<b>UNIT-IV</b>	<b>Internationalization of financial function:</b> International financial management - An overview, Objectives of international firm and impact of risk; Financial function in multinational corporation.			7	
<b>UNIT-V</b>	<b>Foreign Exchange Risk:</b> Foreign exchange market, foreign exchange risk and exposure, exposure information system, strategies for exposure management and techniques for foreign exchange rate projections, devices for foreign exchange risk and exposure devices.			8	
<b>UNIT-VI</b>	<b>Managing Short-term Assets and Liabilities:</b> International working capital management, Investment of international money market; Euro currency and other important international money market, International ranking and payment settlement mechanism.			8	
<b>Text books</b>	1. P.G. Apte: International Financial Management, Tata McGraw Hill. 2. Maurice D Levi: International Finance, Routledge.				
<b>Reference books</b>	1. V.K. Bhalla: International Financial Management, Anmol Publisher. 2. Alan C. Shapiro: Multinational Financial Management, Wiley India. 3. G. Bekaert and R. J. Hodrick: International Financial Management, Prentice Hall India. 4. J. Madura: International Corporate Finance, Thomson South-Western. 5. D.K. Eiteman, A.I. Stonehill and M.H. Moffett: Multinational Business Finance, Pearson Education. 6.C. Eun and B. Resnick: International Financial Management, McGraw Hill.				
<b>Course Assessment</b>	Assessment will consist of the following components 1. Mid-Term Assessment:				

## Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA

<b>Methods</b>	One best of two minor tests (50% of Mid -term marks) Assignments (20% of Mid-term marks) Class Surprise Tests/ Quizzes/Presentations/Term paper (20% of Mid-term marks) Attendance. (10% of Mid-term marks) 2.End –Term Assessment: University Examination
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<b>Title</b>	<b>SEMINAR ON CORPORATE GOVERNANCE</b>			<b>Credits</b>	01
<b>Code</b>	MBA 516	<b>Semester:-</b> 10 <sup>th</sup>	<b>L T P</b>	0 0 2	
<b>Max.Marks</b>	<b>End term -</b>	<b>Mid term -</b>	<b>Practical -</b> 50	<b>Elective</b>	N
<b>Pre requisites</b>					
<b>Note for the examiner</b>	-				
<b>Practical</b>					
<b>SECTION- A</b>					Hrs
UNIT-I	<b>Corporate Governance:</b> Introduction, Overview.				4
UNIT-II	<b>Corporate Board:</b> Attributes, Duties, Responsibilities, Liabilities; Shaping Directorial Competence and Board Effectiveness; Financial Institutions and Nominee Directors.				4
UNIT-III	<b>Corporate Governance and Security:</b> Corporate Disclosure and Investor Protection, Corporate Restructuring and Revival of Sick Units, Corporate Reputation, Corporate Legitimacy and Corporate Crime.				5
<b>SECTION- B</b>					
UNIT-IV	<b>Culture:</b> An introduction; organization culture - Building and maintaining; Managing cultural diversity in organization; Indian culture characteristics.				6
UNIT-V	<b>General Issues regarding Corporate Governance:</b> Takeover Codes, Corporate Board Committees, Globalisation and Corporate Governance, Emerging Trends in Corporate Governance.				6
<b>Text books</b>	1. U.C. Mathur: Corporate Governance & Business Ethics, Macmillan. 2.C.V. Baxi: Corporate Governance, Excel books				
<b>Reference books</b>	1. J. Fred Weston: Takeovers, Restructuring & Corporate Governance, Pearson Education. 2. Dr. S. Singh: Corporate Governance, Excel books. 3. Swami (Dr.) Parthasarathy: Corporate Governance, biz tantra. 4. Donald. H. Chew Jr.: Corporate Governance at the Cross Roads, Tata McGraw Hill. 5. Jill Solomon: Corporate Governance & Accountability, Wiley India. 6. Kesho Prasad: Corporate Governance, Prentice Hall India. 7. Christine A. Mallin: Corporate Governance, Oxford. 8. Subhash Chandra Das: Corporate Governance in India, Prentice Hall India.				
<b>Course Assessment Methods</b>	Internal Assessment based on class presentation and report submission				

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<b>Title</b>	<b>WORKSHOP ON MANAGEMENT INFORMATION SYSTEMS</b>			<b>Credits</b>	01
<b>Code</b>	MBA 517	<b>Semester:-10<sup>th</sup></b>		<b>L T P</b>	0 0 2
<b>Max.Marks</b>	<b>End term</b>	<b>Mid-term</b>	<b>Practical</b> 50	<b>Elective</b>	N
<b>Pre requisites</b>					
<b>PRACTICAL</b>					
<b>Note for the Examiner</b>	-				
<b>SECTION- A</b>					
<b>Introduction:</b> why information system, Perspectives and contemporary approach to information system, usage of information systems, Information system in the enterprise: major types of system in organisation, systems from functional perspectives, integrating functions and business processes. Management opportunities, challenges and solutions, Information systems, organisations.					
<b>Management and strategy:</b> organisations and information systems, how information system impact organisations and business firms, the impact of IT on Management Decision Making, Information Business and Business Strategy, Management opportunities, challenges and solutions,					
<b>SECTION- B</b>					
<b>Enterprise application and business process integration:</b> Enterprise systems, supply chain management systems, customer's relationship management system, and enterprise integration trends					
<b>Redesigning the organisation with the information systems:</b> system as planed organizational change, business process re-engineering and process improvement, overview of system development, alternative systems building approaches, management opportunities, challenges and solutions, Managing international information systems: growth of international information systems, organizing and managing international information systems, technology issues and opportunities challenges and solutions.					
<b>Text books</b> 1. Alter, S., Information Systems: A Management Perspective, Prentice Hall- Gale 2. Davis, G. and Olson, M.H., Management Information Systems: Conceptual Foundation, Structure and Development, McGraw-Hill, New York.					
<b>Reference books</b> 1. Goyal D. P., Management Information Systems: Managerial Perspective, Macmillan India Limited, New Delhi. 2. Kanter, J., Managing with Information, Prentice Hall of India. 3. Laudon, K. C. and Laudon, J. P., Management Information Systems: Organization and Technology in the Network Enterprise, Prentice Hall. 4. Murdic, R.G., and Claggett, J.E., Information Systems for Modern Management, Prentice- Hall.					
<b>Course Assessment Methods</b> Internal Assessment based on class presentation and report submission					

**Paper Title : RESEARCH PROJECT (MANAGEMENT) (Practical)**

**Paper Code: MBA 506**

**Marks :50 Credits: 2**

The objective of this course is to train students to formulate a business problem, and undertake rigorous research using different tools learnt by them during the management program. Students are expected to use various

## **Teaching Scheme and Syllabi of B.E. (Chemical Engineering)-MBA**

quantitative and statistical techniques, statistical software, and the qualitative and quantitative research methodology techniques taught to them.

Each student would be allocated to a faculty who would guide and supervise the research project. The research project would commence in 9th semester, and continue in the 10th semester. However, marks awarded would be included in the marks sheet of 10<sup>th</sup> semester.