

BHARATHIAR UNIVERSITY COIMBATORE - 641 046

MBA – FLEET OPERATIONS AND MANAGEMENT

(For the CPOP students admitted during the academic year 2012-2013 & Onwards)

Scheme of Examinations – CBCS Pattern

Course title	Ins. Hrs/week	Examinations				
		Duration .Hrs	CIA	Marks	Total	Credits
SEMESTER – I						
1. MBAFM01 Management Principles & Practices	5	3	25	75	100	4
2. MBAFM02 Organisational Behaviour	5	3	25	75	100	4
3. MBAFM03 Environmental Management	5	3	25	75	100	4
4. MBAFM04 Finance and Transport Accounts	5	3	25	75	100	4
5. MBAFM05 Human Resource Management	5	3	25	75	100	4
6. MBAFM06 Corporate Communication	5	3	25	75	100	4
7. MBAFM07 Business Application Software Lab	5	3	25	75	100	4
SEMESTER – II						
8. MBAFM08 Transport Economics	5	3	25	75	100	4
9. MBAFM09 Operations Research Techniques	5	3	25	75	100	4
10. MBAFM10 Motor Vehicle Act-I	5	3	25	75	100	4
11. MBAFM11 Introduction to Over Dimensional Consignment	5	3	25	75	100	4
12. MBAFM12 Planning and Distribution of Materials	5	3	25	75	100	4
13. MBAFM13 Soft Skill development	5	3	25	75	100	4
14. MBAFM14 Research methodology	5	3	25	75	100	4
SEMESTER – III						
15. MBAFM15 Elements Of Fleet Management	5	3	25	75	100	4
16. MBAFM16 Vehicle Tracking System	5	3	25	75	100	4
17. MBAFM17 Motor Vehicle Act-II	5	3	25	75	100	4

18. MBAFM18 Route survey	5	3	25	75	100	4
19. MBAFM19 Shop Management	5	3	25	75	100	4
20. MBAFM20 Safety and Security in Transportation	5	3	25	75	100	4
21. MBAFM21 Summer Placement Project Report & Viva-Voce	-	-	20	80	100	4
SEMESTER – IV						
22. MBA FM 22 Logistical Operations Integration	5	3	25	75	100	4
23. MBAFM23 Material Handling Equipments Management	7	3	25	75	100	4
24. MBAFM24 Elective paper ODC Operation	7	3	25	75	100	4
25. MBAFM25 Project work and viva	-	-	20	80	100	4
TOTAL	-	-	-	-	2500	100

MBA FM 01 MANAGEMENT PRINCIPLES AND PRACTICES**Unit - I**

Management: Science, Theory and Practice – The Evolution of Management Thought and the Patterns of Management Analysis – Management and Society: The External Environment – Social Responsibility and Ethics – Global and Comparative Management – The Basis of Global Management.

Unit - II

The Nature and Purpose of Planning: Objectives – Strategies – Policies and Planning Premises – Decision Making – Global Planning.

Unit - III

The Nature of Organizing and Entrepreneurship – Organizational Structure : Departmentation – Line/Staff Authority and Decentralization – Effective Organizing and Organizational Culture – Global Organizing.

Unit - IV

Co-ordination Functions in Organisation – Human Factors and Motivation – Leadership - Committees and Group Decision Making – Communication – Global Leading.

Unit - V

The System and Process of Controlling – Control Techniques and Information Technology – Productivity and Operations Management – Overall Control and toward the Future through Preventive Control – Global Controlling and Global Challenges.

References:

1. Koontz & Weirich, Essentials of Management, Tata McGraw Hill.
2. VSP Rao, V Hari Krishna – Management: Text and Cases, Excel Books, I Edition, 2004
3. Stoner & Wankai, Management, PHI.
4. Robert Krcitner, Management, ATTBS.

MBA FM 02 ORGANISATIONAL BEHAVIOUR**Unit – I**

Origins of Management – Importance of Organizational Behaviour – Multi Disciplinary Anchor of OB – Perspectives of Organizational Behaviour – Elements of Organizational Behaviour – Theoretical Frameworks – Models of Organizational Behaviour – Social Systems, Culture, and Individualization.

Unit – II

Perception – Definition – Concept– Elements– Factors Affecting Perception – Attribution Theory – Attribution Process – Impression Management – Process of Impression Management – Steps to Improve Impression Management – Significance of Motivation – Motivational Techniques – Theories of Motivation – Morale – Incentives – Job Design.

Unit – III

Characteristics of Leadership – Authority – Power – Theories of Leadership – Transactional Leadership – Transformational Leadership – Organizational Politics – Political Behavior – Strategy on Organizational Politics – Features of Stress – Sources of Stress – Impact of Stress – Strategies for Overcoming Stress.

Unit – IV

Negotiation – Distributive Bargaining – Integrative Bargaining – Situational Influences on Negotiations – Negotiation Process – Third-Party Conflict Resolution – Intergroup Relations – Factors that Affect Intergroup Relations – Managing Intergroup Relations.

Unit – V

Organizational Culture – Characteristics – Organizational Climate – Factors Influencing Organizational Culture – Definition of Job Satisfaction – Factors Influencing Job Satisfaction – Techniques to Improve Job Satisfaction.

References:

1. Hema Bhalakrishnan, R. Sethumadhavan, Organizational Behaviour, Scitech Publications (India) Pvt. Ltd. Chennai.
2. Handbook of Organizational Behavior, Robert Golembiewski, ed. 2nd. Ed. 2001 (KSL Core Ref. HD 58.7.H355)
3. IEBM Handbook of Organizational Behavior, Arndt Sorge and Malcolm Warner, eds. 1997 (KSL Stacks. HD 58.7 .I43)
4. Organisational Behaviour, Kalyani Publishers
5. S.S. Khanka, Organizational Behaviour, S. Chand.

MBA FM 03 Environmental Management

Unit - I

Environment, Ecology and Biosphere – importance and scope of ecology – kinds of ecosystem – Ecological dominance – ecological life cycle – Ecosystem components and structure – Environmental degradation and manifestations – land environment – elements of land management – air environment – water environment – energy resources.

Unit - II

Pollution and population – cost of pollution – types of pollution – pollution control – health effects – kind of injury to plants – hydrological cycle – removal of pollutants – green house effect – Population Geography – Sources of population – Theory of population dynamics

Unit - III

Risk assessment and environmental audit – risk management cycle – risk estimation – environmental impact and risk assessment – audit methodology – steps in audit approach – environmental audit scenario in India – environmental management system.

Unit - IV

Environmental ethics – Environmental Costs of Economics Growth – sustainable development – preventive environmental policy

Unit - V

Ecological regrouping of industries – Basic Facts and Environmental Ethics – Religious Environmental Ethics – Applied Ethics & fallacies of ethical reasoning.

References:

1. Mackenthun, Kenneth M. 1999. "Basic Concepts in Environmental Management". Boca Raton, FL: Lewis.
2. "An introduction to environmental management" – Dr. Anand S. Bal, Himalaya Publishing House.
3. "Stress Management" – Gerard Hargreaves
4. "Stress for Success" By Dr. Peter Hanson, Published by pan Books

MBA FM 04 Finance and Transport Accounts

Unit – I

Book-keeping and Accounting – financial accounting – double entry system – preparation of Journal, Ledger and Trial Balance – preparation of final accounts – Ratio Analysis – classification of ratios – Fund flow and Cash flow analysis – Problems and Solutions.

Unit – II

Cost Accounting – Elements of cost – Preparation of cost sheet – Cost of capital – meaning – importance – determination – leverages –types of leverage – capital structure – meaning – definition – theories of capital structure –determination of capital structure – capital structure decision – EBIT – EPS – Problems and Solutions.

Unit – III

Financial management – meaning and importance of finance – functions of financial management – relationship with other functions – scope of finance – financial manager's role – financial goals – profit maximation – wealth maximation – organization of finance functions.

Unit – IV

Capital budgeting – meaning – capital expenditure evaluations – concepts – importance of capital budgeting – limitations methods appraisals –risk analysis in capital budgeting –break even analysis – fixed cost – variables cost – marginal costs – contribution – profit

Unit – V

Working capital management – types and nature of working capital – gross and net working capital – operating cycle – factors influencing working capital – receivables management – cash management – cash planning – working capital finance – sources of working capital – advantages and disadvantages of working capital – problems and solutions

References:

1. Dr. V. R. Palanivelu, Financial Management, S. Chand & Company Ltd.
2. Maheswari. S. N., Financial Management – Principles & Practices, Sultan Chand & Sons.
3. Panday I. M., Financial Management, Vikas Publishing House.
4. S. N. Maheswari, Management Accounting.
5. R. L. Gupta & Radhaswamy, Advanced Accountancy.

MBA FM 05 Human Resource Management

Unit - I

Human Resource Function Human Resource Philosophy - Changing environments of HRM - Strategic human resource management - Using HRM to attain competitive advantage - Trends in HRM - Organisation of HR departments - Line and staff functions - Role of HR Managers.

Unit - II

Job analysis - Methods - Writing job specification – Recruitment and selection process - Employment planning and forecasting - Building employee commitment - Employee Testing & selection - Selection process, basic testing concepts, types of test, work samples & simulation, etc.

Unit - III

Orientation & Training - Orienting the employees - the training process - Developing Managers - Management Development - The responsive managers - On-the-job and off-the-job Development techniques - Performance appraisal Methods - MBO approach - The appraisal interviews - Performance appraisal in practice - Career planning and development.

Unit - IV

Establishing Pay plans - Basics of compensation - Job evaluation - Pay for performance and financial incentives - Money and motivation - incentives for operations employees and executives - Benefits and services - Statutory benefits - non-statutory (voluntary) benefits - Insurance benefits - retirement benefits and other welfare measures to build employee commitment.

Unit - V

Industrial relation and collective bargaining : Trade unions - Collective bargaining - future of trade unionism. Discipline administration - grievances handling - managing dismissals and separation. Labour Welfare : Importance & Implications of labour legislations - Employee health – Auditing HR functions, Future of HRM function.

References:

1. Gary Dessler, "Human Resource Management", Seventh edition, Prentice-Hall of India P.Ltd., Pearson.
2. H.John Bernardin & Joyee E.A.Russel, Human Resource Management - An experiential approach, 4th Edition, McGraw-Hill International Edition., 2007
3. David A. DeCenzo & Stephen P.Robbins, Personnel/Human Resource Management, Third edition, PHI/Pearson.

MBA FM 06 CORPORATE COMMUNICATION

Unit – I

Communication basics – Business Communication – components – types – formal communication network – work team communication – variables – goal – conflict resolution – non – verbal communication – cross cultural communication – business meetings – business etiquette.

Unit – II

Understanding corporate communication – employee communication – managing government relations – writing for media and media relations

Unit – III

Corporate communication in brand promotion – financial communication – crises communication.

Unit – IV

Report writing: characterizing & business reports – types and forms & reports – project proposals – collection of data – tables constitution – charts – writing the report – documenting the sources – proof reading.

Unit – V

Business presentation: Written and oral – team presentation – delivering business presentation -visual aids – slides – electronic presentation – hand – outs – career planning – preparing resume – job applications – preparation for job interview – follow – up.

References:

1. Scot Ober, Contemporary business communication, fifth edition, biztantra.
2. Lesiler & Flat lay, Basic Business communication. Tata Mc Graw Hill.

MBA FM 07 Business Application Software Lab**Unit – I**

MS OFFICE: Introduction to WORD – POWERPOINT and EXCEL.

Unit – II

WORD : Creating a Document with Templates & Wizard – Modifying a saved Document - Converting Files – Keyboard Short-Cuts & Mouse – Adding Symbols & Pictures – Headers and Footers – Finding and Replacing Text – Spelling and Grammar Check – Formatting Text – Tables – Working within Tables.

Unit – III

EXCEL :Cells - Working with Multiple Worksheets – Working & Entering Formula – Formatting a Worksheet – Creating and Editing Charts – Elements of an EXCEL Chart – Selecting Data from a Chart – Types of Chart – Chart Wizard – Formatting Chart – Editing and Printing Charts.

Unit – IV

POWERPOINT : Creating New Presentations – Auto Content Wizard – Using Template – Blank Presentation – Opening Existing Presentations – Applying New Design – Adding Graphics – Headers and Footers – Animating Text – Special Effects to Slides – Transition Speed – Sounds to Slides – Action Buttons.

Unit – V

TALLY : Introduction – Required Hardware – installation of Tally software – Working with Tally- Password setting-Making Ledger Accounts – Writing Voucher -Correcting Sundry Debtors and Sundry Creditors Accounts – Preparation of Trial Balance – Books of Accounts – Cash Book – Bank Books – Ledger Accounts – Group Summary – Sales and Purchase Register – Journal Register – Statement of Accounts & Balance Sheet.

References:

1. OFFICE 2000 complete - BPB
2. Windows 98 complete – BPB
3. Jane Calabria and Dorothy Burke, Windows 98 6in1- PHI

MBA FM 08 TRANSPORT ECONOMICS

Unit -I

Need for Economic Evaluation of Urban Transport Projects – Principles of Economic Analysis – Methods of Economic Evaluation – Comparison of various methods – Case Studies

Unit -II

Components of vehicle operating cost – Factors affecting vehicle operating cost – Value of Travel Time Saving, Accident Cost, Sensitivity Analysis – Case Studies

Unit -III

Transport and Economics – Emergence of modern transport economics – Demand for Transport – Supply of transport – Direct cost, External cost – Subsidy in Transport – Transport at the national level.

Unit - IV

Transport costs – Elasticity of demand – Matching supply and demand – Factors influencing travel demand - Average cost and Marginal cost pricing – Market Pricing and Market Segmentation – Pricing Policy - Pricing of transport services – Price differentiation and yield management

Unit -V

Characteristics of Transport Infrastructure – Investment Needs, Options and Budgetary Support for Transport Sector – Existing Financing Practices – Build, Operate and Transfer (BOT) – Principles and BOT variants - Costing of Transport – Cost Recovery- Pricing – Alternative Financial Resources – Special Purpose Vehicles.

References:

1. Robert F Baker, (eds), Hand Book of Highway Engineering, Van Nostrand Reinhold Company, New York, 1975
2. Kadiyali L.E; Traffic Engineering and Transport Planning, Khanna Publishers, 1999
3. Khanna S.K., Justo, C.E.G; Highway Engineering, New Chand and Bros, Roorkee, 1998

MBA FM 09 OPERATIONS RESEARCH TECHNIQUES**Unit – I**

Operations research- linear programming – definition – necessity of operations research in industry – scope – limitations – linear programming problems – graphical method – introduction – optimal solution – problems and solutions

Unit – II

Transportation and assignment model – introduction – definition – methods – Transportation problem – Assignment problem – introduction – Algorithm – Difference between Transportation Model and Assignment Problem .

Unit – III

Sequencing models – introduction – processing n jobs through 2 machines – processing n jobs through 3 machines – processing 2 jobs through m machines – processing n jobs through m machines – travelling salesman problem .

Unit – IV

Inventory models – introduction – deterministic inventory models – buffer stock – demand forecasting methods – inventory models with probabilistic demand – problems and solutions

Unit – V

PERT and CPM - Introduction – Planning , Scheduling and Controlling – Rules for Constructing a Project Network – Ford and Fulkerson’s Rule – Critical Path method – PERT and CPM for Project management– Rules of Network Construction – Network – Activity – Time cost Optimization Procedure – problems and solutions

References:

1. R. Panneerselvam, “Operations Research”, Prentice Hall of India Private Limited, New Delhi 1 – 2005
2. P.K. Gupta and Man-Mohan, Problems in Operations Research – Sultan chand & Sons, 1994
3. Ravindran, Philips and Solberg, Operations Research Principles and Practice, John Wiley & Sons, Singapore, 1992

MBA FM 10 Motor Vehicle Act – I

Unit I

Definitions – Licensing of Motor Vehicles – grant of learner's licence – grant of driving licence – additions to driving licence – extent of effectiveness of licences – currency of licence.

Unit – II

Renewal of driving licence – revocation of driving licence – power of court to disqualify – suspension of driving licence – suspension or cancellation of driving licence on conviction – disqualification order – endorsement – maintenance of state registers of driving licences .

Unit – III

Registration of motor vehicle – assignment of new registration mark – no objection certificate – change of residence or place of business – transfer of ownership - alteration of motor vehicle – cancellation of registration – certificate of fitness.

Unit – IV

Control of transport vehicles – Permits – transport authorities – grant of stage carriage permits – contract carriage permit - goods carriage permit – procedure in applying for and granting permits – transfer of permit.

Unit – V

Replacement of vehicles – general conditions attaching to all permits – general form of permits – cancellation and suspension of permit – temporary permits – validation of permits – revision – avoidance of contracts restrictive of liability – power of state government to make rules as to stage carriages and contract carriages.

References:

1. The Motor vehicles act by S. Pattabhiraman.
2. Motor vehicle act – 1988 by P K Sarkar
3. Law relating to compensation under the motor vehicles act by M R Sreenath

MBA FM 11 INTRODUCTION TO OVER DIMENSIONAL CONSIGNMENT (ODC) CARRIERS

Unit -I

ODC – Prime mover- Trailer- Puller- Engine valve actuating mechanism, Turbo charger- Construction and operation, Diagnosis and service Maintenance - Intercooler- checks before starting truck engine –Inspection and care procedures before starting engine.

Unit -II

Engine cooling systems of various heavy vehicles-Cooling system troubleshooting Lubricating system components- Basic principles of Diesel fuel injection- Fuel injection system in ODC vehicles.

Unit -III

Clutch components- troubleshooting – 9 speed gear box- Drive line, Propeller shaft- Final drive-Hypoid gear-Differential-Rear axle -Important rear axle drives- Suspension spring - Front wheel (dead axle) - Front axle steering-power steering.

Unit -IV

Introduction- tyre specification- Wheel and tyre trouble shooting-Automotive brakes- Air brakes- Air brake Servicing-Brake system..

Unit -V

Automotive Electrical system –Electric circuit components-Starting system -Starting motor construction and operation- Charging system –operation and service-Electronic ignition systems-Sensor-Automotive application.

References

1. Automobile engineering, Dr.Kirpal singh;
2. Diesel Engineering, Sean Bennett;
3. Automobile Engineering, G.B.S NARANG
4. Owner's manual of MAN Force Trucks Pvt .Ltd.
5. [WWW.NTC](http://WWW.NTC.ODC.VEHICLES.COM) ODC VEHICLES.COM

MBA FM 12 PLANNING AND DISTRIBUTION OF MATERIALS

Unit – I

Introduction to planning and distribution – importance of planning and distribution in logistics- physical distribution channel types and structure – channel types outsourcing channel.

Unit – II

Planning framework for logistics – pressures for change – strategic planning overview – logistics design strategy – product characteristics – product life cycle – packing – planned approach or mythology.

Unit III

Role of distribution centers in ware hours - site search and consideration – The role of the distribution manager – The effect of distribution activities – choosing location for warehouse.

Unit – IV

Elements of warehouse management – principles of warehouse management – The inventory management – inventory costs – inventory control – warehouse strategies – warehouse management process – trends in modern warehouse network – warehouse layout and equipment.

Unit – V

International distribution – forces driving Globalization – developing global strategies – Channel strategies managing Global distribution networks – International Transportation and warehousing International purchasing.

References:

- 1.) David Frederick Ross, Kluwer, Planning And Control, Academic Publisher Group.
- 2.) “The Warehouse Management Handbook”, James A. Tompkins, Jerry D. Smith, 2001.
- 3.) “Warehouse Management”, Michael Hompel, Michael Ten Hompel, Thorsten Schmidt, 2007.
- 4.) “Distribution: Planning and Control”, David F Ross, 2003.

MBA FM 13 SOFT SKILL DEVELOPMENT**UNIT - I**

Self Development And Assessment- Attitude - Emotional Intelligence – Interpersonal Skills – Self Development – Motivation – Self-Analysis through SWOT – Enhancing Knowledge through Reading

UNIT - II

Communication Skills Process of Communication - Listening Skills – Reading Skills – Writing Skills – Speaking Skills – Presentation Skills – Professional Writing Strategies.

UNIT - III

Employability Skills Interview Skills - Preparing For Face-to-Face Interview - Group Discussion – Body Language – Team Building and Team Work.

UNIT - IV

Corporate Skills Leadership Qualities – Negotiation Skills - Stress Management – Time Management – Stress And Stroke.

UNIT - V

Other Skills Meditation -Improving Perception – Etiquette And Manners - Career Planning - Notes Taking - Complex Problem Solving - Creativity Preparing Cv/ Resume

References:

- 1)"Soft Skills", Dr.k. Alex, S.Chand & company ltd, 2011.
- 2)"Soft Skills", S.Hariharan, N.Sundarajan, MJP Publishers, 2010.
- 3)"Success Through Soft Skills", G. Ravindran, S.P. Benjamin Elango and L. Arockiam, ICT, 2007.
- 4)"Communication Soft Skills for Professional Excellence", F Thamburaj, Grace Publisher, First Edition, 2009.

MBA FM 14 RESEARCH METHODOLOGY

Unit I

Research methodology – meaning of research - model of scientific research – types of research – research process – steps involved in research problem – research problem – formulation of research problem – research design – components of research design – hypothesis – types of hypothesis – advantages of hypothesis.

Unit II

Methods of data collection – techniques of data collection – questionnaire method – interview – types of interview – selection and training of interviews – observation – types of observation – survey method – purpose of survey – types of survey – merits of survey method - limitations of survey method – pilot surveys

Unit III

Sample design – steps in the sampling process – methods of sampling – the sampling process – sampling errors and non – sampling errors – simple random sampling – systematic random sampling – stratified random sampling – cluster sampling – purposive sampling – quota sampling – sampling plan – selection of the sample

Unit IV

Interpretation - meaning - Techniques of interpretation - Report writing:- Significance - Report writing:- Steps in report writing -Test of Significance:- Assumptions about parametric and non-parametric tests. Parametric Test - T test, F Test and Z test - Non Parametric Test - U Test

Unit V

Correlation analysis – types of correlation – method of studying correlation – direct method without taking deviation from mean – correlation coefficient from assumed mean – regression – correlation and regression analysis – regression co – efficient – limitations of regression analysis – chi – square test – analysis of variance (ANOVA).

Reference books:

1. Research Methodology by P. C. Tripathi.
2. Research methodology methods and techniques by C. R. Kothari.
3. Research methodology by Ranjit Kumar.
4. Research methodology by R. Panneerselvam.

MBA FM 15 ELEMENTS OF FLEET MANAGEMENT

Unit-I

Functions of fleet management -Structure of fleet management-fleet manager –key decision areas-monitoring vehicle operation - trip planning and routing-vehicle specifications – developing a sound vehicle management system.

Unit-II

Garage and fleet management - relationship between motor vehicle driver and mechanics- work procedure and records–testing and test reports-costing and billing-tools for garages- Vehicle maintenance organization chart, -tactical planning-centralized and decentralized organizations.

Unit-III

Vehicle parts and supply management-cost of inventory-balancing inventory costs against downtime - price discounts - security of store-function of store keeping in garages-Llyout of garage- -maintenance and service schedules.

Unit-IV

Tyre selection and management- tyre types –retreading –basic process of retreading -ty –proper mounting of tyres – tyre maintenance .

Unit-V

Energy management -fuel economy management -fuel economy - shop management vehicle replacement strategies.

References:

1. John Dolce, Fleet Maintenance, Mcgrawhill, Newyork, 1984
2. Analytical fleet maintenance management. John E.Dolce.
3. John Doke “Fleet Management” Mcgraw Hill Co.1984.
4. Automobile Engineering , MS Narang.
5. I.C.Engines Fundamental, J.B.Heywood ,Mcgraw Hill Book

MBA FM 16 VEHICLE TRACKING SYSTEM

Unit-I

Introduction to vehicle tracking system - Active and Passive tracking system - Typical architecture - vehicle tracking system benefits - Advantages and disadvantages - common uses - unconventional uses.

Unit-II

Introduction to global positioning system - radio frequency identification tags - Received signal strength indication - Location based service - Inertial tracking devices - GPRS(general packet radio service).

Unit-III

GIS in vehicle tracking system - vehicle tracking system - GPS boon to fleet owners - practical uses of GPS - features and function of vehicle tracking system - positive and negative of vehicle tracking system.

Unit-IV

Methods of VTS in ancient era - modern VTS - GPS and GPRS - Types of GPRS units - Transportation law about VTS - Relation between GPRS and telecommunication - VTS hardware - GPRS accessories - VTS initialization and maintenance - VTS trouble shooting.

Unit-V

Introduction to sensors - Types of sensors - Vehicle tracking and traffic parameter collection - Alert monitoring via GPRS - intelligent of VTS - GPS manufactures, suppliers, vendors - criteria to select best VTS.

References:

1. "Comments to Access Board Docket Number 2007-1" (PDF). Office of Technical Information Services, APTA. January 20, 2009.
2. "Real-Time Muni Arrival Information Just a Free Call Away". San Francisco MTA. July 13, 2005.
3. "Cell phone bus tracking applications developed". Metro Magazine. April 2009.
4. Dr. Dennis D. McCrady. "The GPS Burst Detector W-Sensor". Sandia National Laboratories.

MBA FM 17 Motor Vehicle Act – II

Unit-I

Constructions, equipments and maintenance of motor vehicles – control of traffic – limits of weight – power to restrict the use of vehicles – power to have vehicle weighted – power to erect traffic signs – parking places and halting stations.

Unit-II

Driving regulations duty to obey traffic signs –leaving vehicle in dangerous position – stationary vehicles – removal of motor vehicles abandoned or left unattended on a public place – safety measures for drivers and pillion riders – duty of owner of motor vehicle to give information – inspection of vehicle involved in accident.

Unit -III

Insurance of motor vehicle – necessity for insurance against third party risk – insurance claim settlement – effect of certificate of insurance – transfer of certificate of insurance .

Unit – IV

Offences, penalties and procedure – general provision for punishment of offence – driving dangerously– punishment for abetment of certain offences – racing and trials of speed – breath tests – power of police officer to impound document –restriction on conviction – courts to send intimation about conviction.

Unit – V

Power to levy fee – effect of appeal and revision on orders passed by original authority – repeal and savings -road safety councils and committees.

References:

- 1) The Motor vehicles act by S. Pattabhiraman.
- 2) Motor vehicle act – 1988 by P K Sarkar
- 3) Law relating to compensation under the motor vehicles act by M R Sreenath

MBA FM 18 ROUTE SURVEY**Unit- I**

Introduction-Classification of Roads - factors affecting efficient road transport- road construction- Bridges: introduction-Classification–strength and capacity analysis-

Unit-II

Objectives-Types-factors Responsible for efficient route survey - advantages-geographical ,climatic , soil and road transport- road network in India.

Unit III

Applications of engineering factors in Route survey-Mechanical properties of vehicle and materials-Simple Stresses and strains- External Forces-Load classification- Internal Forces –Stress-Poisson’s ratio-Factor of safety –simple problems-Geometric properties of sections- simple problems.

Unit -IV

Vehicle knowledge-goods knowledge – various types of heavy vehicles – matching of goods, vehicles and route Characteristics.

Unit -V

Role of route survey -Route characteristics-SWOT analysis of route- Safety concept- Public safety-vehicle safety-goods safety.

References:

- 1) “Geography Of Transport Development In India”, B. C. Vaidya, 2007
- 2) “Principles Of Transportation Engineering”, Partha Chakroborty, Animesh Das.
- 3) Road statistics of India,Problems and Solutions By : Sb Dikshit, State Quality Monitor, U.P.R.R.D.A
- 4) Construction planning Equipement and methods;Tata Mc Grow hill
- 5) Mechanics of Material;Prof.S.K.L. Raju,N.Iyanaruppan 2005

MBA FM 19 SHOP MANAGEMENT

Unit -I

Garage and Tools-Introduction – Types of garage – Service station – Main departments of shop or Garage – Location and Layout of Garages and service station – Work charge procedure and records – Automobile shop equipments and tools.

Unit -II

Material handling equipments-Need, Importance, and Advantages-Cranes-Hydraulically operated truck crane.

Unit -III

Work study - study procedure –time and motion study on production activities – concept of work content –work-study as a tool to improve productivity- Method study – steps involved in method study– recording techniques.

Unit -IV

Objectives of work measurement – techniques of work measurement – job evaluation and merit rating –objectives of job evaluation – procedure for job evaluation – job analysis - job description – job specification – job evaluation systems –Capacity planning

Unit -V

Maintenance management: objectives – maintenance costs – benefits and limitations – types of maintenance – condition based maintenance system – maintenance performance measurement - scope of materials management – purchasing – methods of buying – source selection – vendoranalysis – vendor rating .

References:

- 1) Automobile engineering,Vol I Dr.Kirpal singh;
- 2) Work shop technology, chapman
- 3) Industrial Engineering and Production Management; MARTAND TELSANG.

MBA FM 20 SAFETY AND SECURITY IN TRANSPORTATION**Unit - I**

Introduction to Safety , Need , Essence of Safety Management – Conventional Safety Programming - Occupational Safety Health Act – The Williams - Steiger Act- Safety Concepts – Types of Roads - Classification of Safety - Transport Safety – Road Safety- Goods Safety - Hazard Vehicle Safety - Road Safety - Material Handling Safety.

Unit - II

Introduction – Factors for Improving Transport Safety - Design, Selection, Operation and Maintenance of Motor Trucks - Preventive Maintenance - Check Lists- Motor Vehicles Act – Motor Vehicle Insurance , Carriers Act.

Unit - III

Introduction to Safety in Material Handling - Material Handling Equipment Safety - Crane Safety - Conveyer Safety – Fork Lift Truck Safety - Layout Design and Material Handling-Automotive Shop Safety - Shop Layout and Safety-Uses of Lashing Materials.

Unit - IV

Driver Training - Parking of Tankers/ODC Vehicle on the Highways - Design of the Tanker /ODC Lorries -Static Electricity - Responsibilities of Driver - Inspection and Maintenance of Vehicles - Check List- loading and Decanting Procedures .

Unit - V

Supply Chain Security – Customs-Trade Partnership against terrorism – Container security Initiative – World Customs Organisation SAFE framework of standards –Long Range Identification and Tracking of ships –SCS Technologies for Container Integrity: Track/Trace Technologies–Advanced Inspection Technologies (AIT) (Nuclear Detection.

References:

- 1.Popkes,C.A.“Traffic Control and Road Accident Prevention”,Chapman and Hall Ltd, 1986.
2. Babkov, V.F., “Road Conditions and Traffic Safety”, MIR Publications, Moscow, 1986.
3. Motor Vehicles Act, 1988, Government of India.

MBA FM 22 LOGISTICAL OPERATIONS INTEGRATION

Unit - I

The work of logistics – Network Design - Information – Transportation – Inventory – Warehousing – Material Handling – Packing – Operational Objectives of Logistics

Unit - II

Integrated logistics – Inventory flow – Physical distribution – Manufacturing support – Procurement – Information flow – Planning and Coordination flows – Operational flows – Operational requirements

Unit - III

Operational objectives – Rapid response – Minimum variance – Minimum inventory – Movement consolidation – Quality – Life cycle support.

Unit - IV

Barriers of Internal Integration – Organization structure – Measurement systems – Inventory ownership – Information technology – Knowledge transfer capacity.

Unit - V

Logistical performance cycle – Physical distribution performance cycle – Manufacturing support performance cycles – Procurement performance cycle – Managing operational uncertainty.

References:

- 1) Donald J. Bowersox, David J. Closs, M. Bixby Cooper, supply chain logistics management, published by McGraw-Hill publications
- 2) Cecil C. Bozarth, Robert B. Handfield, Introduction To Operations And Supply Chain Management, published by Pearson Education India
- 3) D K Agrawal Textbook of logistics and supply chain management, Published by Macmillam Publications

MBA FM 23 MATERIAL HANDLING EQUIPMENTS MANAGEMENT**Unit- I**

History of Materials Handling, Need of Materials Handling, Importance of Materials Handling, Advantages of Materials Handling, Dis- advantages of Materials Handling, Functions involved in Material Handling, Types of Layout & Performance of layout

Unit -II

Principles and their uses ,Preliminary considerations, Principles of Material Handling Equipments, Factors in Selection of Material Handling Equipments, Materials handling and role of Management

Unit -III

Selection of Materials Handling Equipments, Economics of Material Handling Equipments, Cost considerations, Cost Analysis, Cost account and Material Handling, cost indices

Unit -IV

Hoisting Machineries, Elevating Equipments, Cranes, Important Parts of cranes, Types of cranes, Rotatory or Revolving Cranes, Bridge & Mobile Cranes.

Unit -V

Conveying Equipments, Traction Type conveyers, Tractionless type conveyers, Surface Tension Equipments, Narrow gauge equipments, Cross Holding Equipments, ODC Material handling

References:

- 1) Plant Layout and Material Handling, R.B.Choudary & G.R.N.Tagore, Khanna Publishers.
- 2) Bulk Materials Handling Hand Book, Jacob Fruchtbaum, CBS Publishers & Distributers.
- 3) Aspects of Material Handling, Dr.K.C.Arora, Vikas V.Shinde, Laxmi Publications (p) Ltd.

MBA FM 24 ODC OPERATIONS**UNIT - I**

Functions of ODC- ODC operations –structures of ODC management - forecasting in ODC operations - authority , delegation and decentralization –Training and development in ODC operation, performance appraisal - leadership styles in ODC operations.

UNIT - II

Safety precautions in ODC operations – planning of route survey – material handling equipments utilization – methods of loading and unloading of goods in trailers –type of trailer – type of roads-vehicle documents –selection of numbers of axles based on the weight of goods.

UNIT- III

Forecasting – travelling time to zero point – road curvatures – traffic conditions – tractor and trailers requirements – enroute problems .

Unit – IV

Delegation of Authority –Sources of formal authority - barriers to effective delegation – Guidelines for effective delegation – responsibilities for ODC in charge , ODC drivers – responsibilities for material handling equipment operators, site in charge and flying squad .

Unit – V

Vehicle placement –assignment of drivers duty –Characteristics of Communication – Obstacle in communication –Training and development – advantages of training – induction training – on the job training- refresher training.

References:

1. Dr.L.M.Prasad “Principles & Practice of Management” ,Sultan Chand & Sons
2. Hampton “Management” ,Tata McGraw Hill
3. J.S.Chandra “Management : Theory & Practice” ,Vikas Publications
4. John Cotton, “Employee Involvement”.

MBA FM 25 Project Work and viva