

PANJAB UNIVERSITY, CHANDIGARH-160014 (INDIA)

**(Estd. under the Panjab University Act VII of 1947-enacted by the Govt. of
India)**

**SYLLABI FOR MASTER OF BUSINESS ADMINISTRATION (BIOTECHNOLOGY)
FOR THE EXAMINATION OF 2012-2013**

Note

Examination in each subject will be of 3 hours duration except for Strategic Management MBABT 7201 which will be 1 hour.
The duration of Strategic Management MBABT 7201 will be 1 hour.
Maximum Marks for external written examination is 100 marks and internal assessment is 20 marks except for seminar and project courses.

Instructions to the paper setters: (Except for MBABT7201: Strategic Management).

IF THERE ARE TWO SETS Set questions in a Five questions from each unit. The students are required to answer five questions in a selecting at least questions from each unit.
IF THERE ARE FOUR SETS Set questions in a Two or three questions from each unit. The students are required to answer five questions in a selecting at least one question from each unit.

NB Use of non-programmable calculators by the students in the Examination Hall is allowed. The calculators will not be provided by the university.

**SCHEME OF EXAMINATION FOR MBA
(BIOTECHNOLOGY)**

Subject Code	Paper Title	Marks
FIRST SEMESTER		
MBABT 7201	BUSINESS ECONOMICS	
MBABT 7202	BUSINESS STATISTICS	
MBABT 7203	MANAGEMENT ACCOUNTING	
MBABT 7204	ORGANISATIONAL BEHAVIOUR	
MBABT 7205	MARKETING MANAGEMENT	
MBABT 7206	WORKSHOP ON BUSINESS COMPUTING	
MBABT 7207	WORKSHOP ON BUSINESS COMMUNICATION	
	TOTAL	_____
SECOND SEMESTER		
MBABT 7208	BUSINESS ENVIRONMENT	
MBABT 7209	HUMAN RESOURCE MANAGEMENT	
MBABT 7210	OPERATIONS MANAGEMENT	
MBABT 7211	FINANCIAL MANAGEMENT	
MBABT 7212	LEGAL ASPECT OF BUSINESS	
MBABT 7213	WORKSHOP ON RESEARCH METHODOLOGY	
MBABT 7214	SEMINAR TRAINING REPORT AND INTERVIEW	

At the end of the examination of 1st Semester the students will undergo compulsory summer training for a period of 4 weeks. Every student will submit the Summer Training Report within 10 weeks from the start of teaching for 2nd Semester.

FIRST SEMESTER

MBABT6101: BUSINESS ECONOMICS

Objective: The objective of this course is to equip the students with basic know edge of the concepts and tools of economic analysis as relevant for business decision making

UNIT I

Nature and scope of business economics, concepts of economics and managerial decision

MBABT6102: BUSINESS STATISTICS

Objective: The objective of this paper is to acquaint the students with various statistical tools and techniques used to business decision making.

UNIT-I

Construction of frequency distributions and their analysis in the form of measures of central tendency and variations, types of measures, skewness, kurtosis and coefficient of skewness, Kurtosis Index, Index Numbers, Definition and Methods of Construction of Index Numbers, Tests of consistency, Base shifting, splicing and Deflation, Problems in construction, importance of index numbers in

Bhardwaj R S, *Business Statistics*, Excel Books

Gupta S P, Gupta M P, *Business Statistics*, Sultan Chand Sons, Delhi

Levin Rubin, *Statistics for Management*, Prentice Hall of India, New Delhi

MBABT6103: MANAGEMENT ACCOUNTING

Objective: The objective of this course is to acquaint the students about the role, concepts, techniques and methodology relevant to accounting function and to impart knowledge regarding the use of cost accounting information in managerial decision making.

UNIT – I

Conceptual basis of accounting, Nature and purpose of accounting, basic accounting concepts and conventions underlying preparation of financial statements, forms of business organization, accounting records, balance sheet equation, comparing accounting cycle, preparation of profit and loss account and balance sheet as per schedule I of Companies Act

UNIT – II

Revenue recognition and measurement, AS, fixed assets, AS, inventory valuation, AS, depreciation accounting, AS, intangible assets accounting, AS, financial statement analysis, ratio analysis, common size statements, comparative analysis, trend analysis, cash flow analysis, accounting for price level changes, human resource accounting, social and environmental accounting

UNIT – III

Cost accounting objectives, cost accounting and management accounting, understanding and classifying costs, overhead allocation, preparation of cost sheet, introduction to methods of costing, techniques of costing, marginal costing and its managerial implications, budgetary control, standard costing and variance analysis

UNIT – IV

politics concept, consequences, reasons and management of political behaviour, work stress causes, organizational and extra organizational stressor, individual and group stressor, effect of stress, stress coping strategies

UNIT IV

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UNIT II

Product planning and pricing, product concept, types of product, brand management, product life cycle, new product development, determinants of price, pricing process, policies and strategies

UNIT III

Promotion and distribution decisions, communication process, personal selling, publicity and sales promotion, distribution, functions of intermediaries, selection and management of intermediaries

UNIT IV

Marketing organization and control, organizing for marketing, control, ethics in marketing, emerging trends and issues in marketing, societal marketing, direct and online marketing, green marketing, customer relationship marketing

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MBABT6106: WORKSHOP ON BUSINESS COMPUTING

Objective: The objectives of this paper are to develop skills in handling computer and use it as a strategic resource in management

UNIT-1

Overview of computer applications in public services, business and industry Microsoft word mail merge, hyperlinks and bootcamp Microsoft excel mathematical calculation, sorting, filtering, pivoting, chart, macro, using financial accounting and statistical software introduction to database and operational level of

UNIT – I

An introduction to business communication, elements of the communication process, types of communication, barriers to communication, principles of written communication, Business letters: their basic qualities, mechanics of letter

UNIT I

Concept of business environment its significance and nature, interaction matrix of different environment factors, process of environmental scanning, environmental scanning of important industries of India viz tractors pharmaceutical industry, food processing, electronics, fertilizers, steel, soft drinks and T

UNIT II

Economic environment the philosophy, strategy and planning in India, monetary policy and their impact on Indian business, industrial policy, foreign trade policy and their impact on Indian business, political environment, relation between business and government of India, Constitutional provisions related to business, concept of state intervention in business, ideology of different political parties, bureaucracy and Indian business

UNIT III

Technological environment, policy for research and development in India, appropriate technology, debate of technology vs labour, MNC as a source of transfer of technology and its impact, institutional infrastructure for exports in India, India's export-import policy, global business environment, significance of foreign investment in India, opportunities and threats in WTO and the new international trading regime, tariff and non-tariff barriers in global trade

UNIT – IV

Socio-cultural environment in India, salient features of Indian culture, values and their impact on Indian business, middle class in India and its impact on industrial growth in India, consumer as an emerging force, social responsibility of business, business ethics and Indian business, impact of mass media on Indian business, changing role of rural sector in India, rural income and rural demand of consumer durable

References:

- Adhikari A, *Economic environment of business* Sultan Chand Sons
- Adhikari M, *Business Economics* Excel Books, New Delhi
- Aswathappa K, *Essentials of business environment* Himalaya Publishing House
- Cheruvu J. F, *Business Environment* Himalaya Publishing House
- Puri K and Misra S K, *Indian economy* Himalaya Publishing House

MBABT6202: HUMAN RESOURCE MANAGEMENT

Objective: The course is designed to give an understanding of the various aspects of the management of human resources, their interaction in the execution of managerial functions and facilitating learning of various concepts and skills required for utilization and development of these resources for organizational functions.

UNIT I

Human resource management Functions, scope and modes, HRM environment and environmental scanning, human resource planning, job analysis and job designing, recruitment, selection, induction and placement, training and development, job evaluation

UNIT II

Panerseva, R., *Operations Research*, Prentice Hall of India, New Delhi

Sharma, J.K., *Operations Research Theory and Applications*, Macmillan India Ltd, New Delhi

Taha, H.A., *Operations Research An Introduction*, Prentice Hall of India, New Delhi

Chandra, N.D., *Quantitative Techniques in Management*, Tata McGraw Hill Publishing Company Ltd

MBABT6204: FINANCIAL MANAGEMENT

Objective To provide an understanding of the function, the roles, the goals and the processes of corporate financial management, covering the sourcing of finances and their issues in investment and operations

UNIT I

Introduction, concept of finance, scope and objectives of finance, profit maximization vs wealth maximization, functions of financial manager in modern age, financial decision areas,

UNIT IV

Dividend decision concept of retained earnings and ploughing back of profits, relevance and irrelevance theories of dividend decision a ter s

UNIT – III

Objectives of foreign exchange management act, provisions of FEMA dealing with regulation and management of foreign exchange, economic offences and penalties, intellectual property rights, objectives of SEBI, provisions of SEBI act dealing with takeover and substantial

UNIT – III

UNIT II

Elements for a programme, entrepreneurial training and development programmes, entrepreneurship orientation and awareness programme, evaluation of various EDP programmes, women entrepreneurs, steps taken by government to promote EDPs, institutional entrepreneurial environment in India

UNIT III

Definition of MSME *micro, small and medium enterprises*, rationale, objective, scope, role

MBABT7102: PROJECT PLANNING, ANALYSIS AND MANAGEMENT

Objective The objective of this course is to promote a sound understanding of the theory and practice of project management. More specifically it introduces students to the purpose, principles, problems and changes, concepts, techniques, and practice of project management and its various facets. It also discusses in project planning, execution and control methods. It introduces students to project management software and applications.

UNIT I

Project planning and analysis overview, phases of capital budgeting, levels of decision making, resource allocation framework, key criteria for allocation of resources, elementary investment strategies, portfolio planning tools, strategic position and action evaluation, aspects relating to conglomerate diversification, interface between strategic planning and capital budgeting, generation and screening of project ideas, generation of

Little, I M D and Mirrees, J A, *Project Appraisal and Planning for Developing Countries*, Oxford and IBH Publishing Co

Nevitt, P K and Fabozzi, F J, *Project Financing*, Euro money Books

MBABT7103: BUSINESS PROCESS RE-ENGINEERING

Objective: The objective of this course is to develop the abilities of the students to design and to evaluate management and its existing structure and select the right frame for Reengineering

UNIT I

Definition of reengineering, time for reengineering, why business process start to fail, explanation of change theory, reengineering mission and scope, reengineering cost, survival and growth strategies, rethinking business processes

UNIT II

The new world of work, the enabling role of information technology, perspectives on the customer, understanding markets, customer research within markets, service and specifications from the customer, insights from customer analysis

UNIT III

Understanding the influences in the background, perspectives on the background, dynamic nature of the industry, competitive intelligence, Bringing the background into focus, mapping the way work gets done, identifying areas for improvement

UNIT IV

Planning for change, refined mission and scope, design options and alternatives, fitting in the fine details, mapping the new process, developing business policies, information channels and communications, feedback for continuous improvement, implementing systems and structural changes, selecting the right frame, the horns of the downsizing dilemma, maximizing the chances for reengineering success, resistance to change, the transition process, revitalizing the organization for long term durable change, reengineering experience

References

Dey, B.R., *Business Process Reengineering – Change Management* Dreamtech Press
Edition

Hammer, M. and Champy, J., *Reengineering the Corporation – A Manifesto for business
revolution*, Nicholas Brearley Publishing Limited, London

Jawadekar, S., *Redesigning the business organization* Tata McGraw
Hill Publishing Company Limited

factors influencing growth, use of animal and plant cell culture structure and organization of animal cell, primary and established cell lines, culture

reciprocating and centrifugal flow meters, mixing theories of mixing devices, propellers, turbines and paddles, power estimations, selection of a mixing device, mixing of solids, centrifugation, principles of centrifugation, industrial centrifuges

UNIT II

FOURTH SEMESTER

Hitt, Michael and Hoskisson, Robert E. *Strategic Management: Competitiveness and Globalization*. Southwestern Thomson

in customer privacy. CRM measurement. Analysis of CRM strategies and approaches

UNIT I

Introduction to TQM History, aims, objectives, benefits, gurus and their principles, TQM reasons for use of TQM, proven examples and benefits, methods to assist the progress of TQM, introduction to tools and techniques brainstorming, affinity diagram, benchmarking, fishbone diagram, check sheet, flow chart, line graph, run chart, histogram, Pareto diagram, FMEA, scatter diagram, control chart, QFD, tree diagram, force field analysis, seven wastes, 5S, 6S, 8S, 10S, 12S, 14S, 16S, 18S, 20S, 22S, 24S, 26S, 28S, 30S, 32S, 34S, 36S, 38S, 40S, 42S, 44S, 46S, 48S, 50S, 52S, 54S, 56S, 58S, 60S, 62S, 64S, 66S, 68S, 70S, 72S, 74S, 76S, 78S, 80S, 82S, 84S, 86S, 88S, 90S, 92S, 94S, 96S, 98S, 100S, 102S, 104S, 106S, 108S, 110S, 112S, 114S, 116S, 118S, 120S, 122S, 124S, 126S, 128S, 130S, 132S, 134S, 136S, 138S, 140S, 142S, 144S, 146S, 148S, 150S, 152S, 154S, 156S, 158S, 160S, 162S, 164S, 166S, 168S, 170S, 172S, 174S, 176S, 178S, 180S, 182S, 184S, 186S, 188S, 190S, 192S, 194S, 196S, 198S, 200S, 202S, 204S, 206S, 208S, 210S, 212S, 214S, 216S, 218S, 220S, 222S, 224S, 226S, 228S, 230S, 232S, 234S, 236S, 238S, 240S, 242S, 244S, 246S, 248S, 250S, 252S, 254S, 256S, 258S, 260S, 262S, 264S, 266S, 268S, 270S, 272S, 274S, 276S, 278S, 280S, 282S, 284S, 286S, 288S, 290S, 292S, 294S, 296S, 298S, 300S, 302S, 304S, 306S, 308S, 310S, 312S, 314S, 316S, 318S, 320S, 322S, 324S, 326S, 328S, 330S, 332S, 334S, 336S, 338S, 340S, 342S, 344S, 346S, 348S, 350S, 352S, 354S, 356S, 358S, 360S, 362S, 364S, 366S, 368S, 370S, 372S, 374S, 376S, 378S, 380S, 382S, 384S, 386S, 388S, 390S, 392S, 394S, 396S, 398S, 400S, 402S, 404S, 406S, 408S, 410S, 412S, 414S, 416S, 418S, 420S, 422S, 424S, 426S, 428S, 430S, 432S, 434S, 436S, 438S, 440S, 442S, 444S, 446S, 448S, 450S, 452S, 454S, 456S, 458S, 460S, 462S, 464S, 466S, 468S, 470S, 472S, 474S, 476S, 478S, 480S, 482S, 484S, 486S, 488S, 490S, 492S, 494S, 496S, 498S, 500S, 502S, 504S, 506S, 508S, 510S, 512S, 514S, 516S, 518S, 520S, 522S, 524S, 526S, 528S, 530S, 532S, 534S, 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UNIT IV

UNIT IV

Metabolic engineering and industrial products plant secondary metabolites, control mechanisms and manipulation of phenylpropanoid pathway, shikimate pathway, alkaloids, terpenoids, industrial enzymes, antibodies, edible vaccines, purification strategies, introduction to the balanced salt solutions and simple growth media, brief discussion on the chemical, physical and metabolic functions of different constituents of culture media, microbial biotechnology

References

Kuby, J. *Immunology*. H. Freeman & Co., New York

MBABT7207: SEMINAR ON INTELLECTUAL PROPERTY RIGHTS AND BIOTECHNOLOGY

Objective: The focus of this paper is to sensitise the participants on the intellectual properties, its various kinds of infringements and the legal remedies available for its protection. Emphasis is on the case laws for better understanding.

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MBABT7208: WORKSHOP ON INSTRUMENTATION IN BIOTECHNOLOGY

Objective: The objective of this course is to introduce the students to the theoretical foundations and practical exposure of biotechnology

UNIT I

Theoretical foundations and practical exposure to following experiments SDS PAGE separation of proteins, sodium dodecyl sulphate polyacrylamide gel electrophoresis, isolation of DNA and RNA, chemical analysis of RNA and DNA, agarose gel electrophoresis of RNA and DNA, restriction enzyme sites in DNA

UNIT II

Theoretical foundations and practical exposure to following experiments polymerase chain reactions, nuclear magnetic resonance spectroscopy, spectroscopic analysis, TEM SEM, absorption spectra for nucleic acids and proteins

References

Manuals of various equipments cited above