



# RKDF UNIVERSITY RANCHI

MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

## First Year

## Semester I

Subject Title	Subject Code
MANAGEMENT CONCEPTS & PRACTICES	MBA-101

### Unit-I

Management- Objective, Overview Process, Functions, Scope and Roles, Nature and Significance of Management.

### Unit-II

Evolution of Management thought, Taylor, Fayol, Elton Mayo, FC Bemard, Likert and Webber (Theories of Management): Recent trends and Future Challenges of Management.

### Unit – III

Planning- Concept, Importance, Types and Process, Strategic Management Overview and Process; MBO, MBE: Decision Making Concept, Process, Types, Techniques and Importance.

### Unit-IV

Organizing- Principles, Structure, Process, Importance: Organizational design: Departmentation: Span of Control; Delegation; Decentralization Staffing- Meaning, Scope, Features, Steps and Process

### Unit-V

Directing and Controlling- Motivation, Morale and Productivity, Leadership, Communication (Organizational): Controlling- Nature: Process and Techniques, Coordination

### BOOKS RECOMMENDED:

1. Koontz O Donnel, Principal of Management
2. Stonier. J. Management. Prentice Hall of India. 1996
3. Gupta, Sharma and Bhalla: Principal and Practices of Management, Kalyani Publication.
4. Rao and Krishna: Management Text and Cases, Excel Books.



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**First Year**

**Semester I**

Subject Title	Subject Code
<b>BUSINESS STATISTICS</b>	<b>MBA-102</b>

## **Unit-I**

Statistical basic of management decision: Frequency distribution and graphic representation of frequency distribution, Measures of Central Tendency- Mean, Median, Mode, Requisite of ideal measures of Central techniques, Merits, Demerits of Mean, Median Mode and their managerial application.

## **Unit-II**

Dispersion Measures of dispersion range, Q.D., M.D., S.D., coefficient of variation, skewness, kurtosis

## **Unit-III**

Theory of Probability and probability distribution- Mathematical probability, Trial and event, sample space, Simple problem based on sample space, Binomial, Poisson, Normal distribution and their application in business decision making

## **Unit-IV**

Correlation and regression analysis- Karl Pearson's coefficient of correlation, rank correlation, repeated ranks, Spearman's rank correlation, regression equation, Regression coefficient, Time Series analysis and forecasting

## **Unit-V**

Sampling and Sample Tests- Purposive sampling, Random Sampling, Null- hypothesis, Alternative hypothesis, Chi-square test of goodness of fit and t- test for difference of Means and Application of these tests in management



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## **BOOKS RECOMMENDED:**

1. Gupta, S.P. and Gupta M.P. "Business Statistics". New Delhi, Sultan Chand, 1997.
2. Levin Richard I and Rubin David S. "Statistics for Management". New Jersey, Prentice Hall Inc., 1995



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## First Year

## Semester I

Subject Title	Subject Code
MANAGERIAL ECONOMICS	MBA-103

### Unit-I

Concepts and Techniques- Nature and Scope of managerial Economics, Application of Economics in Managerial Decision Making- Marginal Analysis; Theory of Demand- demand functions, income and substitution effects, demand forecasting

### Unit-II

Production and Cost- returns to scale, cost curves, break even analysis; economics of Scale, Theory of firm- profit maximization, sales maximization

### Unit-III

Market Structure- Price and output decision under different market structures, price discrimination, non- price completion

### Unit-IV

Macro Economics- Aggregates and Concepts GNP and GDP, Concept and Measurement of National Income: Determination of National Income

### Unit-V

Money Supply and Monetary Policy, Fiscal Policy: Aggregate Consumption- Gross Domestic Savings, Gross Domestic Capital Formation- WPI, CPI and Inflation. Consumption Function

### BOOKS RECOMMENDED:

1. Adhikary, M. "Business Economics", New Delhi, Excel Books, 2000
2. Chopra, O.P. "Managerial Economics". New Delhi Tata McGraw Hill 1985
3. Divedi D.N., "Managerial Economics", Vikas Publication.
4. Varshney R.L. & Maherhwari R.L., "Managerial Economics".
5. Koutsoyiannis, A. "Modern Mico- Econmics", New York, Macmillan, 1991



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## First Year

## Semester I

Subject Title	Subject Code
<b>BUSINESS COMMUNICATION - I</b>	<b>MBA-104</b>

### Unit-I

Meaning, nature, needs, types of communication: Oral Written & non verbal, Upward, Downward & Lateral, Theories of Communication, Process of Communication, Barriers to Effective Communication

### Unit-II

Writing Strategies: Letter Writing, types of business letter, Do's and Don'ts of business letter, Business Memos, resume writing, Essentials of resume writing, Importance of resume and covering letter

### Unit-III

Communication for employment: Strategies to develop effective communication skills, Speeches, public Speaking, Interviews, Group Discussion, Conference, Effective Listening, and Grapevine Communication

### Unit-IV

Types of Non Verbal Communication: meaning and importance Kinesics, Proxemics, Chronemics, Paralanguage and Artifacts, Business etiquettes: Dressing & Grooming, Business Meals, Table Manners

### Unit-V

Report Writing: Types and structure of reports, Drafting of reports, Introduction to electronic communication, designing and delivering business presentation



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## **BOOKS RECOMMENDED:**

1. Rodriques, M.V., Effective Business Communication, Concept Publishing Company, Delhi, 2003
2. Rayudo, C.S., Communication, Himalaya Publishing House, Delhi 2008.
3. Sinha, K.K., Business Communication, Galgoita Publishing Company, New Delhi, 2006
4. Raymond V. Lesikar, John D. Pettit, Jr, Business Communication- Theory and Application, AITBS Publishers & Distribution, Delhi, 1999



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**First Year**

**Semester I**

Subject Title	Subject Code
<b>ORGANIZATIONAL BEHAVIOR</b>	<b>MBA-105</b>

## **Unit-I**

Understanding Organizational behavior: Levels of analysis within OB- individual, group and organization; challenges and opportunities for OB; relationship of OB with other fields

## **Unit-II**

Foundation of individual behavior; learning theories; Perception: factors influencing Perception; Personality, Attitudes, Job satisfaction and Values

## **Unit-III**

Motivation: concept and process; Motivation theories; Maslow, McGregor, Herzberg, Alderfor's, Vroom, Porter & Lawler and Equity theory; Motivating employee techniques; Group: nature, functions & development

## **Unit-IV**

Organizational Change: Forces for change; Resistance to change; Managing change; Stress; Concept, Sources of Stress, Consequences, Management of Stress; Burnout: Causes and Handling of Burnout; Managing diversity in organization

## **Unit-V**

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



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## BOOKS RECOMMENDED:

1. Baron, R.A. and Greenberg, J (Behaviour in organization. Pearson India).
2. Luthans, F., "Organizational Behavior", 7<sup>th</sup> ed. New York, McGraw Hill 1995.
3. Chandan, J., "Organizational Behavior", Vikas Publishing House Pvt. Ltd.
4. Udai Pareek, "Organizational Behavior", Oxford University Press, 2004
5. Robbins, S.P., Judge, T.A. and Sanghi, S. (2007). Organizational Behavior Delhi: Pearson Education





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## First Year

## Semester I

Subject Title	Subject Code
ACCOUNTING FOR MANAGERS	MBA-106

### Unit-I

Financial Accounting- Concept, Importance and Scope, Principles, Double Entry, Ledger Accounting, Preparation of Trial Balance

### Unit-II

Preparation of Financial Statements- Profit and Loss Account and Balance Sheet; Depreciation Accounting

### Unit-III

Financial Statement analysis- Comparative Statement; Common Size Statements; Ratio analysis, Cash flow and fund flow analysis

### Unit-IV

Management Accounting- concept; Needs, Importance; Cost Accounting- Records and Processes, Inventory Valuation, Reconciliation between Financial and Cost Accounts

### Unit-V

Costing for Decision- Making, Marginal Costing and Absorption Costing



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MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

## BOOKS RECOMMENDED:

1. Anthony R n and Reece, J.S. “Accounting Principles”, 6<sup>th</sup> ed. Homewood, Illinois Richard D, Irwin, 1995.
2. Bhattacharya S.K and Dearden J. “Accounting for Management”. Text and Cases. New Delhi, Vikas 1996.
3. Sharma & Gupta, “Management Accounting” Kalyani Publication.
4. Pandey I.M., “Management Accounting”, Vikas Publication.



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## Second Year

## Semester II

Subject Title	Subject Code
INTERNATIONAL BUSINESS ENVIRONMENT	MBA-201

### Unit-I

International Business: An Overview- Types of International Business: The External Environment. The Economic and Political Environment, The Human Cultural Environment

### Unit-II

Balance of Payments, WTO and its importance for Indian Business, International Monetary Fund (IMF), World Bank (IBRD).

### Unit-III

Exchange rate determination, Fixed and Flexible exchange rate, Convertibility of Rupee and its implication, foreign Institutional Investors (FII), Foreign Direct Investment (FDI), Euro-Currency

### Unit-IV

Regional Blocks: Internationalization of Service Firms, Export Management; Joint Ventures and Global Competitiveness

### Unit-V

Globalization and Human Resource Development; Globalization with Social Responsibility



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MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

## BOOKS RECOMMENDED:

1. Alowrth, Julian S. The Finance, Investment and Taxation Decisions of Multinational London, Basil Blackwell 1988
2. Bhalla, V.K. and S. Shivaramu, International Business Environmental and Business New Delhi, Anmil 1995
3. Bhalla, V.K. International Economy, Liberalisation Process, New Delhi, Anmol, 1993
4. Daniel, John D and Radebangh, Lee H International Business 5<sup>th</sup> ed., New York, Addison Wesley, 1989



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**Second Year**

**Semester II**

Subject Title	Subject Code
HUMAN RESOURCE MANAGEMENT	MBA-202

## **Unit-I**

Concepts and Perspectives on Human Resource Management; Human Resource Management in a changing Environment; Corporate Objective and Human Resource Planning

## **Unit-II**

Career and Succession Planning; Job Analysis and Role Description; Methods of Manpower Search; Attracting and Selecting Human Resources

## **Unit-III**

Induction and Socialization; Manpower Training and Development

## **Unit-IV**

Performance Appraisal and Potential Evaluation; Job Evaluation & Wage Determination

## **Unit-V**

Overview of Industrial Relation, Trade Union, Collective Bargaining, Industrial dispute Act 1947



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## BOOKS RECOMMENDED:

1. Aswathappa, K. "Human Resource and Personnel Management", Tata McGraw- Hill, New Delhi- 1997
2. Edwin B. Flippo, "Personnel Management", New York Mc Grew Hill Book Company, International Edition, 1984
3. Monappa, A & Saiyadain M. "Personnel Management", 2<sup>nd</sup> Ed., New Delhi, Tata McGraw- Hill, 1966
4. Pattnayak, "Human Resource Management", Prentice Hall of India.
5. Mamoria C.B., "Personnel Management", Himalaya Publication.
6. R.S. Dwivedi, "Managing Human Resource", Galgotia Publishing Ltd



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## Second Year

## Semester II

Subject Title	Subject Code
FINANCIAL MANAGEMENT	MBA-203

### Unit-I

Aims and Objectives of Financial Management; Du Pont Analysis, Economic Value Added, Cost Volume Profit Analysis

### Unit-II

Instruments of Long Term Finance, Share Capital, Debentures/ Bonds, Hybrid Instruments, Venture Capital, Time Value of Money, Operating Leverage Financial Leverage & Combined Leverage

### Unit-III

Cost of Different sources of Raising Capital, Weighted Average cost of Capital; Capital Structure, Theories and Optimum Capital Structure

### Unit-IV

Capital Budgeting, Methods of Capital Budgeting- Traditional Methods, Pay Back Period, ARR, Discounted Cash Flows, NPV, IRR, Profitability Index

### Unit-V

Management of Working Capital- Cash Receivables and Inventory management. Internal Financing and dividend Policy



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MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

## BOOKS RECOMMENDED:

1. Hampton, John, "Financial Decision Making", Englewood Cliffs, New Jersey, Prentice Hall Inc. 1997
2. Van Home, James C. "Financial Management and Policy", 10<sup>th</sup> ed, New Delhi, Prentice Hall of India, 1997
3. Pandey I.M., "Financial Management", Vikas Publication.
4. Khan & Jain, "Financial Management", Tata Mc Graw Hill.
5. Sharma & Gupta, "Financial Management", Kalyani Publication





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## Second Year

## Semester II

Subject Title	Subject Code
MARKETING MANAGEMENT	MBA-204

### Unit-I

Nature and scope of marketing, Corporate orientations towards the marketplace. The Marketing Environment and Environment Scanning

### Unit-II

Marketing information system and Marketing research, Understanding consumer and Industrial markets, market segmentation, Targeting and positioning

### Unit-III

Product decisions, product mix, product life cycle, new product development, branding and packaging decisions, Pricing methods and strategies, Promotion decision- promotion mix, advertising, sales promotion, publicity and personal selling

### Unit-IV

Channel management- selection, co-operation and conflict management, vertical marketing implementation and systems, Organizing and implementing Marketing in the organization

### Unit-V

Evaluation and control of marketing efforts; New issues in marketing- Globalization, Consumerism, Green marketing, Legal issues



# RKDF UNIVERSITY RANCHI

MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

## BOOKS RECOMMENDED:

1. Enis, B.M. "Marketing Classics: A Selection of Influential Articles", New York, McGraw Hill, 1991.
2. Kotler, Philip and Armstrong, G. "Principles of Marketing", New Delhi, Prentice Hall of India, 1997
3. Kotler, Philip, "Marketing Management Analysis, Planning, Implementation and Control", New Delhi, Prentice Hall of India 1994
4. Ramaswamy, V.S and Namakumari, S. "Marketing Management Planning Control", New Delhi, MacMillan, 1990



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## Second Year

## Semester II

Subject Title	Subject Code
RESEARCH METHODOLOGY	MBA-205

### Unit-I

Introduction to Research Methodology- Meaning, Objectives, Significance of Research in Management; Importance and scope of Research Methodology

### Unit-II

Research Process- Defining Research Problem; Setting of Hypothesis; Research Design- Exploratory, Descriptive and Experimental Research Designs

### Unit-III

Sampling Design- Steps in Sampling Design; Criteria of Selecting a Sampling Procedure, Characteristics of Good Sample Design; Types of Sample Design

### Unit-IV

Data Collection- Primary and Secondary data; Observational and Survey Methods; Questionnaire Design; Processing of Data- Editing, Coding, Classification, Field Work and Tabulation of Data

### Unit-V

Analysis and Report Writing- Selection of Appropriate Statistical Techniques; Parametric Test for hypothesis testing- t- test, Chi- Square test; Characteristics of Non Parametric Test; One-way ANOVA; Report Writing



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## BOOKS RECOMMENDED:

1. Gupta, S.P. "Statistical Methods", 30<sup>th</sup> ed., Sultan Chand, New Delhi- 2001
2. Golden, Biddle, Koren and Karen D. Locke; "Composing Qualitative Research', Sage Pub. 1997
3. Kothari C.R., "Research Methodology", Wishwa Prakashan.
4. Dwivedi R.S., "Research Methods in Behavioural Sciences', Macmillan.



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MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

**Second Year**

**Semester II**

<b>Subject Title</b>	<b>Subject Code</b>
<b>BUSINESS COMMUNICATION - II</b>	<b>MBA-206</b>

General Business Communication, Speaking Skills, Group discussions, Debates, Extempore, Presentation skills etc. based on theoretical and practical teaching or according to faculty.



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MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

**Second Year**

**Semester III**

Subject Title	Subject Code
Business Policy & Strategic Management	MBA-301

**Objective:** The objective of this course is to develop a holistic perspective of enterprise, and critical analysis from the point of view of general management.

## **UNIT-I**

Business Policy as a field of study: Genesis and importance of Business Policy; Vision, Mission, Objectives and policies; General Management point of view: Strategic Decision making and Role of Strategist in Strategic Management.

## **UNIT-II**

Environmental Analysis and Internal Analysis; SWOT Analysis; Industry Analysis; Concept of value chain, Strategic profile of a firm: case study method.

## **UNIT-III**

Competitive Analysis: Framework for analyzing competition, competitive advantage of a firm; Strategic Planning: Formulation of Strategies,

## **UNIT-IV**

Strategic Choice and Implementation: Tools and techniques for Strategic Analysis; Impact Matrix, The experience Curve, BCG Matrix, GEC Model.

## **UNIT-V**

Industrial Analysis Concept of Value Chain, Strategic Profile of a firm, Framework for Analyzing competition, competitive Advantage of a firm.



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### **Books Recommended:**

1. Ansoff, H Igor, Implanting Strategic Management Englewood Cliffs, New Jersey, Prentice Hall Inc., 1984
2. Budhiraja; S B and Athereya, M B. Cases in Strategic Management New Delhi, Tata MaGraw Hill, 1996
3. Christensen, C. R. etc. Business Policy; Text and Cases, 6<sup>th</sup> ed., Homewood Illinois, Richard D. Irwin, 1987
4. Glueck, Willam F. Strategic Management and Business Policy, 3<sup>rd</sup> ed New York, McGraw Hill, 1988



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**Second Year**

**Semester III**

Subject Title	Subject Code
Summer Training Project	MBA-355

Students are supposed to undergo Summer Internship of 8weeks from any organization of good repute. The Summer Internship will be of 8 Credits .It will carry 100 Marks which will be based on Viva and Project presentation with 4 hardcopies submitted to the panel.

Sub.Code	Subject	Duration	Credits	Total Marks
MBA-361	Summer internship	8 Weeks	8	100





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**Second Year**

**Semester III**

Subject Title	Subject Code
CONSTRUCTION EQUIPMENT	MBA-3XX

**OBJECTIVE:** To study and understand the various types of equipments used for earthwork, tunneling, drilling, blasting, dewatering, material handling conveyors and its applications in construction projects.

## Unit-I

CONSTRUCTION EQUIPMENTS AND MANAGEMENT 9 Identification – Planning of equipment – Selection of Equipment - Equipment Management in Projects - Maintenance Management – Equipment cost – Operating cost – Cost Control of Equipment - Depreciation Analysis – Replacement of Equipment- Replacement Analysis - Safety Management

## UNIT II

EQUIPMENT FOR EARTHWORK 9 Fundamentals of Earth Work Operations - Earth Moving Operations - Types of Earth Work Equipment - Tractors, Motor Graders, Scrapers, Front end Waders – Dozer, Excavators, Rippers, Loaders, trucks and hauling equipment, Compacting Equipment, Finishing equipment.

## UNIT III

OTHER CONSTRUCTION EQUIPMENT 9 Equipment for Dredging, Trenching, Drag line and clamshells, Tunneling – Equipment for Drilling and Blasting - Pile driving Equipment - Erection Equipment - Crane, Mobile crane - Types of pumps used in Construction - Equipment for Dewatering and Grouting – Equipment for Demolition.



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## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### UNIT IV

ASPHALT AND CONCRETE PLANTS 9 Aggregate production- Different Crushers – Feeders - Screening Equipment - Handling Equipment - Batching and Mixing Equipment - Pumping Equipment – Ready mix concrete equipment, Concrete pouring equipment. Asphalt Plant, Asphalt Pavers, Asphalt compacting Equipment

### UNIT V

MATERIALS HANDLING EQUIPMENT 9 Forklifts and related equipment - Portable Material Bins – Material Handling Conveyors – Material Handling Cranes- Industrial Trucks.

**OUTCOME:** At the end of this course students will be able to know various types of equipments to be used in the constructions projects.

#### REFERENCES:

1. Deodhar, S.V. "Construction Equipment and Job Planning", Khanna Publishers, New Delhi, 1988.
2. Dr.Mahesh Varma, "Construction Equipment and its planning and Application", Metropolitan Book Company, New Delhi. 1983.
3. Peurifoy, R.L., Ledbetter, W.B. and Schexnayder, C., "Construction Planning, Equipment and Methods", McGraw Hill, Singapore, 2006.
4. Sharma S.C. "Construction Equipment and Management", Khanna Publishers, New Delhi, 1988.



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**Second Year**

**Semester III**

<b>Subject Title</b>	<b>Subject Code</b>
<b>MODERN CONSTRUCTION MATERIALS</b>	<b>MBA</b>

**OBJECTIVE:** To study and understand the properties of modern construction materials used in construction such as special concretes, metals, composites, water proofing compounds, non weathering materials, and smart materials.

## **UNIT I**

SPECIAL CONCRETES - Concretes, Behaviour of concretes – Properties and Advantages of High Strength and High Performance Concrete – Properties and Applications of Fibre Reinforced Concrete, Self compacting concrete, Alternate Materials to concrete on high performance & high Strength concrete.

## **UNIT II**

METALS TYPES OF STEELS – Manufacturing process of steel – Advantages of new alloy steels – Properties and advantages of aluminum and its products – Types of Coatings & Coatings to reinforcement – Applications of Coatings.

## **UNIT III**

COMPOSITES 9 Types of Plastics – Properties & Manufacturing process – Advantages of Reinforced polymers – Types of FRP – FRP on different structural elements – Applications of FRP.

## **UNIT IV**

OTHER MATERIALS 9 Types and properties of Water Proofing Compounds – Types of Non-weathering Materials and its uses – Types of Flooring and Facade Materials and its application.



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### UNIT V

SMART AND INTELLIGENT MATERIALS 9 Types & Differences between Smart and Intelligent Materials – Special features –Case studies showing the applications of smart & Intelligent Materials

OUTCOME: On completion of this course the students will have the knowledge of modern construction materials to be used in the field.

REFERENCES: 1. ACI Report 440.2R-02, “Guide for the design and construction of externally bonded RP systems for strengthening concrete structures”, American Concrete Institute, 2002.

2. Aitkens , "High Performance Concrete", McGraw Hill, 1999

3. Ashby, M.F. and Jones.D.R.H.H. “Engineering Materials 1: An introduction to Properties, applications and designs”, Elsevier Publications, 2005.

4. Deucher, K.N, Korfiatis, G.P and Ezeldin, A.S, "Materials for civil and Highway Engineers", Prentice Hall Inc., 1998.

5. Mamlouk, M.S. and Zaniewski, J.P., "Materials for Civil and Construction Engineers", Prentice Hall Inc., 1999.



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**Second Year**

**Semester III**

Subject Title	Subject Code
PROJECT FORMULATION AND APPRAISAL	MBA-3XX

**OBJECTIVE:** To study and understand the formulation, costing of construction projects, appraisal, finance and private sector participation.

## UNIT I

PROJECT FORMULATION 9 Project – Concepts – Capital investments - Generation and Screening of Project Ideas - Project identification – Preliminary Analysis, Market, Technical, Financial, Economic and Ecological - PreFeasibility Report and its Clearance, Project Estimates and Techno-Economic Feasibility Report, Detailed Project Report – Different Project Clearances required.

## UNIT II

PROJECT COSTING Project Cash Flows – Time Value of Money – Cost of Capital.

## UNIT III

PROJECT APPRAISAL 9 NPV – BCR – IRR – ARR – Urgency – Pay Back Period – Assessment of Various Methods – Indian Practice of Investment Appraisal – International Practice of Appraisal – Analysis of Risk – Different Methods – Selection of a Project and Risk Analysis in Practice.

## UNIT IV

PROJECT FINANCING 9 Project Financing – Means of Finance – Financial Institutions – Special Schemes – Key Financial Indicators – Ratios.



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### UNIT V

PRIVATE SECTOR PARTICIPATION 9 Private sector participation in Infrastructure Development Projects - BOT, BOLT, BOOT - Technology Transfer and Foreign Collaboration - Scope of Technology Transfer.

PERIODS OUTCOME: On completion of this course the students will be able to know the formulations of projects, • projects costing, appraisal and financing.

REFERENCES: 1. Barcus, S.W. and Wilkinson.J.W. "Hand Book of Management Consulting Services", McGraw Hill, New York, 1986.

2. Joy P.K., "Total Project Management - The Indian Context", New Delhi, Macmillan India Ltd., 1992

3. Prasanna Chandra, "Projects – Planning, Analysis, Selection, Implementation Review", McGraw Hill Publishing Company Ltd., New Delhi. 2006.



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**Second Year**

**Semester III**

<b>Subject Title</b>	<b>Subject Code</b>
<b>COMPUTER APPLICATIONS IN CONSTRUCTION ENGINEERING AND PLANNING</b>	<b>MBA-3XX</b>

**OBJECTIVE:** To study and understand the hardware and software requirements of computer, programming, • optimization techniques, inventory models and scheduling techniques applied to construction engineering.

## **UNIT I**

INTRODUCTION 6+6 Overview of IT Applications in Construction – Construction process – Computerization in Construction – Computer aided Cost Estimation – Developing application with database software.

## **UNIT II**

OPTIMIZATION TECHNIQUES 6+6 Linear, Dynamic and Integer Programming - Branch and Bound Techniques – Application to Production Scheduling, Equipment Replacement, Material Transportation and Work Assignment Problems – Software applications.

## **UNIT III**

INVENTORY MODELS 6+6 Deterministic and Probabilistic Inventory Models - Software applications.

## **UNIT IV**

SCHEDULING APPLICATION 6+6 PERT and CPM - Advanced planning and scheduling concepts – Computer applications – Case study.



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## UNIT V

OTHER PROBLEMS 6+6 Sequencing problems – Simulation – Enterprises – Introduction to ERP systems.

OUTCOME: On completion of this course the students will know the computer applications in construction, different optimization techniques and sequencing problems.





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**Second Year**

**Semester IV**

Subject Title	Subject Code
Business legislation	MBA-401

**Objective:**

The objective of this course is to impart knowledge to students regarding the theory and practice of Security Analysis and Investment Decision Making Process.

**UNIT-I**

The Indian Contract Act, 1872: Essentials of a Valid Contract. Void Agreements. Performance of Contracts. Breach of Contract and its Remedies. Quasi-Contracts. The Sale of Goods Act, 1930: Formation of a Contract. Rights of an Unpaid Seller.

**UNIT-II**

The Negotiable Instruments Act, 1881: Nature and Types Negotiation and Assignment . Holder-in-Due Course, Dishonor and Discharge of a Negotiable Instrument Arbitration.

**UNIT-III**

The Companies Act, 1956; Nature and Types of Companies. Formation. Memorandum and Articles of Associations Prospectus Allotment of Shares, Shares and Capital. Membership. Borrowing Powers.

**UNIT-IV**

Management and Meetings, Accounts and Audit. Compromise Arrangements and Reconstruction. Prevention of Oppression and Mismanagement. Winding Up.; Consumer Protection Act and Cyber Laws.

**UNIT-V**

Basic provisions of pollution control, environment protection and intellectual property rights. Laws related to mergers & acquisitions in view of the multinational companies operating in India.



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## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### **Books Recommended:**

1. Avtar Singh. Company Law, 11<sup>th</sup> ed. Lucknow, Eastern, 19996.
2. Khergamwala, J. S. The Negotiable Instrument Acts, Bombay, N.M. Tripathi, 1980.
3. Remaiya, A. Guide to the Companies Act. Nagpur, Wadhwa, 1992.
4. Shah, S.M. Lectures on Company Law, Bombay, N.M. Trhpathi 1990.
5. Tuteja, S.K. Business Law for Managers. New Delhi Sutan Chand, 1998.



# RKDF UNIVERSITY RANCHI

## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

Second Year	Semester IV
Subject Title	Subject Code
Management Information System & Decision Support System	MBA-406

### Unit-I

Information System in Business Introduction to Information System; System Concepts; System & Sub System; System Feed back; Types of Information System; Applications; System Development Life Cycle (SDLC).

### Unit-II

Managing Data Resources Introduction; Organizing Data in a Traditional File Environment; Data Base Management System; Data Base Environment; The range of Data Base Applications; Integration of Information; Role of Enterprise Resource Planning (ERP); Customer Relationship Management; Work Group Integration; Integration of Different Systems; Information System Organizations & Business Processes.

### Unit-III

Management of Information Systems, Technology, and Strategy The Technology: Computer and Computer Processing; Role of Information Technology in Organization; Information System and Strategy; Strategic Analysis.

### Unit-IV

Electronic Communication System Electronic Conference; Electronic Meeting Systems; Electronic Discussions; Electronic Publishing; Introduction to Networks; Network Basics; LAN Basics; Internet Working; ISDN Basics; Network Management.

### Unit-V

Business Telecommunications Telecommunication and Network; The Internet and World Wide Web (WWW); E Business; Applications on E-Business; Transaction Process System (TPS); Operational Information Systems.



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MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

## **Books Recommended:**

1. Management Information Systems by Jaiswal and Mittal, Oxford University Press
2. Decision Support Systems and Intelligent Systems by Turban and Aronson, Pearson Education Asia
3. Management Information Systems by C.S.V.Murthy
4. Management Information Systems by Laudon, Laudon, Dass, Pearson Education Asia.



# RKDF UNIVERSITY RANCHI

## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### Second Year

### Semester IV

Subject Title	Subject Code
CONSTRUCTION PLANNING, SCHEDULING AND CONTROL	MBA-XXX

**OBJECTIVE:** To study and understand the concept of planning, scheduling, cost and quality control, safety• during construction, organization and use of project information necessary for construction project.

### UNIT I

CONSTRUCTION PLANNING 9 Basic Concepts in the Development of Construction Plans – Choice of Technology and Construction Method – Defining Work Tasks – Defining Precedence Relationships among Activities – Estimating Activity Durations – Estimating Resource Requirements for Work Activities – Coding Systems.

### UNIT II

SCHEDULING PROCEDURES AND TECHNIQUES 9 Construction Schedules – Critical Path Method – Scheduling Calculations – Float – Presenting Project Schedules – Scheduling for Activity-on-Arrow and with Leads, Lags, and Windows – Scheduling with Resource Constraints and Precedences – Use of Advanced Scheduling Techniques – Scheduling with Uncertain Durations – Calculations for Monte Carlo Schedule Simulation – Crashing and Time/Cost Tradeoffs – Improving the Scheduling Process.

### UNIT III

COST CONTROL, MONITORING AND ACCOUNTING 9 The Cost Control Problem – The Project Budget – Forecasting for Activity Cost Control – Financial Accounting Systems and Cost Accounts – Control of Project Cash Flows –Schedule Control – Schedule and Budget Updates – Relating Cost and Schedule Information.



# RKDF UNIVERSITY RANCHI

## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### UNIT IV

QUALITY CONTROL AND SAFETY DURING CONSTRUCTION 9 Quality and Safety Concerns in Construction – Organizing for Quality and Safety – Work and Material Specifications – Total Quality Control – Quality Control by Statistical Methods – Statistical Quality Control with Sampling by Attributes – Statistical Quality Control with Sampling by Variables – Safety.

### UNIT V

ORGANIZATION AND USE OF PROJECT INFORMATION 9 Types of Project Information – Accuracy and Use of Information – Computerized Organization and Use of Information – Organizing Information in Databases – Relational Model of Databases – Other Conceptual Models of Databases – Centralized Database Management Systems – Databases and Applications Programs – Information Transfer and Flow

OUTCOME: On completion of this course the students will know the development of construction planning, scheduling procedure and controls.

#### **Recommended Book:**

1. Ketki B Dalal Rangwala, Construction Planning and management .
2. Wiley, Construction Project Scheduling and Control.



# RKDF UNIVERSITY RANCHI

## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### Second Year

### Semester IV

Subject Title	Subject Code
<b>CONSTRUCTION PERSONNEL MANAGEMENT</b>	<b>MBA-XXX</b>

**OBJECTIVE:** To study the various aspects of manpower management such as man power planning, • organization, human relations, welfare and development methods in construction.

### UNIT I

MANPOWER PLANNING Manpower Planning process , Organizing, Staffing, directing, and controlling – Estimation, manpower requirement – Factors influencing supply and demand of human resources – Role of HR manager – Personnel Principles.

### UNIT II

ORGANISATION 9 Requirement of Organization – Organization structure – Organization Hierarchical charts – Staffing Plan - Development and Operation of human resources - Managerial Staffing – Recruitment – Selection strategies – Placement and Training.

### UNIT III

HUMAN RELATIONS AND ORGANISATIONAL BEHAVIOUR 9 Basic individual psychology – Approaches to job design and job redesign – Self managing work teams – Intergroup – Conflict in organizations – Leadership-Engineer as Manager – al aspects of decision making – Significance of human relation and organizational – Individual in organization – Motivation – Personality and creativity – Group dynamics, Team working – Communication and negotiation skills.



# RKDF UNIVERSITY RANCHI

## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### UNIT IV

**WELFARE MEASURES 9 Compensation** – Safety and health – GPF – EPF – Group Insurance – Housing - Pension – Laws related to welfare measures.

### UNIT V

**MANAGEMENT AND DEVELOPMENT METHODS 9** Wages and Salary, Employee benefits, Employee appraisal and assessment – Employee services – Safety and Health Management – Special Human resource problems – Productivity in human resources – Innovative approach to designing and managing organization – Managing New Technologies – Total Quality Management – Concept of quality of work life – Levels of change in the organizational Development – Requirements of organizational Development – System design and methods for automation and management of operations – Developing policies, practices and establishing process pattern – Competency upgradation and their assessment – New methods of training and development – Performance Management.

**OUTCOME:** On completion of this course the students will know various processes in manpower planning, • organizational and welfare measures.





# RKDF UNIVERSITY RANCHI

## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### Second Year

### Semester IV

Subject Title	Subject Code
Management Thesis	MBA-4XX

**Objective:** The purpose of this course is to enable students to conduct problem solving research for specific industry and develop model for improving industry performance.

**Theory Subject:** A group of three to four students are asked to study a industry specific problem solving research. The group is required to submit a technical report. The detailed synopsis of the study will be prepared by the group and approved by the faculty in the beginning. The group will also be required to study in-depth at least one specific issue related to any of the courses of study in their respective industry. The group will identify the issue and will prepare detailed synopsis of the research project study. The research problem on the issue may be based on primary data or secondary data depending upon the nature of the topic and the research design. The project will be evaluated on the basis of written report, presentation and viva-voce.



# RKDF UNIVERSITY RANCHI

## MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

### Second Year

### Semester IV

Subject Title	Subject Code
Entrepreneurship Development	MBA-4XX

**Objective** The purpose of this course is to enable students to conduct problem solving research for specific industry and develop model for improving industry performance and develop project for entrepreneurship.

### UNIT-I INTRODUCTION

Meaning, Characteristics and importance of entrepreneurship, Types and Functions of an entrepreneur, entrepreneurship, Factors influencing entrepreneurship, Features of a successful Entrepreneurship, Merits of a Good Entrepreneur & Motivational Factors of Entrepreneurship.

### UNIT-II ESTABLISHING AN ENTERPRISE

Forms of Business Organization, Project identification, Selection of the product, Project formulation, Assessment of project feasibility.

### UNIT-III MARKETING MANAGEMENT

Meaning and Importance ,Evaluation of Marketing Marketing mix, product management- Product line, Product mix, stages of product life cycle, marketing research and importance of survey, 7PS Marketing, BCG Matrix, GE 9 Cell.

### UNIT –IV ORGANISATIONAL BEHAVIOUR AND INTERNATIONAL BUSINESS

Evolution of management thought, Classical Approach-Taylor, Fayol, Behavioural Approach system, , Maslow Theory. Meaning of International Business, Selection of a market for international business, Export financing, Institutional supports for exports.

**Project Report on a selected product/segment should be prepared and submitted.**



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MASTER OF BUSINESS ADMINISTRATION (MBA)-CONSTRUCTION MANAGEMENT

## **Books Recommended**

1. Entrepreneurship Guide-Bihar State Financial Corporation, Fraser Road, Patna 800001.
2. Motivation-Published by I.S.T.E. Mysore.
3. Philip Kotler- Marketing Management.