Maharshi Dayanand University Rohtak



Ordinance Syllabus and Courses of Reading of M.B.A (Two Year) Examination (I & II Semester)

2009-2010

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(iii)

- 3.(a) The first semester examination shall be open to a regular student who:
 - (i) has been on the rolls of the Institute during the first semester;
 - (ii) has at least 75% attendance in the class during the semester;
 - (iii) has obtained pass marks in the internal assessment/ workshop/practical exam, as specified in Clause 20; and
 - (iv) bears a hood moral character;
- (b) The second, third and fourth semester examination shall be open to a regular student who:
 - (i) has been on the rolls of the Institute for the concerned semester;
 - (ii) has at least 75% attendance in the class during the semester;
 - (iii) has passed the relevant semester examination or is covered under clause 22(i) of the ordinance; and
 - (iv) bears a good moral character.

B. <u>EXAMINATION</u>

- 4. Every candidate shall be examined in the subject(s) as laid down in the Scheme of Examinations/Syllabus prescribed by the Academic Council from time to time.
- 5. The external examiner(s) will set the question papers as per the criteria laid down in the Scheme of Examination for the programme.
- 6. The medium of instruction and examination shall be English.
- 7. The last date of receipt of admission forms and fees shall be fixed by the Vice-Chancellor.
- 8. The amount of examination fee to be paid by a candidate for each semester shall be as per the decision of the University from time to time.
- 9. The Examination for the first and the third semesters shall ordinary be held in the month of December/January and for the second and the fourth semesters in the month of May/June or on such dates as may be fixed by the Vice-Chancellor.

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Supplementary examinations will be held for reappear/failed candidates as under:

Semester	When held
(a) First Semester	Along with the Third Semester
(b) Second Semester	Along with the Fourth Semester
(c) Third Semester	Along with the Fourth Semester
(d) Fourth Semester	Along with subsequent Third
	Semester

- 10. The Direct/Principal of the concerned Institute/College shall forward to the Controller of Examinations at least two weeks before the commencement of the examination in each semester, a list of the eligible students who have satisfied the requirements of rules for appearing in the Examination.
- 11.(i) As soon as possible, after the termination of the examination the controller of Examinations shall publish a list of candidates who have passed the Semester Examination.
 - (ii) Each successful candidate shall receive a copy of the detailed marks card on having passed the Semester Examination.
- 12. The list of successful candidates after the fourth semester examination shall be arranged as under in two divisions on the basis of the aggregate marks obtained in the first, second, third and fourth semester examinations taken together and the division obtained by the candidate will be stated in his/her degree.
 - (a) Those who obtain 50% marks but less than 60% marks-SECOND DIVISION;
 - (b) those who obtain 60% or more marks FIRST DIVISION;
 - (c) those who pass all the four semester examinations at the first attempt obtaining 80% or more marks in the aggregate shall be declared to have passed with –

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last date of receipt of the Project Report, till the commencement of the fourth semester examination, with a late fee.

- (ii) The Project Report shall be evaluated as per the guidelines specified in the Scheme of Examination, separately by the external and the internal examiners. If the difference in the awards is up to 30% of the maximum marks, the average of the two shall be taken as final awards. If the difference between the external and internal examiners is more than 30% of the maximum marks, the appointment of the third examiner shall be made by the Vice-Chancellor out of the panel recommended by the PG Board of Studies in Management. The final award shall be the average of the three examiners.
- (iii) The marks obtained by the candidate for the project report shall be taken into account when he appears in any future examination under reappear clause.
- 17. (a) The comprehensive viva-voce/workshop shall be conducted by a Board of Examiners to be appointed by the Vice-Chancellor on the recommendation of the PG Board of Studies in Management consisting of the following members:
 - i) One internal Faculty nominated by the Director of the concerned Institute.
 - ii) Two External Examiners from the Academic field; and
 - iii) Two Executives from reputed organisations.

Three members shall form the quorum.

- (b) The marks obtained by the candidate for the Viva-voce/ workshop shall be taken into account when he appears in any future examination under re-appear clause.
- 18. The practical examination(s) of the courses (relating to IT/Computer or wherever specified) shall be conducted by the following Board of Examiners, consisting of two members.
 - (i) One internal faculty member (to be appointed by the

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Director of the concerned Institute); and

- (ii) One external examiner (to be appointed by the Vice-Chancellor on the recommendations of the PG BOS in Management).
- 19. The Project Report and Training Report, wherever specified will be submitted in typed form as per the following requirements :
 - (i) The typing should be done on both sides of the paper (instead of single side printing)
 - (ii) The font size should be 12 with Time Roman Format.
 - (iii) The Project Report/Training Report may be typed in 1.5 (one and a half) space. But the References/Bibliography should be typed in a single space.
 - (iv) The paper should be A-4 size.
 - (v) Two copies meant for the purpose of evaluation may be bound in paper-back form and one copy should be in hard binding.

D. PROMOTION AND REAPPEAR

- 20. The minimum percentage of marks to pass the examination in each semester shall be:-
 - 45% in each written paper and internal assessment/ Computer practical/workshop, separately;
 - ii) 45% in Training Report/Project Report and Viva-Voce separately.
 - iii) 50% in the total of each semester examination.
 - iv) A candidate who has secured minimum marks to pass in each paper but has not secured the minimum marks required to pass in aggregate for the semester concerned may take re-examination (in not more than three such papers) to obtain the aggregate percentage required to pass the semester.
- 21. A candidate whose result is declared late without any fault on his/her part, may attend classes for the next higher semester provisionally at his own risk and responsibility, subject to his/her

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2.

First year 2nd Semester

Paper No.	Title of the Paper(s)	External Marks	Internal Marks	Practical Marks/ Work-shop
2201	Financial Management	70	30	_
2202	Marketing Management	70	30	-
2203	Human Resource Management	70	30	_
2204	Operations & Supply Chain Management	70	30	_
2205	Business Research Methods	50	_	50
2206	Computer Network & Internet	50	_	50
2207	Operations Research	70	30	_
2208	International Business	70	30	_

NOTES:

- Immediately after the completion of the second semester the students shall proceed for their Summer Vacation Training (SVT) of 8 weeks duration. The Summer Vacation Training Reports prepared after the completion of SVT shall be assessed in the third semester as a compulsory paper.
 - The SVT will be submitted by the candidates in the manner as specified in the ordinance.
- 2. The performance of the candidates will be evaluated in the paper of Business Research Methods (2205) externally for 50% marks and for the remaining 50% marks by way of representations in the workshop arranged by the Faculty during the semester.
 - At least five workshops will be conducted in the class by the Faculty.
- 3. The duration of the end term examination shall be 3 hours.

Curriculum and Scheme of Examinations for Two year MBA Programme Session 2007-08

First year 3rd Semester

Paper No.	Title of the Paper(s)	External Marks	Internal Marks	Practical Marks/ Work-shop
2301	Strategic Management	70	30	_
2302	Managenal Information System	70	30	_
2303	Business Legistration	70	30	_
2304	Summer Training Report	70	30	_
	Optional Paper	_	_	_
	Optional Paper	_	_	_
	Optional Paper	_	_	_
	Optional Paper	_	_	_
	Optional Paper	_	_	_
	Optional Paper	_	-	_

NOTES:

- 1. Students are required to choose any three optional papers from each set of specialisation areas offered under dual specialisation scheme.
- The SVT carry 100 marks, which will be evaluated externally for 50% marks and for 50% internally Internal evaluation will be based on the presentation/viva voce of SVT before the Board of examiners, as specified in the Ordinance.
- 3. The duration of the end term examination shall be 3 hours.

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Third Semester

Paper No.	Title of the Paper(s)	External Marks	Internal Marks	Practical Marks/ Work-shop
2309	Management of Financial Services and Institutions	70	30	_
2310	Project Management & Infrastructure Finance	70	30	
2311	Strategic Cost Management & Control	70	30	_
2312	Multinational Financial Management	70	30	_

Fourth Semester

Paper No.	Title of the Paper(s)	External Marks	Internal Marks	Practical Marks/ Work-shop
2409	Taxation Laws and Planning	70	30	_
2410	Management of Banking and Insurance	70	30	_
2411	Security Analysis and Portfolio Management	70	30	_
2412	Financial Derivatives	70	30	_

NOTES:

The duration of the end term examination shall be 3 hours.

Information Technology

Third Semester

Paper No.	Title of the Paper(s)	External Marks	Internal Marks	Practical Marks/ Work-shop
2313	Object Oriented Analysis and Design	70	-	50
2314	Programming in Oracle	50	_	50
2315	Data base Management System	50	-	50
2316	Multimedia and Web Development	50	_	50

Fourth Semester

Paper No.	Title of the Paper(s)	External Marks	Internal Marks	Practical Marks/ Work-shop
2413	Software Engineering	50	_	50
2414	Systems Analysis and Design	50	_	50
2415	Artificial Intelligence	50	_	50
2416	Programming in JAVA	50	_	50

NOTES:

The duration of the end term examination shall be 3 hours.

MANAGEMENT CONCEPT AND APPLICATION Paper Code: 2101/50701

External Marks: 70 Internal Marks: 30 Time: 3 hrs.

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COURSE OBJECTIVE:

The objective of this course is to expose the students to the basic concepts of management and to enable them to gain appreciation for emerging ideas, techniques, procedures and practices in the field of management.

Unit-I

Introduction: concept and nature of management; managerial competencies – communication, team work, planning and administrative, strategic and global competencies, evolution of management thoughts-traditional, behavioural, system, contingency and quality viewpoints.

Unit-II

Planning: decision making and organizing: nature and elements of planning, planning types and models, planning in learning organizations; strategic planning—an overview; decision making process, models of decision-making, increasing participation in decision-making, decision making creativity: basic issues in organizing—work specialization, chain of common delegation, decentralization, span of management, bases for departmentation.

Unit-III

Leading: recognition of human factor, motivation models/approaches; leadership styles/behaviours, personal characteristics of effective leaders, leadership development, leadership for learning oganizations.

Unit-IV

Management control, managerial ethics and social responsibility: management control – concept and process, overview of control

techniques, effective control system; managerial ethics, factors affecting ethical choices, ethical dilemma; social responsibility; evaluating corporate social performance; managing company ethics and social responsibility.

Suggested Readings:

- 1. Robbins, S.P. and Decenzo, D.A. Fundamentals of Management, Pearson Education Asia, New Delhi.
- 2. Hellreigel, **Management**. Thomson Learning, Bombay.
- 3. Koontz, H and Wechrich. H; Management, Tata McGraw Hill
- 4. Stoner, J et. al. Management, New Delhi, PHI, New Delhi
- 5. Robbins & Coulter, Management- PHI, New Delhi
- 6. Satya Raju, Management Text & Cases, PHI, New Delhi
- 7. Richard L. Daft, Management, Thomson South-Western

- 1. One case study be discussed per unit in the class.
- 2. Instruction for External Examiner: The question paper will have two sections. Section 'A' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions (one question from each unit). Section 'B' will contain one CASE STUDY which will be compulsory. All the five questions will carry equal marks.

ORGANISATIONAL BEHAVIOUR Paper Code: 2103/50703

External Marks: 70 Internal Marks: 30 Time: 3 hrs.

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COURSE OBJECTIVE:

This course aims to provide insights necessary to understand behavioural processes at individual, team and organizational level to enable the students to learn how to influence the human behaviour in organisations.

Unit-I

Foundation and background of OB, contemporary challenges-workforce diversity, cross-culture dynamics, changing nature of managerial work, ethical issues at work, emotional intelligence in contemporary.

Unit-II

Individual behaviour and processes; individual differences- values and attitudes; perception- concept, process and applications, personality-concept determinants and theories applications, learning and Reinforcement, stress - symptoms, causes consequences and management.

Unit-III

Interpersonal and team processes; group development, behaviour group development, group dynamics, social loafing; developing teams - self directed work teams, virtual teams, team building; Empowerment - concept, significance, process, prerequisites, Conflict - concept, sources, types, management of conflict, Power-concept, sources, approaches, organisational politics.

Unit-IV

Organizational processes and structure: organizational structure and design, Work and job design, organizational learning; organizational culture, organizational change and development.

Suggested Readings:

- Nelson, Debra L. and James C Quick, Organisational Behaviour, Thomson Learning.
- Parkeek, Udai, Understanding Organisational Behaviour, Oxford University Press, New Delhi.
- 3. Robbins, S.P. **Organizational Behaviour,** Prentice Hall of India, New Delhi.
- 4. Hellgiegel, D & J.W. Slocum, **Organisational Behaviour**, Thomson Learning
- 5. McSchane, Organisation Behaviour, TMH, New Delhi
- 6. Luthans, Fred, **Organisational Behaviour**, McGraw Hill, New York.
- New Storm and Keith Davis, Organisation Behaviour, TMH, New Delhi.

- 1. One case study be discussed per unit in the class.
- 2. **Instruction for External Examiner:** The question paper will have two sections. Section 'A' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions (one question from each unit). Section 'B' will contain one CASE STUDY which will be compulsory. All the five questions will carry equal marks.

ACCOUNTING FOR MANAGERS Paper Code: 2105/50705

External Marks: 70 Internal Marks: 30 Time: 3 hrs.

COURSE OBJECTIVE:

The objective of this course is to acquaint the students regarding various accounting concepts and its applications in managerial decision making.

Unit-I

Financial Accounting-concept, importance and scope, accounting principles, journal, ledger, trial balance, depreciation (straight line and diminishing balance methods), preparation of final accounts with adjustments.

Unit-II

Analysis and interpretation of financial statements- meaning, importance and techniques, ratio analysis, fund flow analysis, cash flow analysis (AS-3)

Unit-III

Cost accounting-meaning, importance, methods, techniques, classification of costs and cost sheet; inventory valuation; an elementary knowledge of activity based costing.

Unit-IV

Management accounting concept, need, importance and scope, Budgetary control, meaning, need, objectives, essentials of budgeting, different types of budgets; standard costing and variance analysis (materials, labour); marginal costing and its application in managerial decision making.

Suggested Readings:

1. Singhal A.K. and Ghosh Roy. H.J. **Accounting for Managers**, JBC Publishers an Distributors, New Delhi.

- 2. Pandey, I.M. **Management Accounting**, Vikas Publishing House, New Delhi.
- 3. Horngren, Sundem and Stratton, **Introduction to Management Accounting**, Pearson Education, New Delhi.
- 4. Anthony R.N. and Reece J.S. **Management Accounting Principles.** Homewood, Illinois, Richard D.Irwin, 1995.
- 5. Hansen & Mowen, Cost Management, Thomson Learning
- 6. Mittal, S.N. Management Accounting and Financial Management, Shree Mahavir Book Depot, New Delhi.
- 7. Jain, S.P. and Narang, K.L., **Advance Cost Accounting**, Kalyani Publishers, Ludhiana.
- 8. Khan, M.Y. and Jain P.K. **Management Accounting.** TMH, New Delhi.

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- 1. One case study be discussed per unit in the class.
- 2. **Instruction for External Examiner:** The question paper will have two sections. Section 'A' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions (one question from each unit). Section 'B' will contain one CASE STUDY which will be compulsory. All the five questions will carry equal marks.

BUSINESS COMMUNICATION SKILLS Paper Code: 2107/50707

Internal Marks: 50 Practical Marks: 50 Time: 3 hrs.

COURSE OBJECTIVE:

To acquaint the students with fundamentals of communication, help them honing oral, written and non-verbal communication skills and to transform their communication abilities.

Unit-I

Purpose and process of communication; myths an realities of communication; paths of communication oral communication; noise, barriers to communication; listening-listening process, types of listening, deterrents of listening process, essentials of good listening, telephonic communication.

Unit-II

Presentation skills; prerequisites of effective presentation, format of presentation, Assertiveness—indicators of assertive behaviour, strategies of assertive behaviour, Communication skills for group discussion and interviews.

Unit-III

Non verbal communication; gestures, handshakes, gazes, smiles, hand movements, style of working, voice modulations, body sport for interviews, business etiquettes; business dining, business manners of people of different cultures, managing customer care.

Unit-IV

Written communication; mechanics of writing, report writing, circulars, notices, memos, agenda and minutes, business correspondence-business letter formal style of letter arrangement, types of letters, telex messages, facsimiles, electronic mail, diary writing; developing resume.

Note: In the paper Business Communication Skills (2107) candidates

performance will be assessed internally for 50% marks and in the Workshop for the remaining 50% marks. Internal Assessment will be done on the basis of his/her presentation through Video Film and the record shall be preserved on CDs. The assessment for the remaining 50% marks will be made on the basis of performance of the candidates in the workshop to be conducted in the manner as specified in the Ordinance.

Suggested Readings:

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- 1. Kaul, Asha, Business Communication, PHI, New Delhi
- 2. Kaul, Asha, Effective Business Communication, PHI, New Delhi.
- 3. Chaturvedi, P.D., and Mukesh Chaturvedi, Business Communication. Pearson Education.
- 4. McGrath, E.H., Basic Managerial Skills for All, PHI, New Delhi.

FINANCIAL MANAGEMENT Paper Code: 2201/50801

External Marks: 70 Internal Marks: 30

Time: 3 hrs.

COURSE OBJECTIVE:

The objective of this course is to acquaint the students regarding financial management tools and techniques in financial decision making.

Unit-I

Financial management-scope, finance functions and its organisation, objectives of financial management, time value of money, sources of long term finance.

Unit-II

Investment decisions-importance, difficulties, determining cash flows, methods of capital budgeting; risk analysis (risk adjusted discount rate method and certainty equivalent method); cost of different sources of raising capital; weighted average cost of capital.

Unit-III

Capital structure decisions-financial and operating leverage, capital structure theories- NI, NOI, traditional and M-M theories; determinants of dividend policy and dividend models- Walter, Gordon & M.M. models.

Unit-IV

Working Capital- meaning, need, determinants, estimation of working capital need; management of cash, inventory and receivables.

<u>Note</u>: The topic of capital budgeting, management of cash, inventory management, receivable management will cover theoretical concepts and simple numerical questions.

Suggested Readings:

1. Pandey, I.M., Financial Management, Vikas Publishing House, New Delhi.

- 2. Khan, M.Y., and Jain P.K., Financial Management, Tata McGraw Hill, New Delhi.
- 3. Keown, Arthur, J. Martin, John D., Petty, J. William and Scott, David F, Financial Management, Pearson Education.
- 4. Chandra, Prasanna Financial Management, TMH, New Delhi.
- 5. Van Horne, James C. Financial Management and Policy, prentice Hall of India.
- 6. Brigham & Houston Fundamentals of Financial Management, Thomson Learning, Bombay.
- 7. Kishore, R., Financial Management, Taxman's Publishing House, New Delhi

- 1. One case study be discussed per unit in the class.
- 2. **Instruction for External Examiner:** The question paper will have two sections. Section 'A' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions (one question from each unit). Section 'B' will contain one CASE STUDY which will be compulsory. All the five questions will carry equal marks.

HUMAN RESOURCES MANAGEMENT Paper Code: 2203/50803

External Marks: 70 Internal Marks: 30 Time: 3 hrs.

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COURSE OBJECTIVE:

The primary concern of this course is to develop an appreciation of effective management of human resources and to enable the students to meet HR challenges in present scenario.

Unit-I

Strategic importance of HRM, objectives of HRM; challenges to HR professionals; role, responsibilities and competencies of HR professionals; HR department operations; human resource planning – objectives and process; human resource information system.

Unit-II

Talent acquisition: recruitment and selection strategies, career planning and management, succession planning, socialization and induction of new employees; training and development, investment in training, training need assessment, designing and administering training programme, executive development programme, evaluation of T & D programme.

Unit-III

Appraising performance: developing and instituting performance appraisal system, assessment and development centres, potential appraisal, rewarding performance: linking reward to organizational objectives, determine compensation structure, pay for performance and incentive plans, ESOP, executive compensation, designing and administering benefits and services.

Unit-IV

HR in knowledge era: HR in knowledge industry, HR in virtual organizations, HR in mergers and acquisitions, outplacement, outsourcing HR functions, employee leasing, HR audit, international HRM.

Suggested Readings:

- 1. Ivanceivich, John M., **Human Resources Management**, Tata Mc Graw Hill, New Delhi.
- Gomez, Megia, Luis, David Balkin and Roberty Cardy,
 Managing Human Resources. Pearson Education.
- 3. Dessler, Gary, **Human Resources Management**, Pearson Education.
- 4. Mathis, Robert, and John Jackson, **Human Resources Management**, Thomson Learning Inc.
- Shell, Scott, and George Bohlander, Human Resource Management. Thomson Learning Inc.
- 6. Pattanayak, Biswajet, **Human Resource Management,** PHI, New Delhi.
- 7. Jyothi P., and D.N. Venkatesh, **Human Resource Management**, Oxford University Press, New Delhi.

- 1. One case study be discussed per unit in the class.
- 2. **Instruction for External Examiner:** The question paper will have two sections. Section 'A' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions (one question from each unit). Section 'B' will contain one CASE STUDY which will be compulsory. All the five questions will carry equal marks.

BUSINESS RESEARCH METHODS Paper Code: 2205/50805

External Marks: 50 Work Shop: 50 Time: 3 hrs.

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COURSE OBJECTIVE:

The objective of this paper is to impart knowledge about various stages of the research processes and their application in decision making.

Unit-I

Business research: its concept, nature, scope, need and managerial value of business research; components of theory-definitions, concepts, constructs, variables, hypothesis; process of research and structure of research proposal.

Unit-II

Research design- concept and types, exploratory, descriptive, diagnostic and experimental: sampling design techniques; factors influencing sample size; attitude measurement; measurement scales- types and construction of scales and reliability' and validity aspects in measurement.

Unit-III

Method of data collection - questionaire/schedule: questionaire designoing, interview and observational methods: data analysis and interpretation, editing, coding, content analysis and tabulation: hypothesis testing- and overview of parametric and non-parametric tests (analysis of variance. X^2 test. Wilcoxon test. Rank test. Mann -Whitney test. Kruskal -- Wailis H-test).

Unit-IV

Multivariate analysis- an overview of dependence and interdependence methods (multiple regression, discriminate analysis, conjoint analysis, factor analysis, cluster analysis): research report: ingredients and constructions of research report procedure of preparation of reference and bibliography.

Note: The performance of the candidate will be educated in the paper of Business Research Methods (2205) extremally for 50% marks and for the remaining 50% marks by way of presentation in the workshop arranged by the Faculty during the semester. At least five workshop will be conducted in the class by the Faculty.

Suggested Readings:

- Zikmund, Millian G.. Business Research Methods, Thomson Learning. Bombay.
- Cooper, Donald R- and Pamels Schindler, Business Research Methods, Tata McGraw Hills, New Delhi.
- 3. Geode, Millian J. & Paul K, Halt Methods in Research, McGraw Hills, New Delhi.
- 4. Shekhran. Uma, Business Research Method, Miley Education, Singapore.
- 5. Kothari, C.R., Research Methodology.

- 1. One case study be discussed per unit in the class.
- 2. **Instruction for External Examiner:** The question paper will have two sections. Section 'A' shall comprise 8 questions (2 questions from each unit). The students will be required to attempt four questions (one question from each unit). Section 'B' will contain one CASE STUDY which will be compulsory. All the five questions will carry equal marks.

OPERATIONS RESEARCH Paper Code: PM-2206

External Marks: 70 Internal Marks: 30 Time: 3 hrs.

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COURSE OBJECTIVE:

The objective of this paper is to acquaint the student with various quantitative techniques which are of great importance for quantitative decision-making.

Unit-I

Operations Research: Evolution, methodology and role in managerial decision making; Linear programming; Meaning, assumptions, advantages, scope and limitations; Formulation of problem and its solution by graphical and simplex methods; special cases in simplex method; infeasibility, degeneracy, unboundedness and multiple optimal solutions; duality.

Unit-II

Transportation problems including transhipment problems, Special cases in transportation problems; unbalanced problems, degeneracy, maximization objective and multiple optimal solutions; assignment problems, maximization objective and multiple optimal solutions.

Unit-III

PERT/CPM: Difference between PERT and CPM, network construction, calculating EST, EFT, LST, LFT, and floats, probability considerations in PERT, time-cost trade-off. Decision theory: decision making under uncertainty and risk, Bayesian analysis; decision trees.

Unit-IV

Game theory, pure and mixed strategy games, principle of dominance, two person zero sum game, Queuing theory: concept, assumptions and applications; analysis of queue system, Poisson distributed arrivals and exponentially distributed service time models (MMI and MMK); Simulation, meaning, process, advantages, limitations and applications.

Suggested Readings:

- Paneerselvam, Operations Research, Prentice Hall of India, N. Delhi.
- Taha, Operations Research; An Introduction, Prentice Hall of India, N. Delhi.
- 3. Vohra, N.D., Quantitative Techniques in Management; Tata McGraw Hill Publishing Company Ltd. New Delhi.
- 4. Kapoor, V.K. Operations Research; Sultan Chand & Sons, New Dehi.
- 5. Sharma, J.K. Operations Research: Theory and Applications, Macmillan India Ltd. New Delhi.
- Kalavathy, Operations Research, Vikas Publishing House, New Delhi.

Note:

Instruction for External Examiner: The examiner will set 8 questions (2 questions from each unit). The students will be required to attempt any five questions (Selecting at least one question from each unit). All questions will carry equal marks.