REGULATIONS AND SYLLABUS FOR MBA HOSPITAL MANAGEMENT

Offered by

BHARATHIAR UNIVERSITY, COIMBATORE FROM 2007-2008

Under The

UNIVERSITY INDUSTRY INTERACTION AND CONSULTANCY SERVICE CENTER (UIICSC) COLLABORATIVE PROGRAMME

MBA HOSPITAL MANAGEMENT

COURSE TITLE

MBA-Hospital Management

COURSE DESCRIPTION

The course will be conducted under the BU-UIICSC (University Industry Interaction Consultancy Services Centre) of the Bharathiar University. It will be an intensive full time course, which will include classroom lectures and practical training in the various departments in a Bharathiar University approved Hospital (AH)

COURSE OBJECTIVE

To develop graduates with good conceptual knowledge, Managerial skills and practical training in various functional areas in a Hospital

DURATION OF THE COURSE

The Course shall extend over a period of two years under the annual pattern with examinations at the end of every year

PLACE OF STUDY

The programme will be conducted in an Approved Hospital (AH) of the Bharathiar University (BU)

REGULATIONS:

1) ELIGIBILITY FOR ADMISSION

Candidates admitted to the MBA-HOSPITAL MANAGEMENT should be a graduate from a recognized University. The candidates with Hospital experience will be given preference.

2) FACULTY QUALIFICATION

MBA (Hospital Management) / MHM/ MSc (Hospital Management) MBA/ MBBS with PG Diploma in Hospital Management / MSc Nursing / Experienced executives from Hospital Industry.

3) COURSE OF STUDY AND SCHEME OF EXAMINATIONS

The period of certified study for the MBA-Hospital Management shall be a full time course and its duration shall extend over a period of two academic year (non- semester). There shall be theory and practical examination at the end of each year, which will consist of theory, practical and oral components. Priority will be given for practical aspects in the curriculum

Scheme of examination

I Year

Paper	NAME OF THE SUBJECT	CREDIT	INT	EXT	TOTAL
No.					
1	Basic Biological Sciences	4	40	60	100
2	Principles of Management and				
	Organizational Behavior	4	40	60	100
3	Human Resource Management	4	40	60	100
4	Financial Management	4	40	60	100
5	Purchasing Management and				
	Inventory Control	4	40	60	100
6	Marketing and Public Relations	4	40	60	100
7	Strategic Management for Hospitals	4	40	60	100
8	Computer Application in Hospital	6	40	60	100
	Administration Practical				
9	Hospital Internship Including 15 days of				
	Field Visit – Project Report	14	40	60	100

II Year

Paper	NAME OF THE SUBJECT	CREDIT	INT	EXT	TOTAL
No.					
1	Bio Statistics and Operation Research	4	40	60	100
2	Hospital Architecture, Planning, design				
	and Maintenance	4	40	60	100
3	Clinical Services	4	40	60	100
4	Support Services	4	40	60	100
5	Health Related Laws and Ethics	4	40	60	100
6	Epidemiology and Public Health Systems				
		4	40	60	100
7	Research Methodology	4	40	60	100
8	Hospital Information System	4	40	60	100
9	Project work Viva-Voce	6	40	60	100
10	Hospital Internship including 15 days				
	of field visit – Viva-Voce	14	40	60	100

EVALAUTION SYSTEMS AND QUESTION PAPERS

There will be three methods of evaluation

- a. Internal Assessment will be conducted by the institution.
- b. The External examination will be conducted by the University at the end of the year for subjects mentioned
- c. Project evaluation will consist of Viva which will be conducted by the institution.

Internal Assessment

Further the Internal Assessment will be conducted for all subjects and scaled to 40%. 100 marks are divided as follows.

Tests conducted in the institutes	50 Marks
Class Participation	30 Marks
Assignments	20 Marks

External Examination

The External Examination shall be conducted by the University for 100 marks and will be converted to 60% of total marks. The pattern of question papers will be as follows

Section A:	Objectiv	e typ	be with	no ch	oices
	(20		C		•

(20 questions from each unit) - 20%

Section B: Short answers of either or type

(5 questions 1 from each unit) - 30%

 $5 \times 6 = 30$

Section C: Essay type questions of either or type

(5 questions 1 from each unit) - 50%

 $5 \times 10 = 50$

Project Evaluation

Each project development contains Internal Assessment

Continuous Internal Assessment - 40%

The end evaluation will contain two components

Viva – Voce - 30% End Evaluation - 30%

Total 100%

4) FIELD VISIT

Students shall visit Primary Health centers, Government Hospitals, Mental

Hospital, Diagnostic centers, Specialty hospitals, Drug addiction centers, Senior citizen home, Hospital for Terminally ill patients during their 1st and 2nd year field work and produce a report which will be considered for internal evaluation.

5) HOSPITAL INTERNSHIP

The internship program will helped to understand the functioning of the patient care areas, the support service departments and various other departments and their function, as the candidate will have hands on experience during the course of his/her study.

6) THEORY AND PRACTICAL TRAINING

The candidate admitted to the above programme shall be put through a **minimum of 1600 contact hours and 180 working days of theory and practical training** in the hospitals in the various administrative areas of the Hospital

7) REQUIREMENT TO APPEAR FOR THE EXTERNAL EXAMINATION

A candidate shall be permitted to appear for the university external examination of any year if he/ she secure not less than 90% of attendance in the number of instructional days, failing which he/ she should redo that course of study.

8) MEDIUM OF INSTRUCTION AND EXAMINATION

The medium of instruction throughout the course and the examinations shall be conducted in **English** only.

9) PASSING MINIMUM

A Candidate shall be declared to have passed the examination in a subject if he/she secured not less than 50% in the University examinations and 50% both in internal and external (University) examinations.

10) CLASSIFICATION OF SUCCESSFUL CANDIDATES

All candidates securing not less than 75% of the aggregate marks shall be declared to have passed in **FIRST CLASS with DISTINCTION** provided they have passed the examination in every subject without failure in anytime within the course of study.

All the candidates securing not less than 60% of the aggregate marks shall be declared to have passed in **FIRST CLASS** provided they have passes the examination in every subject.

Other successful candidates shall be declared to have passed the examination in **SECOND CLASS**

11) CONFERMENT OF DEGREE

Candidates shall be eligible for conferment of the degree, if he/ she has undergone the prescribed course of the study for a period of two years in a institution approved by the university and also has passed the examinations as have been prescribed.

A candidate, who has passed all the examinations as prescribed, shall be eligible to receive the degree of "MBA – Hospital Management" from the Bharathiar University.

12) REVISION OF REGULATIONS AND SYLLABUS

The syllabus and regulations of the course are subject to modification by the concerned board every three years but however it may be modified earlier if needed by the university as and when required.

<u>I YEAR: PAPER 1</u> BASIC BIOLOGICAL SCIENCE

Unit: 1

Human Anatomy and Physiology: Basic functions and importance of various systems in Human body -Digestive System-Respiratory system-Circulatory system-Central Nervous system, Muscular Skeletal system-Reproductive system-Excretory system-Endocrine Glands-Special Senses.

Unit: 2

Medical Terminology: Reasons for using medical terms-Glossary of medical terms: major diseases and medical specialties.

Unit: 3

Roots, Prefixes, Suffixes, Abbreviations and symbols-Common roots: element referring to, usage and definition-Common prefixes and suffixes-Common abbreviations: departments, time, general healthcare, routes of medication and laboratory-Symbols.

Unit: 4

Illness: Defining Health and illness: Direct and indirect causes-Classification and description of disease.

Unit: 5

Infection Control: Nosocomial infection-asepsis--Reservoir, carrier and mode of transmission of communicable diseases -Infection control measures-Disinfection -Sterilization and aseptic technique-Infection control committee-purpose, composition and duties.

- 1. A Clinical Problem Solving Approach John V. Basmajian and Charles E. Slonecker
- 2. Review of Medical Physiology William F. Ganong McGraw Hill, Boston
- 3. Stedman's Medical Dictionary
- 4. Biological Science Taylor Cambridge University

<u>I YEAR: PAPER 2</u> PRINCIPLES OF MANAGEMENT AND ORGANISATIONAL BEHAVIOUR

Unit: 1

Introduction to management: Definition and scope of management – The scientific management theory – Classical organization school – The behavioral school – The human relations movement – Hawthorne experiment – McGregor's theory of X and Y – TQM – Deming's 85 – 15rule – TQM principles – Contingency theory – Management science school – Systems approach.

Unit: 2

Functions of Management: Planning – Organizing – Staffing – Directing – (Motivation – Communication – Leadership) – Controlling - All basic theories and styles.

Unit: 3

Leadership: Definition of leadership – leadership style – Continuum of leadership behavior – Managerial grid style-Life-Cycle or situational approach-Four systems of management leadership – leadership skills – Leadership activities in a hospital – Functions of a leader like communication – Human resource management – Net working.

Unit: 4

Individual Behavior: Personality – Learning – Attitudes – Perception – Motivation – Ability – Their relevance to organizational behaviors in hospital management – Group Behavior – Group dynamics – Group norms – Group cohesiveness – Their relevance to organizational behavior.

Unit: 5

Organizational Culture: Meaning, significance – Organizational climate – Implications on organization behavior – Organizational change – Need and nature – Causes of change – Resistance to change – Management of change in hospitals.

- 1. Management Stoner Freeman, Gilber, Prentice Hall
- 2. Essentials of Management Koontz, Tata Mc Graw hill
- 3. Organizational Behaviour Keith Devis, Tata Mc Graw hill
- 4. Organizational Behaviour Stephen Robbins, Prentice Hall
- 5. Organisational Behaviour Fred Luthans, Tata Mc Graw hill

I YEAR: PAPER 3 HUMAN RESOURCE MANAGEMENT

Unit 1

Human Resources Management: Definition – Nature and scope – Objectives – Functions – Role of HRM in hospitals – Human Resource Planning: process – Job analysis – Job description – Job specification.

Unit 2

Recruitment Selection: Recruitment policy – Sources, methods – Selection Process: Tests, Interviews, – Placement – Induction.

Unit 3

Training of Employees: Training needs – Identification – Training methods and evaluation of training – Promotions – Policy – Transfers – Types – Dismissals.

Unit 4

Wage and Salary Administration: Meaning – Purpose – developing wage and salary structure – Job evaluation – Working conditions – Safety – Welfare – Employees' health services.

Unit 5

Labour Laws Applicable to Hospitals: Industrial Employment (Standing Order) Act, 1946 – Shops and Establishment Act, 1954 – Employment's State Insurance Act, 1948 – Employees' Provident Fund Act, 1952 – Payment of Gratuity Act, 1972 – Maternity Benefit Act, 1961-: Minimum Wages Act, 1948 – Payment of Wages Act, 1936 – Payment of Bonus Act, 1965.

- 1. HRM in Hospitals Goel R.C, Prentice Hall of India.
- 2. Personnel Management and Human Resources Venkataraman C.S. & Srivastava
- 3. Personnel/Human Resource Management Subba Rao.P, Konark Publishers.
- 4. Organizational Behavior Freud Luthans, McGraw Hill Book Co. 1995.
- 5. Human Behavior at Work Keith Davis, McGraw Hill Book Co. 1991.

<u>I YEAR: PAPER 4</u> FINANCIAL MANAGEMENT

Unit: 1

Scope of financial and management accounting: Functions – distinction between management accounting, financial accounting and cost accounting – accounting concepts and conventions – financial statements – balance sheet – profit and loss account – depreciation and methods of depreciation – simple examples of preparing and studying profit and loss and balance sheet.

Unit: 2

Financial statement analysis: Ratios: modes of expression of ratio – ratio analysis – advantages and limitations of ratio analysis – classification of ratios - funds flow analysis-funds flow statement -simple problems using financial ratios -working capital – receivables management – cash flow statement-advantages and limitations of cash flow statement – preparation of cash flow statement.

Unit: 3

Funding of hospital institutions: Funding public trust – donations -grants - funding corporate hospitals –public equity –foreign funding in private sector health care institutions-funding government and public sector hospitals-government budget.

Unit: 4

Costs and their behavior: Elements of cost – Direct – Indirect cost – Over heads – Types of over heads – Classification of costs – Concept of cost accounting – advantages of cost accounting — Break even Analysis – Cost benefit analysis – Cost effective analysis-Cost containment.

Unit: 5

Budgeting & auditing: Definition and scope of Budgeting – Classification of Budgets – Time based budgets – Function based budgets – Flexibility based budgets – Approaches to budgeting – Incremental budgeting – Performance Budgeting – Zero based budgeting – Budgeting process – Budget Manual – Audit -definition – Types – Objectives and Limitations of Audit – Vouching.

- 1. Financial Management I.M.Pandey
- 2. Financial Management Khan and Jain, Tata- McGraw
- 3. Advanced Accountancy Jain and Narang
- 4. Cost and Management Accounting S.N.Maheswari, Sultan chand & Sons
- 5. Hand book of practiced Auditing B.N.Tanton

<u>I YEAR: PAPER 5</u> PURCHASING MANAGEMENT AND INVENTORY CONTROL

Unit: 1

Principles of Logistic Management: Definition of Logistics Management – Functions of Logistics Management – Principles of Purchasing Management - Tendering procedures – procurement procedure

Vendor development and rating – Methods of payment – Letter of credit – Foreign currency payments.-Import documentation.

Unit: 2

Inventory control: Definition -objectives of Inventory Control – Types of Inventory cost – Types of Inventory Control – Pareto's law -ABC /VED / SDE Analysis – Lead Time – Buffer stock – Reorder level – Economic Order Quantity (EOQ) – Types of Inventory Control systems.

Unit: 3

Store Management: Stores function- location and layout – Standardization, Codification and Classification of materials – Material accounting and physical distribution – Store documentation – condemnation and disposal of scrap, surplus and obsolete materials – Types of stores in a Hospital.

Unit: 4

Equipment Planning and Procurement: Steps in equipment selection – Utilization index – Factors leading to poor utilization of equipment- planning and procurement of spares / accessories / consumables.

Unit: 5

Recent trends in Materials Management: Types of Materials used and stored in a Hospital – Computerization of Materials function – MIS Reports – Concept and frame work of supply chain management -concept of Just in time and Central purchasing.

- 1. Stores management-Second edition Mr. K S Menon Published by Macmillan India Ltd
- 2. An Introduction to Documentary Credits Mr. Rupnarayan Bose Published by Macmillan India Ltd
- 3. Supply Chain Management –Mr. B S Sahay Published by Macmillan India Ltd
- 4. Materials Management Gopalakrishnan & Sunderasan
- 5. Industrial Engineering O.P.Khanna

<u>I YEAR: PAPER 6</u> MARKETING AND PUBLIC RELATONS

Unit: 1

Service marketing concepts: Marketing mix -4Ps in marketing.-Market segmentation - Distinctive nature of services marketing--Characteristics of services- Services marketing mix - 3Ps of service marketing-People- Physical evidence: -Process-Service quality -Service quality dimensions.

Unit: 2

Market Promotion: Importance of market Research - Definition and need for internal marketing-Word of mouth communication (w.o.m)-Customer Relationship Management (CRM)-Definition-Factors affecting the customer Relations-Different relationship markets-CRM strategy-customer loyalty ladder-Customer life cycle-Barriers for effective CRM.

Unit: 3

Pricing of Health services: Definition of price-cost-value-Factors to be considered for pricing of services - Pricing Objectives- profit oriented -Market skimming -.Market penetration -Operations and Patronage oriented objectives -Pricing Strategies - Cost based pricing-Competition based pricing -Demand based pricing--Price discounting-Odd pricing-Place differentiates-Quantity differentiates-Penetration pricing- Value pricing-Complementary pricing-Price bundling-Market segmentation and pricing.

Unit: 4

Health Insurance: Illness and Accident insurance – New insurance products-concept of Social Security -Role of TPAs - Managed Health care –Co pay system- Referral System-Accreditation –NABH –JCI - Accreditation- Quality council of India - Medical Tourism- Business opportunities - Challenges – Quality Assurance in Health care.

Unit: 5

Positioning the market offering: Developing a positioning strategy – promotional method in service sector – medical camp, conferences, internet medicine, public interest programmes, referral doctor system, advertising media – press, radio, television, films, hoardings, etc – media relations.-Branding.

- 1. Text Book of Marketing services -The Individual Experience Mr. Nimit Chowdhary and Mrs. Monika Chowdhary
- 2. Branding Concepts and Process Mr. Debashis Pati
- 3. Marketing Management, Philip Kotler Prentice Hall
- 4. Services Marketing S.M.Jha Himalaya Publishing House

I YEAR: PAPER 7 STRATEGIC MANAGEMENT FOR HOSPITALS

Unit: 1

Strategic management: Definition, Nature and value of strategic management. Strategic management process: strategic management model – various components of the model. Need for strategic management in hospitals.

Unit: 2

Strategic formulation: Hospitals mission and social responsibility – need for the mission – various factors involved in formulating the mission. Corporate social responsibility – Ethics in hospitals.

Unit: 3

External environment: Economic, Social, Political, Technological factors in environment. Forces driving the competitions among the hospitals. Operating environment in the hospitals.

Unit: 4

Internal analysis – key resources across the functional areas. The value chain analysis in hospitals. Possible factors for assessing the sources of differentiation in support and primary activities. Generic strategies - merger, diversification, turn around and liquidation. Joint ventures and strategic alliances in hospital sectors.

Unit: 5

Strategic analysis and choice: BCG matrix – IABS matrix. Strategic surveillance, special alert control. Six sigma approaches and balance score guard methodology.

- 1. Strategic Management Pearce. J.A & Robinson.R.B-2007
- 2. Business Policy Azar Kashmi
- 3. Management of Hospitals Goel.S.L & Kumar.R
- 4. Competitive Strategy Micheal Porter

<u>I YEAR: PAPER 8</u> PRACTICAL: COMPUTER APPLICATIONS IN HOSPITAL ADMINISTRATION

Unit: 1

Introducing to Computing: Fundamental of Computers – Generation of computers – Anatomy of Computers – Classification of Computers – Input and Output devices – Memory and operating system – Programming languages – Data processing.

Unit: 2

Introduction to Windows: Application in Windows – word processing (MS Word) – Spreadsheet (MS Excel) – Presentation (MS Power Point) – Relational databases (MS Access).

Unit: 3

Awareness on the application of IT in Various functions of Hospital. Application of statistical tools through SPSS in the areas of Health services.

REFERENCE BOOKS:

- 1. Fundamentals of Computers V.Rajaraman
- 2. Word 97 Fast and easy Nancy Stevenson, Galgotia.
- 3. Internet: An Introduction CIS Series, Tata McGraw Hill.

Suggested Practicals:

- Mail Merge using Ms Word
- Profit Analysis using Excel
- Vendor Analysis using Excel
- Lead Time Analysis using Excel
- Electricity billing using Excel
- Grade Analysis using Excel
- Budget Consumption using Excel
- Correlation using SPSS
- One Way ANOVA using SPSS
- Regression using SPSS
- Chi-square using SPSS
- One sample t test using SPSS
- Two sample t test using SPSS
- Test of significant difference independent samples
- Test of significant difference Related samples

II YEAR: PAPER 1 BIOSTATISTICS & OPERATION RESEARCH

Unit: 1

Frequency distribution – Measures of central tendency- Arithmetic mean, Median, Mode, Percentiles – Geometric Mean – Harmonic mean – Measures of Dispersion – Range – Mean Deviation – Standard error-standard Deviation – Coefficient of Variation -Simple problems.

Unit: 2

Methods of Sampling – types of population, sample size – sampling distribution and statistical inference – type I & II Errors.-Correlation and Regression – Scatter diagram-Correlation Coefficient–Test of significance-Chi square test.

Unit: 3

Measurement of probability and Laws of probability for independent events – Conditional probability, Bayer's theorem and application of probability – probability distribution – Binomial ,Poison, Normal "t".

Unit: 4

Introduction to operations research – Techniques of operations research – limitations of operations research – Queuing theory – Transportation Module – Simulation - Simple problems.

Unit: 5

Network Models: PERT – CPM – PERT COST – resource allocation – float and slack – Simple problems.

REFERENCE BOOKS:

Business Statistics - R.S.N. Pillai and B.Bagawathi Statistical Methods - Elhance Statistical Methods - S.P.Gupta Bio Statistics - Sundar Rao

Selected Readings:

A review of Bio Statistics - Paul E Leavarton Bio Statistics - K.Visweswara Rao Operation Research - Kanthi Swarup, et. el.

II YEAR: PAPER 2 HOSPITAL ARCHITECTURE, PLANNING, DESIGN AND MAINTENANCE

Unit: 1

Hospital as a system: Definition of hospital – classification of hospitals – changing role of hospitals – role of hospital administrator – hospital as a system – hospital & community.

Unit: 2

Planning: Principles of planning – regionalization - hospital planning team – planning process – size of the hospital – site selection – hospital architect – architect report – equipping a hospital – interiors & graphics – construction & commissioning – planning for preventing injuries – electrical safety.

Unit: 3

Technical analysis: Assessment of the demand and need for hospital services – factors influencing hospital utilization – bed planning – land requirements – project cost – space requirements – hospital drawings & documents-preparing project report.

Unit: 4

Hospital standards and design: Building requirement – Entrance & Ambulatory Zone – Diagnostic Zone – Intermediate Zone – Critical zone – Service Zone – Administrative zone – List of Utilities – Communication facility – Biomedical equipment

Voluntary & Mandatory standards – General standards – Mechanical standards – Electrical standards – standard for centralized medical gas system – standards for biomedical waste.

Unit: 5

Facilities planning: Transport – Communication – Food services – Mortuary – Information system – Minor facilities – others.

- 1. Designing for total Quality in Health Care G.D.Kunders
- 2. Modern Trends in Planning and Designing of hospitals Gupta S.K.SunilKant Chandra Shekhar.R Satpathy
- 3. Hospital and Nursing Homes Planning, Organisations & Management Syed Amin Tabish
- 4. Hospitals, Facilities Planning and Management G.D.Kunders

<u>II YEAR: PAPER 3</u> <u>CLINICAL SERVICES</u>

Unit: 1

Introduction to Hospital services: Meaning and scope of patient care services – significance of patient care – role of administration in patient care – classification of Hospitals.

Unit: 2

Clinical services 1: Outpatient services – Inpatient services – Accident and Emergency services – Billing services.

Unit: 3

Clinical services-2: Laboratory services -Blood bank services - Radiology and Imaging services - Telemedicine -Rehabilitation services.

Unit: 4

Clinical services-3: Operation theatre – Intensive care units – Hospital acquired infections – Sterilization – Nursing services – Ward management.

Unit: 5

Total quality Management: Concept of quality – Quality control and assurance – ISO 9000 standards – TQM – NABH– JCAHO –ACHS Accreditation– Quality manual.

FRAME WORK FOR THE ABOVE TOPICS

- 1. Definition
- 2. Types
- 3. Role and Functions
- 4. Planning considerations like location, principles, shape, design, types, layout, special requirements
- 5. Equipment required
- 6. Staffing
- 7. Policies and procedures
- 8. Monitoring and Evaluation

- 1. Management process in Health care S. Srinivasan
- 2. Hospital department Profiles Gold Berry A.J

II YEAR: PAPER 4 SUPPORT SERVICES

Unit: 1

Nutrition and Dietary services – Pharmacy services – Medical Records services.

Unit: 2

Facilities Engineering – Maintenance of Civil Assets – Electrical supply and Water supply – Medical gas pipeline – Plumbing and Sanitation – Air conditioning system – Hot water and Steam supply – Communication Systems – Need and scope of Biomedical engineering departments in modern hospitals.

Unit: 3

Laundry services – House keeping services – CSSD-Energy conservation methods – AMC.

Unit: 4

Ambulance services – Mortuary services – Hospital security services.

Unit: 5

Disaster management – Fire hazards – Engineering Hazards – Radiological hazards.-Outsourcing of Support services –few case studies.

FRAME WORK FOR THE ABOVE TOPICS

- 1. Definition
- 2. Section or types
- 3. Role and Functions
- 4. Planning consideration like location, principles, shape, design, types, layout, Special Requirements
- 5. Equipment required
- 6. Staffing
- 7. Policies and procedures
- 8. Monitoring and Evaluation

- Hospital and facilities planning and Design
 Hand Book of Bio-Medical Engineering
 Clinical Engineering Principles and Practices
 G.D.Kunders
 Jacob Kline
 Webster J.G and
 - Albert M. Cook
- 4. Maintenance Planning and Control Antony Kelly

II YEAR: PAPER 5 HEALTH RELATED LAWS AND ETHICS

Unit: 1

Laws relating to Hospital formation: Promotion-Forming society-The Companies Act-Law of Partnership-A Sample Constitution for the Hospital-The Tamil Nadu Clinics Act.

Unit: 2

Laws relating Purchases and funding: Law of contracts-Law of Insurance-Export Import Policy-FEMA-Exemption of Income Tax for Donations-Tax Obligations: Filing Returns and Deductions at Source.

Unit: 3

Laws pertaining to Health: Central Births and Deaths Registration Act, 1969- Recent amendments – Medical Termination of Pregnancy Act, 1971 – Infant Milk Substitutes, Feeding Bottles and Infant Food Act, 1992.

Unit: 4

Laws pertaining to Hospitals: Transplantation of Human Organs Act, 1994 – Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 – Medical Negligence – Medico Legal Case – Dying Declaration-MCI act on medical education. The Biomedical Waste (Management and Handling) Rules-Radiation Safety System.

Unit: 5

Laws pertaining to Manufacture and sale of Drugs: Drugs and Cosmetics Acts, 1940 – Pharmacy Act, 1948 – Drugs and Magic Remedies (Objectionable Advertisement) Act, 1954 – Poison Act, 1919 – Legislation for Tobacco control.

- 1. The Law of Health Care Administrations Stuart Showalter
- 2. Dynamics of Industrial Relations C.B.Memoria
- 3. Industrial laws N.D.Kapoor

<u>II YEAR: PAPER 6</u> EPIDERMIOLOGY AND PUBLIC HEALTH SYSTEM

Unit: 1

Basic concepts and methods of Epidemiology and application to the variety of disease problems – Health for all and primary Health care – Clinical trails – community trails – ethical considerations – inference from epidemiological studies.

Unit: 2

National Health Programmes related to Communicable diseases- Malaria, Filarial, Tuberculosis, Leprosy, AIDS, and STD

National Health Programmes related to Non Communicable diseases – Cancer, Blindness, Diabetes, and Mental Health

Reproductive and child health programme (RCH)-Health related national programmes – Integrated Child development scheme, water supply and sanitation, minimum needs programme.

Unit: 3

Alcoholism and drug dependency: Alcohol and alcoholism – opiod drug use – cocaine and other commonly abused drugs – nicotine addiction – setting up de-addiction and rehabilitation centers.

Unit: 4

Environmental and Occupational hazards – Hazards of environment and work place – Sterilizations – Autoclaves – Waste disposal management (Solids and Liquids) – Incinerators.

Unit: 5

Emergency Epidemic Management System – Safety systems – Immunization and Isolation systems – Communication systems – Public Health Service Systems – Health and Population policy and Strategies – District Health Organization – Regionalization of health care.

- 1. Foundation of Epidemiology Gilienfeld
- 2. Smallpox Eradication in India Brilliant Lawrence
- 3. Pre-test Self Assessment and Review Ronald Gold et.el.,
- 4. Principles of Internal Medicine Harrisons Volume 2

II YEAR: PAPER 7 RESEARCH METHODOLOGY

Unit: 1

Introduction to Research Methodology: meaning of research – objective of research – relevance to management with special reference to hospital management – research orientation and managerial performance.

Unit: 2

Formulation of the problem – Research design – meaning – need for research design – features of a good research design – Different research designs.

Unit: 3

Sampling Fundamentals – Sampling Techniques – Types – Uses and Limitations – Measurement and Scaling Techniques – Methods of data collection.

Unit: 4

Processing and analysis of data – Hypothesis testing – Small and large sample – Test for population mean – Chi-square distribution – Goodness of fit test – Introduction to ANOVA.

Unit: 5

Interpretation, Precautions in interpretations – Report writing – Steps in report writing – Computers and Research – Uses of Computers in Research and Documentation – Introduction to SPSS and Biomedical statistical packages.

- 1. Research methodology C.R.Kothari
- 2. Business Research Methods Cooper Schmidt, Tata McGraw Hill
- 3. Research methods for Commerce & Management K.V.Rao

<u>II YEAR: PAPER 8</u> HOSPITAL INFORMATION SYSTEMS

Unit: 1

The Information Explosion: Information is important – Impact on society – Impact on teaching and learning – Impact on Government – Impact on Healthcare – The future of healthcare technology – The future healthcare record – Preparing for the future – Summary. The world of Informatics.

Unit: 2

The right information: The process of decision making – Literature databases – Searching the literature – Example of unit-based literature – Standards of information seeking – Future consideration – Summary. The Electronic health record: Functions of the health record – Changing functions of the patients record – Advantages of the paper record – Disadvantages of the paper record – Optically scanned records – The electronic health record – Automating the paper record – Advantages of the EHR – Disadvantages of the EHR – Bedside or point-or-care systems – Human factors and the EHR – Roadblocks and challenges to EHR implementation – The future – Summary.

Unit: 3

Securing the Information: Privacy and confidentiality and Law – Who owns the data? – Security – Computer crime – Role of healthcare professionals – Summary. Information Systems cycle: The information systems cycle – Analysis – Design phase – Development – Implementation – Why some projects fails? – Summary.

Unit: 4

Electronic Communications: A bit of history – Hardware and software for connecting – Methods of accessing information – World Wide Web (WEB) – Communication Technologies – Summary.

Unit: 5

Telehealth: Terms related to Telehealth – Historical perspective on telehealth – Types of Technology – Clinical initiatives – Administrative initiatives – Advantages and Barriers of telehealth – Future trends – Summary-The future of Informatics: Globalization of Information Technology – Electronic communication – Knowledge management – Genomics – Advances in public health – Speech recognition – Wireless computing – Security – Telehealth – Informatics Education – Barriers to Information Technology implementation – Summary.

- 1. Informatics for Healthcare professional Kathleen M,
- 2. Management Information system James O'Brien, Tate McGraw Hill
- 3. Introduction to Computer Peter Norton, Tate McGraw Hill