

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

**SIX YEAR INTEGRATED B.TECH.-M.B.A.
PROGRAMME**

Applicable to Branches:

- 1. COMPUTER SCIENCE & ENGINEERING*
- 2. ELECTRONICS AND COMMUNICATION ENGINEERING*
- 3. MECHANICAL ENGINEERING*
- 4. CIVIL ENGINEERING*

**Teaching Schemes
(Third to Eight Semester & Summer Semesters)**

(Batch 2015)

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

**SECOND YEAR
(MECHANICAL ENGINEERING)**

(Batch 2015)
(Session 2016-2017)

SCHEME OF PAPERS

THIRD SEMESTER (Mechanical Engineering)

Sr.No.	Course No.	Title	L	T	P	Credits
1.	BAS 201	Numerical Methods and Applications	3	1	0	3.5
2.	BAS 202	Operations Research	3	1	0	3.5
3.	MCE 251	Machine Drawing *	2	4	0	4.0
4.	MCE 202	Basic Thermodynamics	3	1	0	3.5
5.	MCE 203	Strength of Materials	3	1	0	3.5
6.	MCE 204	Manufacturing Technology	3	0	0	3.0
7.	BAS 251	Numerical Methods and Applications Lab *	0	0	2	1.0
8.	MCE 253	Strength of Materials Lab *	0	0	2	1.0
9.	MCE 254	Manufacturing Technology Lab *	0	0	2	1.0
			17	8	6	24.0
Total Contact Hours: 31						

* MCE 251, BAS 251, MCE 253 and MCE 254 are practical papers only.
There will not be any theory examination for these papers.

- In addition to above mentioned subjects, there will be an additional course on Environmental and Road Safety Awareness as a qualifying subject

The detailed syllabi for all above courses are the same as that of B.Tech (Mechanical Engineering)-Batch 2015

Department of Mechanical Engineering
Punjabi University, Patiala.
General Instructions to the Paper Setters
(B.Tech. / Six Year Integrated B.TECH.-M.B.A. Programme in Mechanical Engineering)

Applicable to 2015 Batch

The B. Tech. paper structure will be as shown below:

Pattern of Question Paper	
TITLE OF SUBJECT (CODE----)	
Bachelor of Technology (Branch) Section:	
End Semester Exam	
TIME ALLOWED: 3 Hour	Roll. No.....
Maximum Marks: 50	Minimum Pass Marks: 40%
Note: - Section C is compulsory. Attempt any six questions selecting three questions from each of Sections A & B.	
Section-A (From Section A of the syllabus)	
Q1.	
Q2.	
Q3.	
Q4.	
Q5.	3x5
(From Section B of the syllabus)	
Q6.	
Q7.	
Q8.	
Q9.	
Q10.	3x5
Section-B (From Whole Syllabus)	
Q11.	
a).....	
b).....	
c).....	
d).....	
e).....	
f).....	
g).....	
h).....	
i).....	
j).....	10x2

Note for the paper setter:

1. Numbers of questions to be set are eleven (11) as per the above format.
2. There will be five questions in each of the Sections A and B. Each question will be of five (05) marks. However, a question may be segregated into subparts.
3. Section C is compulsory and contains ten sub-parts of two mark each.
4. The maximum limit on numerical questions to be set in the paper is 35% while minimum limit is 20% except theoretical papers.
5. The paper setter shall provide detailed marking instructions and solution to numerical problems for evaluation purpose in the separate white envelopes provided for solutions.
6. The paper setters should seal the internal & external envelope properly with signatures & cello tape at proper place.
7. Log tables, charts, graphs, Design data tables etc. should be specified, whenever needed.
8. Use of Scientific calculator should be clearly specified.
9. There are some MBA subjects for Six year integrated programme (*like MBA 501 Foundations of Business, MBA 512 Business Research Design and Methods, MBA 536 Advanced Topics in International Business, MBA 540 Financial Management, MBA 122 Marketing Management, MBA 128 Operations Management, MBA 129 Management of Human Resources, MBA 512 Business Research Design & Methods*) where syllabus is not divided among two sections namely A, B then Question paper must be set by without specifying section in it and giving proper weightage to the respective portions.

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

**SECOND YEAR
(MECHANICAL ENGINEERING)**

(Batch 2015)
(Session 2016-2017)

SCHEME OF PAPERS

FOURTH SEMESTER (Mechanical Engineering)

Sr.No.	Course No.	Title	L	T	P	Credits
1.	HSS 201	Management Practices & Organizational Behaviour	3	1	0	3.5
2.	ECE 205	Measurement Science and Techniques	3	1	0	3.5
3.	MCE 205	Theory of Machines	3	1	0	3.5
4.	MCE 206	Fluid Mechanics	3	1	0	3.5
5.	MCE 207	Applied Thermodynamics	3	1	0	3.5
6.	MCE 208	Machine Design-I	3	1	0	3.5
7.	ECE 255	Measurement Science and Techniques Lab *	0	0	2	1.0
8.	MCE 256	Fluid Mechanics Lab *	0	0	2	1.0
9.	MCE 257	Applied Thermodynamics Lab *	0	0	2	1.0
			18	6	6	24.0
Total Contact Hours: 30						

* ECE 255, MCE 256 and MCE 257 are practical papers only.

There will not be any theory examination for these papers.

- In addition to above mentioned subjects, there will be an additional course on Punjabi as a qualifying subject

The detailed syllabi for all above courses are the same as that of B.Tech (Mechanical Engineering)-Batch 2015

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

(MECHANICAL ENGINEERING)

(Batch 2015)

(Session 2017-2018)

SCHEME OF PAPERS

FIFTH SEMESTER (Mechanical Engineering)

Sr. No.	Course No.	Title	L	T	P	Credits
1.	CPE 206	Visual Programming using VB.Net	3	1	0	3.5
2.	MCE 301	Machine Design – II	3	1	0	3.5
3.	MCE 302	Dynamics of Machines	3	1	0	3.5
4.	MCE 303	Heat and Mass Transfer	3	1	0	3.5
5.	MCE 304	Industrial Metallurgy and Materials	3	1	0	3.5
6.	MCE 305	Industrial Engineering	3	1	0	3.5
7.	CPE 256	Visual Programming using VB.Net Lab *	0	0	2	1.0
8.	MCE 352	Dynamics of Machines Lab *	0	0	2	1.0
9.	MCE 353	Heat and Mass Transfer Lab *	0	0	2	1.0
10.	STG 351	Summer Training **	-	-	-	6.0
		Open Elective ***				
			18	6	6	30.0
Total Contact Hours: 30						

* CPE 256, MCE 352, MCE 353 and STG 351 are practical papers only.

There will not be any theory examination for these papers.

** Summer training will be of 4 – 6 weeks duration in Industry / In-house.

*** Student can opt any number of courses from list of open elective subject.

The detailed syllabi for all above courses are the same as that of B.Tech (Mechanical Engineering)-Batch 2015

***** Open Elective**

1. CPE-201 Computer Architecture (B. Tech. Computer Science & Engineering)
2. CPE-202 Object Oriented Programming (B. Tech. Computer Science & Engineering)
3. CPE-203 Operating Systems (B. Tech. Computer Science & Engineering)
4. CPE-301 System Programming (B. Tech. Computer Science & Engineering)
5. CPE-302 Database Management System (B. Tech. Computer Science & Engineering)
6. CPE-401 Internet & Web Technologies (B. Tech. Computer Science & Engineering)
7. ECE 201 Electronic Devices (B. Tech. Electronics & Communication Engg.)
8. ECE 403 Wireless & Mobile Communications (B. Tech. Electronics & Communication Engg.)
9. CVE 202 Building Materials (B. Tech. Civil Engineering)
10. CVE 203 Building Construction (B. Tech. Civil Engineering)
11. CVE-301 Transportation Engg.-I (B. Tech. Civil Engineering)
12. CVE-305 Irrigation Engg. - I (B. Tech. Civil Engineering)
13. CVE-402 Water Supply Engineering (B. Tech. Civil Engineering)
14. 301 Project Management (M.B.A. 2 Year Regular)
15. 306 Human Resource Planning and Development (M.B.A. 2 Year Regular)

In addition to above open elective subjects, student can opt any subject offered by university departments with the consent of ACD of ME department.

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

**SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME
THIRD YEAR
(MECHANICAL ENGINEERING)**

(Batch 2015)
(Session 2017-2018)

SCHEME OF PAPERS

SIXTH SEMESTER (Mechanical Engineering)

Sr.No.	Course No.	Title	L	T	P	Credits
1.	MCE 306	Computer Aided Design	3	1	0	3.5
2.	MCE307	Machining Science	3	1	0	3.5
3.	MCE 308	Refrigeration and Air Conditioning	3	1	0	3.5
4.	MCE 309	Mechanical Vibrations	3	1	0	3.5
5.	MCE 356	Computer Aided Design Lab *	0	0	2	1.0
6.	MCE357	Machining Science Lab *	0	0	2	1.0
7.	MCE 358	Refrigeration and Air Conditioning Lab*	0	0	2	1.0
8.		Elective-I	3	1	0	3.5
9.		Elective-II	3	1	0	3.5
			18	6	6	24.0
Total Contact Hours: 30						

ELECTIVE PAPER I: ANY ONE FROM A

- A**
1. HSS 302 Human Resource Development
 2. MCE 310 Industrial Automation & Robotics
 3. MCE 311 Work Study & Methods Engineering
 4. MCE 312 Welding Technology
 5. MCE 313 Facilities Planning

ELECTIVE PAPER II: ANY ONE FROM B

- B**
1. MCE 314 Industrial Quality Control
 2. MCE 315 Mechatronics
 3. MCE 316 Advanced Operations Research
 4. MCE 317 Machine Tool Design
 5. MCE 318 Total Quality Management

* MCE 356, MCE 357 and MCE 358 are practical papers only.
There will not be any theory examination for these papers.

The detailed syllabi for all above courses are the same as that of B.Tech (MechanicalEngineering)-Batch 2015

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

Applicable to Branches:

- 1. *COMPUTER SCIENCE & ENGINEERING***
- 2. *ELECTRONICS AND COMMUNICATION ENGINEERING***
- 3. *MECHANICAL ENGINEERING***
- 4. *CIVIL ENGINEERING***

(Batch 2015)
(Session 2017-2018)

SUMMER SEMESTER-I (During Summer Vacation after 3rd Year)

SCHEME OF PAPERS (See Annexure-1)

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

**FOURTH YEAR
(MECHANICAL ENGINEERING)**

(Batch 2015)
(Session 2018-2019)

SCHEME OF PAPERS

SEVENTH SEMESTER (Mechanical Engineering)

Sr.No.	Course No.	Title	L	T	P	Credits
1.	MCE 401	Computer Integrated Manufacturing Systems	3	1	0	3.5
2.	MCE 402	Fluid Machines	3	1	0	3.5
3.	MCE 403	Automobile Engineering	3	1	0	3.5
4.	MCE 404	I. C. Engines	3	1	0	3.5
5.	MCE 451	Computer Integrated Manufacturing Systems Lab *	0	0	2	1.0
6.	MCE 452	Fluid Machines Lab *	0	0	2	1.0
7.	MCE 454	I. C. Engines Lab *	0	0	2	1.0
8.		Elective –III	3	1	0	3.5
9.		Elective –IV	3	1	0	3.5
			18	6	6	24.0
Total Contact Hours: 30						

ELECTIVE PAPER III: ANY ONE FROM C

- C**
- i. MCE 405 Non Traditional Manufacturing
 - ii. MCE 406 Product Design & Development
 - iii. MCE 407 Production Planning & Control
 - iv. MCE 408 Metal Forming
 - v. MCE 409 Heat Exchangers
 - vi. MCE 410 Project Management

ELECTIVE PAPER IV: ANY ONE FROM D

- D**
- i. MCE 411 Power Plant Engineering
 - ii. MCE 412 Finite Element Methods
 - iii. MCE 413 Productivity Management
 - iv. MCE 414 Developments in Manufacturing Management
 - v. MCE 415 Non Conventional Energy Resources
 - vi. MCE 416 Modeling and Simulation
 - vii. CPE 318 Business Intelligence

* MCE 451, MCE 452 and MCE 454 are practical papers only.
There will not be any theory examination for these papers.

The detailed syllabi for all above courses are the same as that of B.Tech (Mechanical Engineering)-Batch 2015

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

**FOURTH YEAR
(MECHANICAL ENGINEERING)**

(Batch 2015)
(Session 2018-2019)

SCHEME OF PAPERS

EIGHTH SEMESTER (Mechanical Engineering)

Course No.	Title	Credits
PRJ 451	Project Semester (One Semester Training in Industry)	20

Breakup of Marks :-

INDUSTIAL VISIT BY FACULTY COORDINATOR (150 MARKS)

(within 10-12 weeks of commencement of Training)

Presentation	:	60 Marks	150
Viva-voce	:	60 Marks	Marks
Report (Hard Copy)	:	30 Marks	

Evaluation by Faculty Coordinator in consultation with Industrial Coordinator during industrial visit

EVALUATION BY A TEAM OF FACULTY MEMBERS IN THE INSTITUTE (250 MARKS)

(Within one week of completion of the training)

Presentation	:	100 Marks	250
Viva-voce	:	100 Marks	Marks
Final Report (Hard Copy)	:	50 Marks	

The final presentation and viva-voce will be conducted jointly by the faculty coordinator, nominee of the Head to be appointed by the Head of the Department.

The letter grade will be awarded to the students according to marks obtained by him/her out of total 400 marks.

**DEPARTMENT OF MECHANICAL ENGINEERING
PUNJABI UNIVERSITY, PATIALA**

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

Applicable to Branches:

- 1. *COMPUTER SCIENCE & ENGINEERING***
- 2. *ELECTRONICS AND COMMUNICATION ENGINEERING***
- 3. *MECHANICAL ENGINEERING***
- 4. *CIVIL ENGINEERING***

(Batch 2015)
(Session 2018-2019)

SCHEME OF PAPERS (See Annexures 2-3)

SUMMER SEMESTER-II (During Summer Vacation after 4th Year)

**(For Pursuing MBA at Wilkes University or at School of Management Studies,
Punjabi University, Patiala)**

(Annexure-1)

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

Applicable to Branches:

1. *COMPUTER SCIENCE & ENGINEERING*
2. *ELECTRONICS AND COMMUNICATION ENGINEERING*
3. *MECHANICAL ENGINEERING*
4. *CIVIL ENGINEERING*

(Batch 2015)

(Session 2017-2018)

SCHEME OF PAPERS

SUMMER SEMESTER –I
(During Summer Vacation after 3rd Year)

Sr.No.	Course No.	Title	L	T	P	Credits
1.	MBA 501	Foundations of Business	9	0	0	9
Total Contact Hours: 10						

The aforesaid course will be offered during summer vacations after Third Year of Six Year Integrated B.TECH.-M.B.A. Programme. This course will be over and above the B.Tech. Program.

A separate DMC will be issued to the students for this course indicating the grades obtained by the students in this subject.

However this course will not be included in calculation of CGPA of B.Tech Degree of Six Year Integrated B.TECH.-M.B.A. Programme.

One non-credit course for transition to American culture, language, rules and practices will be taught either by Wilkes faculty or other arrangement will be done.

The number of courses offered during summer semesters may change as per norms of the university

The evaluation for all summer semesters subjects (to be offered after third year & final year of B. Tech.) will be totally (100%) internal.

(Annexure-2)

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

Applicable to Branches:

- 1. COMPUTER SCIENCE & ENGINEERING**
- 2. ELECTRONICS AND COMMUNICATION ENGINEERING**
- 3. MECHANICAL ENGINEERING**
- 4. CIVIL ENGINEERING**

(Batch 2015)
(Session 2018-2019)

SCHEME OF PAPERS

SUMMER SEMESTER-II (During Summer Vacations after 4th Year)

(For Pursuing MBA at Wilkes University)

Sr.No.	Course No.	Title	Credits
1.	MBA 512	Business Research Design and Methods ***	3
2.	MBA 536	Advanced Topics in International Business ***	3
3.	MBA 540	Financial Management ***	3

*** The aforesaid courses will be offered during summer vacations after Fourth Year of Six Year Integrated B.TECH.-M.B.A. Programme. These courses will be over and above the B.Tech. Program.

The number of courses offered during summer semesters may change as per norms of the university

A separate DMC will be issued to the students for these courses indicating the grades obtained by the students in these subjects.

However these courses will not be included in calculation of CGPA of B.Tech Degree of Six Year Integrated B.TECH.-M.B.A. Programme.

Beside the aforesaid three courses, the students will be required to undertake additional courses towards completing the requirements of 2nd year of MBA program at Wilkes University.

The evaluation for all summer semesters subjects (to be offered after third year & final year of B. Tech.) will be totally (100%) internal.

SIX YEAR INTEGRATED B.TECH.-M.B.A. PROGRAMME

Applicable to Branches:

1. *COMPUTER SCIENCE & ENGINEERING*
2. *ELECTRONICS AND COMMUNICATION ENGINEERING*
3. *MECHANICAL ENGINEERING*
4. *CIVIL ENGINEERING*

(Batch 2015)
(Session 2018-2019)

SCHEME OF PAPERS

SUMMER SEMESTER-II

(During Summer Vacations after 4th Year)

(For Pursuing MBA at School of Management Studies, Punjabi University, Patiala)

SCHEME OF PAPERS

1. The following six courses will be mandatory requirement for those students who are interested to pursue MBA at School of Management Studies, Punjabi University, Patiala under Six Year Integrated B.TECH.-M.B.A. Programme.

- i. MBA 122 Marketing Management
- ii. MBA 128 Operations Management
- iii. MBA 129 Management of Human Resources
- iv. MBA 512 Business Research Design & Methods
- v. MBA 536 Advanced Topics in International Business
- vi. MBA 540 Financial Management

2. The students of 2015 batch onwards (Who want to complete MBA at School of Management Studies, Punjabi University, Patiala) will be pursuing these six Courses after Fourth Year of Six Year Integrated B.TECH.-M.B.A. Programme.

3. The Evaluation Scheme for these courses will be as adopted by School of Management Studies, Punjabi University, Patiala.

4. The number of courses offered during summer semesters may change as per norms of the university

5. The aforesaid courses will be offered during summer vacations after Fourth Year of Six Year Integrated B.TECH.-M.B.A. Programme. These courses will be over and above the B.Tech. Program.

6. A separate DMC will be issued to the students for these courses indicating the Marks / grades obtained by the students in this subject.

7. However these courses will not be included in calculation of CGPA of B.Tech Degree of Six Year Integrated B.TECH.-M.B.A. Programme.

8. The evaluation for all summer semesters subjects (to be offered after third year & final year of B. Tech.) will be totally (100%) internal.

MBA 501 FOUNDATIONS OF BUSINESS

L	T	P	Credits
9	0	0	9

This course provides a foundation of all functional areas of business, including accounting, economics, finance, information systems, international business, management, marketing, law, operations management and statistics.

MBA 512 BUSINESS RESEARCH DESIGN AND METHODS

Research Methodology: Objectives, Role & Scope in Management Research, Process of Research; Research Designs: Exploratory, Descriptive & Experimental Research Designs and their Applications; Sampling Design: Concepts, types and their applicability; Scaling Techniques including Likert, Thurston, Semantic Differential Scaling techniques, etc. Tools & Techniques of Data Collection: Primary & Secondary; Classification & Tabulation of Data.

Introduction to Statistics, Statistics & Business Research, Measures of Central Tendency: Mean, Median and Mode; Measures of Dispersion, Coefficient of Variance; Skewness & Kurtosis: Concept and Measures; Correlation Analysis: Simple, Partial & Multiple (Elementary); Regression Analysis: Concept & Measures, Linear Regression. Elementary Probability Theory: Concepts, Definitions and Problems.

Probability Distributions: Binomial, Poisson and Normal Distributions; Testing of Hypothesis: Concepts like types of hypothesis, significance level, degrees of freedom, Errors in hypothesis testing, Procedure of testing hypothesis etc.; Statistical Tests: Chi-square test, t-test, ANOVA – 1 way and 2 way; SPSS and Report Presentation: Use of Statistical Package for Social Sciences, Report Writing - Mechanics of Report Writing, Preliminary pages, Main body and Appendices including Bibliography, Diagrammatic and Graphical presentation of Data.

Recommended Books:

1. Alan Bryman & Emma Bell, *Business Research Methods*, Oxford University Press, New Delhi, 2nd Edition.
2. Amir D. Aczel & Jayavel Sounderpandian, *Business Statistics*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 6th Edition.
3. Donald R. Cooper & Pamela S. Schindler, *Business Research Methods*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 9th Edition.

MBA 536 ADVANCED TOPICS IN INTERNATIONAL BUSINESS

International Business: Introduction, Nature, why International Trade, Theories of International Business, International Business Approaches, Competitive advantage of Global Business, Problems of international Business, Modes of Entering international Business. Changing environment of International Business.

Strategy and Structure of International Business: Global strategic planning, Organization of International Business, Production Strategy, International Marketing, International Human Resource Management, Political Risk and Negotiation Strategies.

International Monetary system: International Monetary Fund(IMF), International Liquidity and SDRs, International Bank for Reconstruction and Development(IBRD), International Development Association(IDA), International Finance Corporation(IFC), The Multinational Investment Guarantee Agency(MIGA).

Recommended Books:

1. International Business – environment and operations by John D. Daniels and Lee H. Radebaug,. Pearson Education, 12th edition 2010.
2. International Business by Andrew Harrison, Ertugrul Dalkiran, Ena Elsey, Oxford Publication, Nov. 2000.
3. International Business by Roger Bennett, Pearson Education, 2nd edition 2002.
4. International Business by P. Subba Rao, Himalaya Publisher, 2nd edition, 2008.
5. International Business by Charles W. H. L Hill, Himalaya Publisher, 7th edition ,2008
6. International Business: A strategic Management Approach by Alan M. Rugman, Richard M. Hodgetts, Mc-Graw Hill Publisher, International edition.

MBA 540 FINANCIAL MANAGEMENT

Financial Management: An Overview, Goals and Functions of Finance, Financial System: Assets, Markets, Intermediaries and Regulatory Framework. Capital Market and Money Market, Concepts in Valuation: Time value of money, Present Values, IRR, Bond returns, Return from Stock Market Investments.

Capital Investment Decision making: Principles of Cash Flows, Discounted and Non-Discounted Cash Flow Techniques for appraising capital investments, Risk Analysis in Capital Budgeting. Working Capital Management: An Overview, Determinants, Working Capital Cycle, Management of Cash, Receivables and Inventories. Financing Working Capital needs.

Leverage: Operating Leverage and Financial Leverage. Cost of Capital. Capital Structure and firm's value: Theories, MM Hypothesis, Optimization of Capital Structure, Capital Structure Planning. Dividend Policy and firm's value, Dividend Policy in practice. Corporate Restructuring: Mergers and Acquisitions, motives, considerations and regulations.

Recommended Books:

1. J.J. Hamton, *Financial Decision Making: Concepts, Problems and Cases*, Prentice-Hall of India, New Delhi, 4th Edition.
2. Khan and Jain, *Financial Management*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 4th Edition.
3. Stephan A. Ross, Randolph W. Waterfield and Jeffery Jaffe, *Corporate Finance*, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 7th Edition.

MBA 122 Marketing Management

Course Overview

The objective of this course is to develop the ability in the students to define and analyze the marketing problems through the formulation of marketing objectives, policies, programmes and strategies.

Course Syllabus

Group I:

Nature, Scope and Concepts and Orientations of Marketing, Marketing Tasks, Modern concepts of marketing, Marketing Environment and Environment Scanning, Marketing information systems and marketing research, Strategic Planning in marketing management, Understanding consumer and Industrial markets, Consumer behaviour: Factors influencing consumer buying behavior, Buying process, Market segmentation, Targeting and Positioning

Group II:

Product Decisions: Product Mix, Product life cycle, New product developments. Branding and Packaging Decisions. Pricing Methods and Strategies. Promotion Mix Decisions: Advertising, Sales Promotion, Public Relations, Personal Selling, Direct Marketing. Managing the sales force. Marketing Organization.

Group III:

Channel Management: Types & functions, selection, cooperation, Conflict Management, Vertical Marketing Implementations and Systems, Marketing Logistics, Emerging issues in marketing: Green Marketing, Holistic Marketing, Network Marketing, Event Marketing, Nucleus marketing, Viral marketing.

Recommended Texts

- Kotler Philip & Armstrong, G. Principles of marketing, Prentice-Hall of India New Delhi, 2007
- Kotler Philip, marketing management, Prentice-Hall of India, New Delhi, 2007
- Zikmund, marketing, Thomson learning, Mumbai, 7th Edition.
- Stanton, Etzel, Walker, fundamentals of marketing, Tata McGraw-Hill Publishing Co. Ltd., New Delhi, 10th Edition

MBA 128 Operations Management

Course Overview

The objective of this course is to have an understanding of Operational issues in Manufacturing & Service Sector Organisations that include Designing, Acquiring, Operating, and Maintaining the facilities and processes; purchasing raw materials; Controlling and Maintaining Inventories; and providing the proper labour needed to produce an good or service so that customer's expectations are met. At the conclusion of the course students should be able to: (1) build both quantitative and qualitative analysis skills, especially those needed for managing operating systems; and (2) provide common –sense modeling concepts which can be used to help managers evaluate various management problems.

Course Syllabus

Group I:

Role and scope of operation management, operations Strategy, Operations strategy, operations management as an inter-functional imperative. Types and characteristics of manufacturing systems, product planning and design: Operations and the life cycle, Developing new products. Forecasting demand: forecasting methods, forecast errors. Plant location: factors & Quantitative models, Plant Layout: models & techniques, assembly line balancing.

Group II:

Capacity Planning, Materials requirement planning: procedure, benefits and disadvantages. Scheduling: scheduling jobs on machines, control of schedules, scheduling in services, introduction to statistical quality control: process charts & acceptance sampling, PERT and CPM, application of OR techniques to operations management such as transportation, assignment, sequencing.

Group III:

Inventory management, planning and control: inventory concepts, scope, objectives & functions of inventory control, classification of inventories, inventory costs concepts, selective inventory control systems, inventory control models: Economic Order Quantity (EQQ) with & without shortages, EQQ under fluctuating demand, EQQ with quantity discounts, Economic Production Quantity (EPQ), Fixed Order Cycle (FOC) and Fixed Order Quantity (FQQ) systems.

Recommended Texts

- Elwood S. Buffa, Modern Production/ Operations management, Wiley Series, 8th Edition.
- James R. Evans, David R. Anderson, Dennis J. Sweeney and Thomas A. Williams, applied production and operations management, west publishing company, International Edition, Minnesota.
- John O. McClain and L. Joseph Thomas, Operations Management, Prentice Hall-of- India, New Delhi, 2nd Revised Edition.
- Lee J. Krajewski, Operations Management, Prentice Hall-of- India, New Delhi, 8th Edition.

MBA 129 Management of Human Resources

Course Overview

The Student should be able to critically analyze organizational situations, prescribe courses of action necessary for problem solving and integrate the steps necessary for effective implementation. Upon completion, the student should be able to indicate and explain various human resource management interventions that may be required when dealing with the work environment, people, and problems.

Course Syllabus

Group I:

Concept, scope, functions, importance of personnel management, environment scanning, building up skills for effective HR manager. Global HRM. Organization of personnel department and its relationships with other departments. HR in: information technology firms, mergers and acquisitions. Integrating HR strategy with Business strategy, Personnel Policies Manpower Planning, Analyzing work and designing jobs, Managing Separations and Rightsizing. Methods of Manpower search and selection of Human Resources. Induction, Placement, Socializing, Promotion and Succession.

Group II:

Executive Development and Training Manpower Retention of Talent. Performance Appraisal and Potential Evaluation. Managing Basic Remuneration. Job evaluation. Motivation in action: Empowerment, Quality of work life, Problem Employees. Incentives, Sharing Productivity Gains and Profits, Employee Stock Option Plans.

Group III:

Grievance Handling, Disciplining and Counseling of employees. Concept and present state of industrial relations. A brief idea of Trade Unionism. Industrial Unrest and Remedial Measures.

Recommended Texts

- Garry Desseler, Human Resource Management, prentice-hall of India Pvt. Ltd., New Delhi, 10th edition.
- Edwin B. Flippo, personnel Management, McGraw-Hill Book Company, 6th Edition.
- Raymond Noe, Wright, Gerhart & Hollenbeck, Human Resouce Management – Gaining A competitive advantage, Tata McGraw-Hill Publishing Company Ltd., New Delhi, 5th Edition, 2007.