



3-Year Bachelor of Hotel Management (BHM) Curriculum and Syllabus

Third Semester

Course Code	Course Title	Contact Hrs. / Week			Credit
		L	T	P	
Theory					
TIU-UMG-T203	Managerial Economics	3	1	0	3
TIU-UMG-T201	Financial Accounting	3	1	0	3
TIU-UMG-T205	Production Management	3	1	0	3
TIU-UMG-T207	Operation Research	3	1	0	3
TIU-UMG-T211	Bio-Sciences & Epidemiology	3	1	0	4
TIU-UMG-T213	Laws Related to Hospital & Medical Services	3	1	0	4
	Career Advancement & Skill Development	3	1	0	3
Practical					
TIU-UMG-P2	Minor Project	0	0	2	2
Sessional					
	Entrepreneurship Skill Development	0	2	0	2
Total Credits					27

MANAGERIAL ECONOMICS

TIU-UMG-T203

L-T-P: 3-1-0

Credit: 3

Unit 1: Introduction to Managerial Economics

Managerial Decision Making and Economic Theory, Goals of the firm: Measuring and Maximising Economic Profit, Economic Cost of Using Resources, Economic Profit versus Accounting Profit, Other Goals Forms of Business Organisation, Separation of Ownership and Control, Pricing decisions under Risk and Uncertainty, The Principal-Agent Problem, Asymmetric Information, Moral Hazard and Adverse Selection.



Unit 2: Demand Analysis

- (A) Demand Functions - Law of Demand, Explaining the law of demand, Violations of the Law of Demand, Shifts in Demand; Elasticity of Demand: Price Elasticity, Factors affecting price elasticity, Price elasticity and Change in Total Revenue, AR, MR and Price elasticity, Range of Values of Price Elasticity; Income Elasticity, Inferior, Superior and Normal goods, Income Elasticity and Share in Total Expenditure; Cross Price Elasticity, Substitutes and Complements;
- (B) Introduction to methods of demand estimation
- (C) Indifference curves, budget line and consumer equilibrium, ICC, PCC

Unit 3: Production and Cost Analysis

- (A) Production Function, Short Run and Long Run, Production with One Variable Input, Total Product, Average and Marginal Products, Law of Variable proportions, Relationship between TP, AP and MP.
- (B) Short Run Costs of Production, Fixed and Variable Costs, Short Run Total, Average and Marginal Cost and Relationship between them, Short Run Cost Curves, Relationship between AVC, MC, AP and MP; Long run cost curves, Relationship between LAC and SAC, Economies of Scale and Scope
- (C) Production with Two Variable Inputs, Isoquants – Characteristics, Marginal Rate of Technical Substitution, Laws of Returns to Scale, Iso cost Curves, Finding the Optimal Combination of Inputs, Production of a given output at Minimum Cost, Production of Maximum Output with a given level of Cost, Expansion Path, Finding the Long Run Cost Schedules from the Production Function
- (D) Law of supply, elasticity of supply, market equilibrium, changes in equilibrium.

Unit 4 : Managerial Decision Making under Alternative Market Structures

- (A) Characteristics of Perfect Competition, Profit Maximisation in Competitive Markets, Output Decision in the Short Run, Shut Down Point, Short Run Supply for the Firm and Industry; Output Decision in the Long Run, Break Even Point, Long Run Supply for the Perfectly Competitive Industry, Profit Maximising Input Usage under Competitive Conditions;
- (B) Profit Maximisation under Monopoly, Output and Pricing Decisions in the Short and Long Run,
- (C) Short and long run equilibrium under monopolistic competition
- (D) Interdependence of strategic decision making – oligopoly, Collusion – cartels, price leadership.



Unit 5 : Pricing Decisions

Price Discrimination under Monopoly, Average Cost Pricing, Marginal cost pricing, Peak Load Pricing, Limit Pricing, Multiproduct Pricing, Transfer Pricing.

Unit 6: Externalities and Market Failure

Understanding externalities and market failures, pricing under market failure

References:

- Damodaran, Suma – Managerial Economics – Oxford University Press
- Hirschey, Mark – Economics for Managers – Thomson South-Western
- Lipsey & Chrystal - Economics (Eleventh Edition) – Oxford University Press Maddala & Miller - Micro Economics – Theory & Applications (International Edition) – Tata McGraw Hill
- Maurice & Thomas – Managerial Economics – Tata McGraw Hill
- Peterson & Lewis – Managerial Economics – Prentice Hall of India Pvt. Ltd. / Pearson Education.
- Pindyck and Rubinfeld (Sixth Edition) - Micro Economics – Prentice Hall of India Pvt. Ltd / Pearson Education Salvatore, Dominick - Managerial Economics in a Global Economy – Oxford University Press -
- Salvatore, Dominick - Micro Economics – Theory & Applications (Fourth Indian Edition) – Oxford University Press
- Samuelson & Nordhaus – Economics (Sixteenth Edition) - Tata McGraw Hill
- Sen, Anindya - Micro Economics – Theory & Applications – Oxford University Press



FINANCIAL ACCOUNTING

TIU-UMG-T201

L-T-P: 2-1-0

Credit: 3

Module – I (Financial accounting)

1. Introduction to Financial Accounting – Concepts – Conventions – Importance and scope – Accounting Principles– Double entry system – Brief overview of accounting cycle – introduction to Balance Sheet and Income Statement
2. Accounting for Fixed assets – Introduction – Valuation of Fixed assets – principles and norms of standard accounting treatment
3. Depreciation – Methods – Accounting – Importance
4. Revenue Recognition - Introduction -Definitions -Sale of Goods -Rendering of Services - The Use by Others of Enterprise Resources Yielding Interest-Royalties and Dividends -Effect of Uncertainties on Revenue Recognition -accounting standard
5. Provisions – Doubtful Debt – Bad Debt – Importance – Provisions – Reservations – Accounting Treatments
6. Financial Statements – Introduction to Corporate Final Accounts as per Schedule VI of Companies Act 1956
Income Statement – Interpretation of Annual Reports.

Module – II(Cost accounting)

1. Cost Accounting : key terms, cost concepts, classifications, total cost components, cost accounting and management accounting, cost accounting and financial accounting.
2. Elements of Cost : Materials (Purchasing, Storekeeping, Issue, Pricing & Control); Labour (Costing & Control) ; Overheads (Analysis, Distribution and Control, Treatment of Special Items).

Readings Textbook:

- Atkinson - Management accounting, Pearson Education
- Banerjee, Bhabatosh – Financial Policy and Management Accounting, PHI, 7th edition, 2008
- Bhattacharyya, Asish - Cost Accounting For Business Managers,
- Elsevier Drury - Management & Cost Accounting,
- Thomson Learning Horngren, Dattar, Foster - Introduction to Management Accounting, Pearson Education/PHI



PRODUCTION MANAGEMENT

TIU-UMG-T205

L-T-P: 2-1-0

Credit: 3

Module 1:

- History and Overview of Production Management.
- Capacity Planning.
- Location Planning.
- Types of Production Processes.
- Layout Planning

Module 2:

- Productivity Management.
- Purchasing and Warehousing.
- Methods Study, Motion Study and Work Measurement.

Module 3:

- Job Evaluation
- Materials management.

Module 4:

- Total Quality Management
- Case Studies

Recommended Books:

Study Books:

- K.Ashwathappa, Sreedhar Bhat, Production and Operations Management, HPH, 2012.
- Dipak Kumar Bhattacharyya, Production and Operations Management, Universities Press
- J.K, Sharma: Operations Research, Macmillian, 2013.

Reference Books:

- Ajay K Garg, Production and Operations Management, TMH, 2012
- B. Mahadevan, Operations Management: Theory and Practice, Second Edition, Pearson, 2010.
- Kenneth K. Boyer, Rohit Verma, Operations Management: Cengage Learning, 2011.



TECHNO INDIA UNIVERSITY
WESTBENGAL

EM 4, Sector V, Salt Lake, Kolkata-700091, West Bengal, India
Phone: +91 9836544416/17/18/19, Fax: +91 33 2357 1097

- Prof. L.C. Jhamb: Production Operations Management, 18th edition, Everest Publishing House,
- Richard B. Chase, Ravi Shankar, Operations and Supply Management 12th Edition, TMH

TIU



OPERATION RESEARCH

TIU-UMG-T207

L-T-P: 3-1-0

Credit: 3

UNIT -1. LINEAR PROGRAMMING

- a) Formulation of LP Models
- b) Graphical LP Solution
- c) Simplex Method
- d) Artificial Variables – Big M - Method and Two-phase Method
- e) Duality, Sensitivity Analysis, Shadow Price and their economic interpretation

UNIT -2. TRANSPORTATION, TRANSHIPMENT AND ASSIGNMENT MODELS

- a) Construction of Transportation, Trans-shipment and Assignment Models
- b) The Transportation Algorithm
- c) The Hungarian Method for the Assignment Problem
- d) The Trans-shipment problem

UNIT -3. GOAL PROGRAMMING

- a) Construction of Goal Programming Models
- b) Goal Programming Algorithms

UNIT -4. INTEGER LINEAR PROGRAMMING

- a) ILP Algorithms - Branch and Bound, Cutting Plane Algorithm

UNIT -5. DECISION ANALYSIS

- a) Decision Making under Certainty – Analytic Hierarchy Process
- b) Decision Making under Risk and Uncertainty

UNIT -6. MARKOV PROCESSES AND MARKOV CHAINS

- a) State transition diagrams
- b) Calculation of the state of the system at any time period
- c) Calculation of the long-run system state: Fundamental Matrix and associated calculations.

UNIT -7. QUEUEING MODELS

- a) M/M/1 Queues and applications
- b) M/M/c and M/M/c/k Queues and their applications



UNIT -8. SIMULATION MODELS

- a) Construction of Simulation Models
 - b) Generation of Random numbers from discrete distributions
- Application models to be discussed in detail

Suggested Readings

- Anderson, Sweeny and Williams - Quantitative Methods for Business (8th edition); Thomson learning
- Hillier, F.S. and Lieberman, G.J. : Operations Research (8 th edition), TMH
- Kasana, H.S. & Kumar, K.D. - Introductory Operations Research; Springer Render B, Stair R M Jr, Hanna M E : Quantitative Analysis for Management (9th edition); Pearson Education
- Ross, Sheldon – Simulation; Elsevier Taha, H.A. : Operations Research - An Introduction (8th edition), Prentice Hall/Pearson Education
- Vohra, N. D. Quantitative Techniques for Management (3rd edition), TMH
- Winston, Wayne L. – Operations Research: Applications and Algorithms (4th edition); Thomson Learning



BIO-SCIENCES & EPIDEMIOLOGY

TIU-UMG-T211

L-T-P: 3-1-0

Credit: 4

Module -I

- Introduction to biomolecules
Classification, Function and properties of Carbohydrates, Lipids, Proteins and Nuclei acid.
- Microbiology & parasitology
 - A) Basic Microbiology, Culture media, Aseptic technique and methods, Staining methods.
 - B) Introduction to Protozoan parasites. Entamoeba histolytica, Plasmodium Vivax, Trichomonas Vaginalis, Food and water borne diseases.

Module -II

- Introduction to epidemiology
Basic concepts and methods of epidemiology, health for all and primary health care – clinical trials, immunization and isolation system, emergency epidemic managementsystem.
- Concept of disease— Natural History
 - Level of prevention
 - Rehabilitation
- Communicable and non-communicable diseases-
 - a) Communicable Diseases
 - b) Non- Communicable Diseases

Module -III

- Mortality, Morbidity, IMR, MMR.
- Preventive measures for disease Outbreak --Vaccination, Immunisation, Surveillance, Monitoring
- Transmission of Disease—Vehicles of transmission
- Observational, Analytical & Experimental Studies

Reference books:

1. Biological Sciences - D.J. Taylor N.P.O Green G.W.Stout
2. Principles of Internal Medicine - Harrisons Volume 2.



TECHNO INDIA UNIVERSITY
WESTBENGAL

EM 4, Sector V, Salt Lake, Kolkata-700091, West Bengal, India
Phone: +91 9836544416/17/18/19, Fax: +91 33 2357 1097

3. Text Book of Preventive and Social Medicine — Park.
4. Hospital Administration — Tabish (O.U.P.).
5. Epidemiology & Management of Health Care for all-P.V. sathe & A.P. Sathe

TIU



LAWS RELATED TO HOSPITAL & MEDICAL SERVICES

TIU-UMG-T213

L-T-P: 3-1-0

Credit: 4

Module -I

- Introduction & Legal Procedures.
 - Court, Affidavit, Evidence, Complaint, Investigation, Oath, Offence, Warrant, Summons.
 - Medico Legal Aspects of Emergency Services.
- Inquest.
 - Police Inquest, Magistrate's Inquest.
- Criminal Courts in India & their Powers.
- General Important Legal Knowledge Pertaining to IPC, CRPC, Civil PC, Evidence Act.

Module -II

- Introduction to Indian Constitution.
 - Preamble, Fundamental Rights.
- Rights & Responsibilities of Medical Person.
- Hippocratic Oath, Declaration of Geneva.
- List of Offences & Professional Misconduct of Doctors, as per Medical Council of India.

Module -III

- Medical Establishment, Professional Negligence, Errors & Commission, Insurance Policy.
 - General Claims Procedure.
- Laws Related to Medical Procedures.
 - Medical Termination of Pregnancy Act 1971(MTP Act)
 - Prenatal Diagnostic Techniques, Regulations & Prevention of Misuse Act 1994 (PNDT Act)
 - Transplantation of human organs Act 1994.
- Consumer Protection Act 1986.
- Medical Negligence & Compensation.
- Medical Ethics/Doctor Patient Relationship.

Module -IV

- Preventive Steps for Doctors/Hospitals to Avoid Litigation.
 - Consent Form



- Life Support
- Dying Declaration
- Death Certificate
- High Risk
- Post Mortem
- Illustrative Cases of Medical Negligence in India.
 - Surgery
 - OBST/GYNAEC
 - Medicine
 - Pediatrics
 - Other Disciplines/Anaesthesia
- Legal Requirements of Licences/Certificates for a Hospital.

Reference Books:

1. Parikh's Text Book of Medical Jurisprudence & Toxicology – By Dr. C.K. Parikh – CBS Publications.
2. Medical Negligence & Compensation – By Jagdish Singh – Bharat Law, Jaipur.
3. Medical Negligence & Legal Remedies – By Anoop K. Kaushal – Universal Medical Termination of Pregnancy Act.
4. Preconception & Prenatal Diagnostic Techniques (Prohibition of sex selection) Act 1994.
5. Organ Transplant Act.
6. The Consumer Protection Act 1986.
7. Indian Trade Union Act 1926.
8. Industrial Dispute Act 1946.
9. Medico-legal Aid to Hospitals & Doctors, with Consumer Protection Law – By M.S. Pandit & Shobha Pandit – Pandit Publications.
10. Opening the Domains of Laws – By Adv. Seema Bapat.
11. Modi's Book on Medico Jurisprudence & Toxicology.