

Master of Hospital Administration

Syllabus - First Semester

INFORMATION TECHNOLOGY FOR MANAGERS

Course Code: MHA4106

Credit Units: 3

Course Objective: This course will expose students to developments in computer technology and understand the working of a computer system. It will introduce end-user computing and build skills in using IT and understanding various technologies like internet, telecom, DBMS concepts, e-commerce etc. The course will expose the students to the latest trends in computer.

Course Contents:

Module-I: Modern Computer Systems

Evolution of Computer Systems, Input, output and storage technologies, Computer Assisted Control and Automation, (e.g. Delhi Metro , Digitally Controlled Car engines etc.), Computer Controlled Biometric/RFID based Access Control , Contemporary hardware and software platforms(Open Source, Web Software etc.), Storage of Data Resources

Module-II: Data Resource Management

Introduction to DBMS, Benefits of DBMS over traditional file system, Types of DBMS, Application of DBMS using MS-ACCESS / ORACLE as a tool for understanding of DBMS concepts.SQL Query handling, Forms, Concept of Data Warehouses and Data Marts, Introduction to Data Centers.Storage Technologies and Architecture (DAT, NAS, SAN etc.). Live examples of storage strategies of companies like Google, Amazon Wal-Mart dealing with storage crisis

Module-III: Telecommunications and Computer Networks

Networked Enterprise :- Components, Types of networks, Advantages of Network Environment, Business Uses of Internet, Intranet and Extranet, Web 2.0/3.0, Distributed/Cloud/Grid Computing, GSM & CDMA, GPRS ,3G & 4G technologies, VOIP and IPTV.

Module-IV: Electronic Commerce Systems

Introduction to e-Commerce and M-Commerce, Advantages and Disadvantages of each. Concept of B2B, B2C, C2C , with examples. Concept of Internet Banking and Online Shopping, Electronic Payment Systems. Project Discussion:- Development of e-commerce store (Web Site Development, Internet Publicity, Payment Gateway, Packaging & Delivery , After Sales Support) .

Module-V: E-governance

Concept of e-governance, World Perspective, Indian Perspective, Technologies for e-governance, e-governance as an effective tool to manage the country's citizens and resources, Advantages and

Disadvantage of E-governance, E-governance perspective in India. Discussion on MCA21 Project, Bhoomi etc.

Module-VI: Security Management

The Information Security, System Vulnerability and Abuse, Security Threats (Malicious Software, Hacking etc.) and counter measure. Definition of Cyber Crime and Types. Antivirus, Firewalls, Anti-Spyware, Security Audit, Discussion on Overview of IT-ACT 2000.

Examination Scheme:

Components	CPA	TP	Q/S	A	ME	EE
Weightage (%)	5	5	5	5	10	70

Text & References:

- Norton P (2010), Introduction to Computers, Tata McGraw-Hill
- Potter T (2010), Introduction to Computers, John Wiley & Sons (Asia) Pvt Ltd
- Morley D & Parker CS (2009), Understanding Computers – Today and Tomorrow, Thompson Press
- Jawadekar, WS (2009); Management Information System; Tata McGraw Hill
- Mclead R & Schell G (2009), Management Information Systems; Pearson Prentice Hall
- O’Brein, JA (2009); Introduction to Information Systems; Tata McGraw Hill

HOSPITAL PLANNING

Course Code: MHA4203

Credit Units: 03

Course Objective

To expose the students to planning and operation of hospitals in a detailed manner which will include all facets of hospital planning activities covering every department that is involved both in clinical care as well as supportive services.

Course Contents

Module-I: Introduction to Hospital Planning

Conception of idea, formation of hospital planning team, market survey, feasibility study, selection of location, Financial planning of hospitals, Macro level planning, Conception to commissioning- site development, architects brief working drawings and specifications, engineering drawing, equipment planning, bed distribution, space allocation, interior designing and construction of building - commissioning, shake down period

Module-II: Planning for Medical and Ancillary services

Out-patient services, Emergency services, Day care services, Inpatient services and Intensive Care Units (ICU), Surgical suites, Labor and delivery suites-LDRP suites and Physical Therapy department.

Module-III: Planning for Supportive Services

Admitting department, Medical Records department, Laboratory services, blood banking & Radiological services, Pharmacy & Medical store, Medical gas system, HVAC, CSSD, Food & Beverages and Laundry & linen services.

Module-IV: Planning for Advanced facilities

Cardiac catheterization laboratory, various endoscopy units, Radiotherapy unit, IVF unit and Dialysis unit.

Module-V: Recent Advances in Hospital Planning

Green Hospitals, Energy efficiency in hospitals, Robotics in Hospitals and Geriatric Care

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Texts & References:

- *Modern Trends in Planning & Designing of Hospitals: Principles and Practice:* Shakti Kumar Gupta, Sunil Kant, R Chandrashekhar, SidharthSatpathy, by Jaypee – 2007
- *Hospitals: Facilities Planning and Management,* GD Kunders by Tata Mcgraw Hill
- *Hospital Planning:* Charles Butler, Addison Erdman
- Dr Malhotra's series: *Step by Step – Hospital designing & Planning,* by Jaypee 2007

HOSPITAL MATERIALS MANAGEMENT

Course Code: MHA4206

Credit Units: 03

Course Objective: Hospitals carry a large inventory of drugs, sophisticated and highly costly equipment besides beds, furniture and linen. The student should be conversant with Inventory and various methods of control and Purchase management.

Course Contents:

Module-I: Introduction

Definition, scope and importance of materials management; aims, objectives & principles of materials management; Material Cycle; Material Codification-advantages and types.

Module-II: Stores Management

Responsibilities and functioning of stores, types of Medical Stores, planning of hospital stores, duties of officer in-charge and storekeeper; location, lay-out planning and design of hospital stores, preservation of stores, documentation & evaluation of stores and role of computers in hospital stores management.

Module-III: Purchase Management

Objectives and elements of good purchasing system, Procurement procedure, Tendering system, modes of tenders, Purchase order and its types, types of purchasing systems.

Module-IV: Inventory Management

Inventory control, Basic inventory model, types of inventory, objectives and scope of inventory control, Lead time, Buffer stock, Re-order level, Economic order quantity (EOQ), Inventory control costs – Purchase cost, shortage cost, inventory carrying cost & inventory acquisition cost; Inventory ordering systems; Inventory control Techniques- ABC, VED, SDE, SAP, FSN, HML, XYZ, SOS, GOLF, MUSIC; and Supply chain management.

Module-V: Stock Verification, Condemnation and disposal

Process and need for stock verification, Techniques of verification, Pilferage, Stock distribution methods, criteria and procedure of stock condemnation and disposal.

Module-VI: Equipment Management

Classification of Hospital equipments, Planning and selection of equipments, factors affecting utilization of equipments, equipment failure, training & development, documentation, equipment maintenance and its types and Equipment audit.

Module-VII: Legal aspects

Role and functions of Director General of supplies and disposal, Registration and blacklisting of firms, Law of contract, Letter of credit & its types, Import & export policy & pricing of goods and Duty of customs.

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Texts & References:

- *Hospital Stores Management- An Integrated Approach*, by Dr. Gupta Shakti, Jaypee Brothers.
- *Material Management* by Dr. Pawan Arora, Global India Publication Pvt Ltd
- *Handbook of Materials Management*, P. Gopalkrishnan, Eastern Economy Edition
- *Procurement and Materials management for Hospitals*, Rex H Gregor, Harold C. Mickey

Syllabus - Third Semester

SUMMER INTERNSHIP EVALUATION

Course Code: MHA4335

Credits Units: 06

Training Objective:

To provide on the job experience, as an understudy in a hospital, to help the student understand systems and procedures and learn to make decisions considering the Hospital as an integral unit.

Duration: 2 months

Format for Report Writing

1. Abstract
2. Introduction
3. Aims & Objectives
4. Operational definitions
5. Significance of Study
6. Review of literature
7. Research methodology
8. Data Analysis
9. Results
10. Discussion
11. Conclusion
12. Recommendations
13. Limitations of study
14. Future prospects of study
15. References

Guidelines for presentation-

- Powerpoint presentation
- Time for presentation: 20 minutes
- Time for discussion: 10 minutes

Examination Scheme

Components	Presentation	Report submitted	Viva-Voce
Weightage (%)	25	50	25

OPERATIONS RESEARCH

Course Code: MHA4302

Credit Units: 03

Course Objectives:

- To provide basic OR approach to problem solving.
- To introduce important analytical tools for managerial decision making.
- To introduce concepts of resource allocation & health service planning.

Course Contents:

Module-I: Introduction

The OR approach to problem-solving and decision-making, Scope and limitations of OR in managerial decision-making.

Module-II: Introduction to OR Techniques

Linear Programming, Decision Tree Analysis, Queuing theory, PERT/CPM.

Module-III: OR Models

Replacement models, Sensitivity analysis, Assignment models, Inventory control models, Forecasting.

Module-IV: Applications of OR in Hospitals and Health Agencies

Resource allocation, Health services planning, Deployment of health human power, Materials Management, Equipment replacement, Patient scheduling.

Examination Scheme:

Components	CPA	TP	Q/S	A	ME	EE
Weightage (%)	5	5	5	5	10	70

Text & References:

- *Operations Research in Hospitals: Diagnosis and Prognosis*, David H. Stimson, Ruth H. Stimson
- *Operations Research and Healthcare: A handbook of methods and Applications*, Margaret L. Brandeau, Francois Sainfort, William P. Pierskalla
- *Patients hospitals and Operational Research*, Taylor Francis
- *Operations Research* by P. Rama Murthy
- *Operations Research: Methods, Models and Applications*, Jay E. Aronson and Stanley Zionts

QUALITY MANAGEMENT

Course Code: MHA4303

Credit Units: 03

Course Objective:

To understand the concept of quality and its relation to healthcare scenario

Course Contents:

Module-I: Basics of Quality Management

Definitions, principles of quality, benefits of quality management, dimensions of quality in primary healthcare and various quality frameworks

Module-II: Quality Improvement Approaches

- Quality Assurance cycle and developing standards.
- TQM Quality Gurus: Deming, Juran and Crosby principles.
- Benchmarking: Principles, types and process of benchmarking
- Medical Audit: Clinical Audit, its methodology and related statistics.

Module-III: Quality Improvement Tools and techniques:

- Tools: Brainstorming, Cause effect Analysis, Flow chart, Pareto Analysis, etc
- Lean Management: 4P model, Lean principles and its tools - 5 S technique, 3 M technique, Kaizen's theory, Jidoka & Andon, Throughput & Takt Time.
- Six Sigma: Variations in performance, DMAIC & DFSS methodology, Champions, black belts and green belts, Six sigma applications and its benefits.

Module-IV: Accreditation

Benefits of Hospital Accreditation, ISO certification, Quality Council of India (QCI), National Accreditation Board for Hospitals & Healthcare Providers (NABH) – accreditation procedure, assessment criteria and its standards; and Joint Commission International (JCI)

Module-V: Cost and Quality

Prevention cost, Appraisal Cost, Internal & External failure costs, Net & Total cost of quality.

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Text & References:

- *Quality Management in Hospitals* by S. K. Joshi
- *Total Quality Management* – Aswathappa – Himalaya Books House
- *Quality Management* – P. C. Tripathy
- *Hospital Quality Assurance: Risk Management & Program evaluation*, Jesus J. Pena
- Donald E. Lighter and Douglas C Fair: *Quality Management in Health Care – Principles and Methods*, Jones and Bartlett publishers, second edition.
- Daigh RD. *Financial implications of a quality improvement process*.

- McLaughlin CP and Kalauzny AD. *Total quality management in health*, Healthcare management review.

MEDICAL & HEALTH LAWS

Course Code: MHA4304

Credit Units: 03

Course Objectives:

To acquaint the students with various legal aspects concerning type and character of the health care organizations and its duties towards patients and its employees.

To familiarize the students in matters of liability of hospital medical negligence and medical malpractice in diagnosis, administration of drugs, surgery etc.

Course Contents:

Module-I: Introduction

Law pertaining to establishment of hospitals and legal requirements under Medical Council Acts.

Module-II: Hospitals as an Industry

Basic concepts of labour laws in India, Hospitals as an 'industry' - application of labour enactments, Discipline in hospitals and Trade union act

Module-III: Hospital's duties towards Patients

Essentials of Contractual obligations in hospital services, duties towards patients, Rights of patients and Code of ethics.

Module-IV: Acts pertaining to Hospitals

Legal aspects relating to Organ transplantation, MTP Act 1971, Basics of Drugs and Cosmetic Acts, Euthanasia. ESI Act, PNDT Act, Human experimentation, Clinical trials, Industrial dispute Act, Central Births & Death Registration Act.

Module-V: Legal liabilities of Hospitals

Legal liability of hospitals - criminal, civil and tortious; Absolute liability and vicarious liability, Medical negligence, Legal remedies available to patients under contract law, tort, criminal law, Consumer protection Act and Medical Jurisprudence.

Module-VI: Medical ethics, CPA & Auditory procedures

Consumer protection act, Autopsy, Use of investigational drugs, Introduction/need & procedures for medical audit, Audit administration & Regulating committees.

Confidentiality and professional secrecy, ethics of trust and ethics of rights – autonomy and informed consent,

Medical ethics – basic issues, importance, process of developing and implementing ethics and values in an institution – codes of conduct: Hippocrates oath and declaration of Geneva – MCI regulation – professional conduct, etiquette and ethics.

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Text & References:

- *Medico-legal Aspects of Patient Care*, 3rd Edition, R. C. Sharma, Peepee Publishers & Distributers- 2008

MANAGEMENT OF CLINICAL SERVICES

Course Code: MHA4305

Credit Units: 03

Course Objectives:

- To enable the students gain insights into various aspects like importance, functions, policies and procedures, equipping, controlling, co-ordination, communication, staffing, reporting and documentation of clinical services in a hospital.
- To understand the processes and details related to effective patient care and to further increase the satisfaction level of patients

Course Contents:

Module-I: Hospital as a system

Concept of patient care, Role of Hospital Administration towards the patient and towards the Hospital, Patient safety and patient risk management.

Module-II: Out-Patient Department

- Organization & management of OPD: Overview of the department, its functions, location and physical facilities
- Daycare services; Auxiliary, Ancillary & Domiciliary facilities in the OPD.

Module-III: Inpatient Department

- Organization & management of OPD: Overview of department, its functions, Ward design (general & specialized), Nursing Administration, Isolation unit, Janitor's closet.
- Assessment of IPD in terms of Patient Days, Bed Utilization Rate, Ward Occupancy, and Average length of stay.

Module-IV: Accident and Emergency Services

Organization & management of department, Physical facilities and Manpower planning, Triage, Centralized Accident & Trauma services (CATS) and Observation unit.

Module-V: Operation Theatres

Organization & Management of OT complex, Pre-op & Post-op area, Zoning, ventilation & lighting, Modular systems, Methods of fumigation and OT scheduling.

Module-VI: Intensive Care Units

Organization & Management of ICUs, Types of ICUs, Staffing in ICUs, Specialized ICUs – ICCU, NICU, PICU etc, and Critical care scoring

Module-VII: Specialty Services

Rehabilitation unit, Nuclear Medicine department, Burns Unit, Obstetrics & gynecology unit, Pediatric unit, Transplantation Unit etc.

Module-VIII: Other Hospital Functional Activities

Biomedical Waste Management: segregation, collection, transportation & disposal, Nosocomial Infections & its control, Patient safety

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Texts & References:

- *Principles of Hospital Administration and Planning*, Shakharkar B.M.
- *Modern trends in Planning and designing of Hospitals: Principles and Practice*: Shakti Kumar Gupta, Sunil Kant, R Chandrashekhar.
- *Management of Hospitals & Health services*: Strategic issues and performance, Rockwell Schulz, Alton C. Johnson
- Shakharkar B.M., *Principles of Hospital Administration and Planning*
- *Hospital managerial services* Volume -4, S.L. Goel, R. Kumar
- *Hospital Core Services: Hospital administration in 21st century* Vol 1 Kumar R, S.L. Goel
- *Hospital Management*, Dr. A.K. Malhotra, Global India Publications Pvt ltd, New Delhi
- *Hospital Management : A guide to departments*, Howard S. Roland, Beatrice L Rowland

MANAGEMENT OF SUPPORT & UTILITY SERVICES

Course Code: MHA4306

Credit Units: 03

Course Objectives:

- To enable the students gain insights into various aspects like importance, functions, policies and procedures, equipping, controlling, co-ordination, communication, staffing, reporting and documentation of non-clinical services in a hospital.
- To understand the processes and details related to effective patient care and to further increase the satisfaction level of patients

Course Contents:

Module-I: Support Services-I

- Radiology & Imaging Services: Types of services, Functional Areas, Organization & management of department, Turn-around time assessment, Radiation Hazards and its preventive measures.
- Hospital Laboratory: Its functional components, Lab hazards, quality assessment, National Accreditation Board for testing & calibration laboratories (NABL)
- Blood Bank & Transfusion Services: blood donation, labelling, transfusion reactions, legal aspects and accreditation.
- Transportation & Ambulance Services: History, transportation bay, Administrative aspects, Basic Life Support (BLS) and Advanced Life support (ALS).

Module-II: Support Services-II

- Central Sterile Supply department: Functional areas, Sterilization process, Theatre Sterile Supply Unit (TSSU) and supply distribution system.
- Dietetics: Functions of Dietary services, Functional areas, equipments, diet distribution systems, centralized & decentralized services and other managerial issues.
- Medical Records Department: Types of medical records & its importance, functional organization of MRD, storage & retrieval of records, Reports generated by MRD and medico-legal aspects.

Module-III: Utility Services-I

- Hospital Linen and Laundry: Types of hospital linen, Basic tasks of laundry, Types of laundering system and laundry process.
- Housekeeping services: Its functions, types, cleaning agents and cleaning operations.
- Mortuary: Mortuary services, physical facilities & staffing, policies & guidelines and managerial concerns.
- Security: Its functions, Security risks and types of security system.
- Pharmacy: Role & types of pharmacies, drug distribution systems, procurement of drugs and managerial issues.

Module-IV: Utility Services-II

- Basic Engineering Services: Civil Assets, Electricity Supply, Water supply, Gas manifold
- Allied Engg services: Air conditioning, Refrigeration, non-conventional energy devices.
- Maintenance & store management, Engg service department
- Engineering Hazards: Hospital Planning & design, Physical environment, Building elements and material, preventive management program.

Examination Scheme:

Components	CP	V	A	ME	EE
Weightage (%)	5	5	5	15	70

Texts & References:

- *Principles of Hospital Administration and Planning*, Shakharkar B.M.
- *Modern trends in Planning and designing of Hospitals: Principles and Practice*: Shakti Kumar Gupta, Sunil Kant, R Chandrashekhar.
- *Management of Hospitals & Health services*: Strategic issues and performance, Rockwell Schulz, Alton C. Johnson
- Shakharkar B.M., *Principles of Hospital Administration and Planning*
- *Hospital managerial services* Volume -4, S.L. Goel, R. Kumar
- *Hospital Core Services: Hospital administration in 21st century* Vol 1 Kumar R, S.L. Goel
- *Hospital Management*, Dr. A.K. Malhotra, Global India Publications Pvt ltd, New Delhi
- *Hospital Management : A guide to departments*, Howard S. Roland, Beatrice L Rowland

HOSPITAL STUDY-II

Objective:

To have a practical exposure of various departments of a hospital. It is included in the syllabus to make the students aware of the functioning of different departments of hospital.

Training:

1. Central Sterile Supply Dept.
2. Hospital Library
3. Emergency Dept
4. Critical Care Unit
5. Medical Record
6. Operation Theatre
7. Maintenance Department
8. Bio-Medical Department

Central Sterile Supply Department (CSSD)

- 1) Location
- 2) Equipments
- 3) Items processed by Central Sterile Supply Department
- 4) Sterilization technique
 - a) Heat
 - b) Gas
 - c) Liquid
 - d) Ionizing radiation
 - e) Others
- 5) Work flow
- 6) Clean zone, dirty zone
- 7) Pooling of materials, equipments
- 8) Process of receiving and distribution of materials
- 10) Cleaning, drying and packing of sterilized materials
- 11) Segregation of Dirty zone and clean zone
- 12) Process of receiving and distribution of materials
- 13) Quality control checking of sterilization in collaboration with Micro-biology Lab.
- 14) Organization & Staffing
- 15) CSSD Committee

Emergency Dept

- 1) Location
- 2) Basic layout of Emergency Dept
 - (a) Receiving patients
 - (b) Patient examination zone
 - (c) Patient investigation zone
 - (d) Procedure room
 - (d) Cardio Pulmonary Resuscitation Unit
 - (e) Dead bodies identification and segregation
 - (f) EMO's Office

(g) Nursing Station

- 3) Infrastructural facilities
- 4) Equipments
- 5) Legal procedure system
- 6) Emergency Operation Theatre
- 7) Admission procedure
- 8) Billing for day care procedure in Emergency Dept.
- 9) Staffing
- 10) Security

Critical Care Unit

- 1) Organizational structure
- 2) Bed orientation pattern
- 3) Lighting system
- 4) Monitoring system
- 5) Maintenance of sterility and general cleanliness
- 6) Administration of CCU
- 7) Workflow
- 8) Equipment maintenance
- 9) Maintenance of uninterrupted gas and power supply system
 - 1) Continuous wall flow oxygen
 - 2) Compressed air
 - 3) Suction Apparatus (Vacuum Pump)
 - 4) Uninterrupted Power Supply (UPS) line

Medical Records

- a) Assembly of records
- b) Quantitative and qualitative analysis
- c) Different classification of records
- d) Methods of deficiency check
- e) Completion of incomplete records
- f) Retrieval of medical records
- g) Coding system
- h) Indexing system
- i) Generation of statistics and analysis
- j) Reporting to various statutory authorities
- k) Methods of numbering
 - i) Serial number
 - ii) Unit number system
 - iii) Serial unit numbering
- l) Filing System
 - i) Decentralized system
 - ii) Centralized system
 - iii) Various other methods
- m) Types of forms

Operation Theatre

- 1) Location
- 2) Zoning of Operation Theatre
- 3) Infrastructural facilities
- 4) Centralized and decentralized Operation Theatres
- 5) Equipment requirement
- 6) Procurement and maintenance including annual maintenance contract
- 7) Functions and policies of Operation Theatres
- 8) Manpower requirement
- 9) Duties and responsibilities including standard operation procedures
- 10) Safety procedures
- 11) Methods of checking operating rooms for readiness to receive patient
- 12) Periodical sterilization / fumigation
- 13) Sterile supply

Maintenance Department

Observation of

- a) Location of different maintenance departments
- b) Lay out
- c) Power Generation and supply
- d) Demineralization Plant with R.O. facility for Dialysis unit
- e) Oxygen Plant
- f) Effluent Treatment Plant
- g) Air Condition Plant and distribution system
- h) Maintenance of the medical equipments, calibration
- i) Maintenance of total hospital building – civil, electrical and mechanical
- j) Organization

Bio-Medical Department

- 1) Bio Medical equipment and their function
- 2) Importance and fundamental functions of Bio-Medical Equipments
- 3) Maintenance procedures of Bio-Medical Equipments
- 4) AMC of Bio Medical Equipments

Syllabus - Fourth Semester

HOSPITAL MANAGEMENT INFORMATION SYSTEM

Course Code: MHA4401

Credit Units: 02

Course Objective:

To understand the various indicators of health and health information system and health management information system in hospitals

Course Contents

Module-I: Introduction

Concept of information as a resource, understanding the principles of information systems and Classification of information in hospitals.

Module-II: Managing Hospital Information Systems

- Data generated for HIS; Functions, Benefits and applications of HIS, HIS components, various performance Indicators, HIS model and data movement.
- HIS modules: Various HIS Modules for Clinicians Access, Nursing Access, In-patient Module, Registration Module, Diagnostic services Module, Dietetics Module, OT Module and Accident & Emergency Module etc.

Module-III: Role of Information Technology in Hospitals

Computerization in Hospitals, advantages of computerized system, database interface, IT Components of HIS and various softwares available in the healthcare market.

Module-IV: Management Information System

Concept of MIS, functions of MIS, developing MIS, types of MIS, developing indicators, identifying data and developing tools of measurement and applications of MIS.

Module-V: Telemedicine

Concept of Telemedicine and its evolution, Telemedicine network in India, and Strengths & Opportunities for Telemedicine in India.

Examination Scheme:

Components	CP	V	A	CT 1	CT 2
Weightage (%)	20	15	5	30	30

Text & References

- *Management Information System (MIS) in Hospitals: A computer based approach for quality in hospital services and administration*, by Anil Kumar Saini
- S.C. Joshi & S.N. Mehta. *National Information System: Planning and Management*, Global vision publishing house.
- *Information Technology in health care: Socio technical approaches*, 2010. IOS Press BV

HEALTH INSURANCE AND MEDICAL TOURISM

Course Code: MHA4402

Credit Units: 02

Course Objective:

To acquaint students to the concept of HI and various HI products, so that the students are ready for challenges of healthcare insurance which is emerging as a sector holding great promise.

Course Contents

Module-I: Introduction

History of Health Insurance, Principles of Health Insurance, Public Financing, Private Financing, Current trends in Health Insurance - International and Indian scenario, Economic and financial management of Health Insurance

Module-II: Health Insurance systems in India

- Private Health Insurance: Individual Health Plans, Mediclaim, Floaters plans, Third Party Administration, Benefits Management, Claims Management, IRDA
- Social Health Insurance: ESI, CGHS, RSBY
- Social and Community based Insurance: Microfinance

Module-III: Medical Tourism

Basic Concepts of Medical Tourism, Scope of Medical Tourism in India.

Examination Scheme:

Components	CP	V	A	CT 1	CT 2
Weightage (%)	20	15	5	30	30

Text & References:

- Usha Mehta, A.D. Narde. *Health Insurance in India and Abroad*, Allied Publishers.
- Thomas K. T., Sakthivel R. *Health Insurance In India: Overcoming Challenges and Looking Ahead*, Lambert Academic Publishing, 2012.
- Michelle A. Green, JoAnne C. Rowell. *Understanding Health Insurance- A guide to billing and reimbursement*.
- William S Stevens. *Health Insurance- Current Issues and Background*, Nova Science Publishers.

DISASTER MANAGEMENT

Course Code: MHA4403

Credit Units: 02

Course Objectives:

- To learn, identify and assess disasters in the community.
- To set-forth policies and procedures for disaster preparedness and to prepare hospital disaster plan.

Course Contents

Module-I: Basics of Disaster Management

Definitions, Determining risk of disaster, Classification of disaster on the basis of origin, source, onset & anticipated response; Disaster process, Effects of Disasters – Health issues, characteristics and geography of disasters, Impact of Disasters on the Hospitals.

Module-II: Disaster Management Process

Phases of disaster management, leadership, organization of medical relief, Triaging, Disaster Response – local, national & International; Disaster Management Act – 2005.

Module-III: Disaster preparedness

Hospital Disaster Plan – its pre-requisites, principles and components; Hospital disaster management committee and its role; Hospital disaster manual.

Module-IV: Fire Safety

Grades of fire and its causes; elements of fire safety, various fire extinguishers; and fire safety training.

Examination Scheme:

Components	CP	V	A	CT 1	CT 2
Weightage (%)	20	15	5	30	30

Text & References:

- *A guide to emergency health management after natural disasters*, American health organization scientific publication.
- *Emergency vector control after Natural disaster*, American health organization scientific publication.
- *District Health facilities*, WHO regional publication western pacific services.
- *Medical supply management after natural disaster*, American health organization scientific publication.

HOSPITAL STUDY-III

Objective:

To have a practical exposure of various departments of a hospital. It is included in the syllabus to make the students aware of the functioning of different departments of hospital.

Training:

1. Diagnostic Imaging
2. Dental Service
3. Dialysis Unit
4. Burn Units
5. Blood Bank
6. Mortuary
7. Telemedicine
8. Medical transcription

Diagnostic Imaging

- 1) Various types of machines like;
 - a) CT
 - b) MRI
 - c) PET
 - d) USG with color Doppler
- 2) Advantages / disadvantages of different types of machine
- 3) Basic functioning and maintenance
- 4) Special licensing requirement
- 5) Special structural requirements
- 6) Staffing and manpower planning
- 7) Cost analysis and profitability
- 8) Operation and maintenance

Dental Services

- a) Location
- c) Laboratory
- d) Recovery Room
- e) Waiting Room
- f) Storage
- i) Lighting
- j) Plumbing
- k) Ventilation
- l) Equipment and maintenance

Dialysis Unit

1. Location
2. Infrastructural facility
 - a) for day care dialysis or out patient dialysis
 - b) for inpatient dialysis

3. Various types of dialysis units
4. Special arrangement for maintaining sterility
5. Ambulatory dialysis system
6. Procurement, installation and maintenance of various types of dialysis machines
7. Arrangement for stand-by unit

Burn Unit

1. Location
2. Infrastructural facility
3. Special equipment requirement for Burn Unit
4. Laboratory facility
5. Communication facility
6. Maintenance of Asepsis
7. Manpower

Blood Bank

- 1) Location
- 2) Reception
- 3) Special arrangements for voluntary donors
- 4) Administrative Office
- 5) Record Keeping
- 6) Servicing rooms
- 7) Bleeding Room
- 8) Storage Room
- 9) Storage equipment
- 10) Regulatory requirement
- 11) Blood safety procedures
- 12) Receipt, storing and delivery of blood
- 13) Triple screening and check method
- 14) Record keeping
- 15) Medico-legal aspects
- 16) Physical facilities
- 17) Waiting facilities
- 18) Laboratory facilities
- 19) Issuance of Blood Donor Card
- 20) Safety devices
- 21) Liquid waste management
- 22) Procedure for discarding
- 23) Staffing

Mortuary

- 1) Location
- 2) Physical facilities
- 3) Body refrigerator
- 4) Walk in refrigerator
- 5) Capacity requirement of Mortuary
- 6) Autopsy facility

- 7) Preservation / identification/labeling of viscera / body fluids and other materials for medicolegal purposes
- 8) Embalming procedures
- 9) Methods of long distance transportation of dead bodies
- 10) Arrangements for religious rites
- 11) Mortuary traffic control
 - a) Internal
 - b) External
- 12) Identification of bodies using triple check system
- 13) Maintenance of records
- 14) Various legal requirements
- 15) Disposal of unclaimed bodies

Telemedicine

1. Infrastructure – both end – (1) Hospital end (2) Nodal Centre
2. Requirement of:
 - a) Computer Monitors
 - b) Cameras
 - c) Internet connection
3. Observation of telemedicine techniques and practical demonstration
4. Manpower requirement

Medical Transcription

1. Observation of techniques and demonstration
2. Infrastructural requirement
3. Trained manpower
4. Transmission modes

DISSERTATION

Course Code: MHA4437

Credit Units: 15

Internship Objective:

To impart the practical knowledge through research methods, help formulate a rigorous research problem related to hospital on the basis of their observation, help do an independent study, and encourage working in a team.

Pedagogy

- Identifying several situations amenable to dissertation work, writing a proposal and making a presentation to the Departmental Research Committee.
- Reporting to the committee on the progress of research work periodically.
- Making use of a variety of research methods.
- Defending the inference before the Examining Committee.

Report Contents

Every student will do a detailed study on the topic selected for the dissertation, and is expected to prepare a two or three proposals which he intends to take up for the Dissertation. The Assigned guide will examine this and decide on the topic of dissertation. Report will comprise of following contents:

1. Abstract
2. Introduction
3. Aims & Objectives
4. Operational definitions
5. Significance of Study
6. Review of literature
7. Research methodology
8. Data Analysis
9. Results
10. Discussion
11. Conclusion
12. Recommendations
13. Limitations of study
14. Future prospects of study
15. References

Evaluation

The Departmental Research Committee and an expert from Hospital industry will evaluate the dissertation.

Components	Presentation	Report submitted	Viva-voce
Weightage (%)	25	50	25