

**Masters in Hospital Administration (M.H.A.) (Second Year- III<sup>rd</sup> Semester)**

**Theory Paper 1: Operations Management & functions, Paper code- MHM 31**

**Teaching hours: 64**

**Credit-04**

**Maximum marks 30 (IA) + 70 (ESE) = 100**

**Course description:** The objective of this course is to help the students understand the planning, Organization and management of Clinical Services in the hospital. The students will learn the skills of identifying the critical problems in clinical services and suggest management solutions to improve them.

**Learning Objectives:**

1. Enumerate and identify various Clinical Services like OPD, IPD, ward Management, OT, Emergency, disaster Management and ICU.
2. Describe steps in planning, Organization and management of various Clinical Services.

**Competencies:** After completion of the course the student will be able to understand the planning, organization and management of clinical services in the hospital and will be able to identify the critical problems in clinical services and suggest management solutions to improve them.

**Broad outlines**

**Unit-I:** Role of Hospital and Hospital Administrator, Hospital as a System.

**Unit-II:** Out Patient Department Services (O.P.D), In Patient Department Services, Dental Services, Radio Diagnosis and Imaging services, Operation Theatre Services in Health Care Delivery, Nursing Care and Ward Management.

**Unit-III:** Intensive Care Unit (ICU), Control of Hospital Infection.

**Unit-IV:** Progressive Patient Care. Emergency Services and

**Unit-V: Monitoring and Evaluation. Implementation and Monitoring:** System Approach, PERT Analysis (Operational Planning), Determine the Monitoring Roles and Responsibilities, Developing Indicators, Reporting to Stake-holders. **Evaluation:** Design the Evaluation of the Exercise of the project, using the Evaluation Results – SMART / SPICED analysis.

**Reference Books:**

1. Hospital Planning & Administration – WHO Monograph Series 54 –By R. Llewelyn,

- Davis & H.M.C. Macaulay - Indian Edition - Jaypee Brothers, New Delhi.
2. Hospital & Nursing Homes : Planning, Organization, & Management - By Syed Amin Tabish - Jaypee Brothers, New Delhi.
  3. Principles of Hospital Administration & Planning - By B.M. Sakharkar - Jaypee Brothers.
  4. Hospital Facility Planning and Management, G.D. Kundra
  5. Hospital Administration & Planning - By A.G. Chandorkar - ParasMedical Publisher.
  6. Hospitals Planning, Design & Management - By Kunders & Gopinath.
  7. Healthcare System & Management - By S.L. Goel - Deep & Deep Publisher.

## **Theory Paper 2 -Hospital Planning & Facility Management**

**Paper Code MHM- 32**

**Teaching hours; 64**

**Credit-04**

**Maximum marks 30 (IA) + 70 (ESE) = 100**

**Course description:** This course will introduce students to fundamentals of Hospital Planning and Organization. It will encompass basic knowledge of architecture, engineering and project management. It will introduce time tested concepts in building design and also futuristic models which is based on efficiency and patient centeredness. It will also provide insights to organizing major departments including nursing services.

### **Learning objectives:**

1. To understand the evaluation of Hospital as a part of Healthcare delivery system and its significance in the current era.
2. To understand basic principles of planning and designing modern hospitals and other healthcare facilities.

**Competencies:** After completion of the course students would be in a position to guide the architects with regard to what are the essential requirements in hospital planning and constructions to get the effective utilization of space at a minimum cost also able to plan and design a hospital. Students will be fully competent to organize and administer various services required for managing the Hospital also able to conduct performance audit with an aim to improve efficiency of Hospital Services.

### **Broad outlines:**

**Unit-I: History of Hospital Planning. Promoting and Building a New Hospital :** (Planning the Hospital, Planning for a New Hospital, Guiding Principles in Planning Hospital Facilities and Services, Preliminary Survey, Financial Planning, Equipment Planning, Permanent Hospital Organization, Planning: Early Considerations, Operational Plan and Functional Plan, Facility Master Plan, The Design Team, Design Development Stage, Planning the Hospital Building, Building Contract and Contract Documents,



Furnishing and Equipping the Hospital, Purchase of Capital Equipment, Ready to Operate stage, Before Opening the Hospital, Commissioning and Inauguration)

**Unit-II: Organization of the Hospital:**

**1.1 Organization:**(Introduction, Organizational, Structure, Management Structure, Organizational Charts)

**1.2 Management of the Hospital:** (Overview, Two Lines of Authority in the Hospital, Professional Management of the Hospital.

**Unit-III: Planning and Designing Administrative Services:** (Introduction, Executive Suite, Professional Service Unit, Financial Management Unit, Hospital Information System, Nursing Service Administration Unit, Human Resource Management, Public Relations Department, **Planning and Designing Medical And Ancillary Services** (Outpatient Services, Emergency Services, Clinical Laboratories, Radiological Services, Diagnostic Radiology, Radiation Therapy Department, Nuclear Medicine, Surgical Department, Labor and Delivery Suite, Physical Medicine and Rehabilitation, Cardiac Catheterization Laboratory (CATH LAB)

**Unit-IV: 4.1 Planning and Designing Nursing Services:** (General Nursing Unit, Pediatric Nursing Unit, Obstetrical Nursing Unit, Psychiatric Nursing Unit, Isolation Rooms, Intensive Care Units (ICUs), New-born Nurseries,

**4.2 Planning and Designing Supportive Services** (Admitting Department, Medical Records Department, Central Sterilization and Supply Department (CSSD), Pharmacy, Materials Management, Food Service Department, Laundry and Linen Service, Housekeeping)

**Unit-V: 5.1 Planning and Designing Public Areas and Staff Facilities:**

**5.2 Planning and Designing Hospital Services** (Overview, Engineering Department, Maintenance Management, Electrical System, Air-Conditioning System, Water Supply and Sanitary System, Centralized Medical Gas System, Communication Systems, Environmental Control, Solid Waste Management, Transportation).

**Reference Books:**

1. Hospital Planning & Administration – WHO Monograph Series 54 –By R. Llewelyn, Davis & H.M.C. Macaulay – Indian Edition – Jaypee Brothers, New Delhi.
2. Hospital & Nursing Homes : Planning, Organisation, & Management – By Syed Amin Tabish – Jaypee Brothers, New Delhi.
3. Principles of Hospital Administration & Planning – By B.M. Sakharkar – Jaypee Brothers.
4. Hospital Administration – By C.M. Francis & Marioc Desouza –Jaypee Brothers, New Delhi.
5. Hospital Administration & Planning – By A.G. Chandorkar – ParasMedical Publisher.
6. Hospitals Planning, Design & Management – By Kunders & Gopinath.
7. Healthcare System & Management – By S.L. Goel - Deep & Deep Publisher.
7. Hospital facilities planning & Management, G.D. Kunders

**Course description;** This course emphasizes the value and process of strategic management and designed to explore an organisation's vision, mission, examine principles, techniques and models of organisational and environmental analysis, and discuss the theory and practice of strategy formulation and implementation.

**Learning Objectives:**

1. To understand the process of forming, formulating, Implementing and evaluating business strategies.
2. To analyse and evaluate critically real life organizational situations and develop creative solutions, using a strategic management perspective.

**Competencies:** After completion of the course the student will be able to understand the impact of social, economic and political force on the design, Planning and Implementation of organization policy.

**Broad outlines:**

**Unit -I- 1.1-Introduction to strategic management-** Meaning and definition of strategy and strategic management, objectives, nature, process, vision, mission, importance and policies of strategic management, **1.2 Organisational mission-** Value of organisational mission, mission statement, characteristics of mission statement, Porter's value chain- concept and applications

**Unit- II- 2.1 Audit** -Introduction, origin, definition , objectives, scope, types of audit, comparison between external and internal audit, limitations of auditing and auditor's report, **2.2 Management, marketing, finance/ accounting, computer information system.**

**Unit III- 3.1- Strategy formulation-** Introduction, types of strategy formulation, **3.2- strategic implementation-** introduction, organization and strategy implementation, factors causing unsuccessful implementation of strategy, **3.3 - Strategic evaluation and control** - concept, role of strategic evaluation and control, barriers in strategic evaluation and control, participants in strategic evaluation and control and stages of control

**Unit IV- 4.1 Management issue-** Definition, strategic management model, annual objectives, issues in strategy formulation and strategy implementation, conflict management strategies, restructuring , reengineering, linkage performance and pay to strategies, managing resistance to change, managing the natural environment, creating a strategy - supportive culture and SWOT analysis.



**Unit V-5.1 Strategy analysis**-Introduction, levels of strategy ,framework of strategic analysis(external analysis, internal analysis , strategy identification and selection), Porter's five forces model, external factor evaluation (EFE) matrix, competitive profile matrix (CPM), BCG growth share matrix, balanced scoreboard (BSC) and GE business portfolio matrix.

Reference Books: Strategic Management of health care organisation, Ginter

Theory Paper 4: Quality Assurance in Health-Care, Paper Code- MHIM34

Credit- Teaching hours: 64

Credit-04

Maximum marks 30 (IA) + 70 (ESE) = 100

**Course Description:** This course will introduce students to the concepts in Quality in healthcare, their applications and their importance in a healthcare environment.

**Learning Objectives:**

- 1 Define quality in the healthcare setting also Highlight basic quality terminology, purpose, and theory.
- 2 Provide a context and foundation for practical application of quality & accreditation agencies like JCI, QCI, NABH, NABL, ISO etc.

**Competencies:** After completion of this course the student will be able to apply the concepts of quality to practical problems in organizations in a critical manner.

**Broad outlines**

**Unit-I: Introduction and Setting Standards** -Quality and Its Needs, Purpose of Quality Assurance , Principles of Quality Management, Definition, Meaning and Measurements of Quality of Health Care, Application and Benefits of Quality Management. Interplay between Quality Management and Consumer Needs.

**Unit-II: Continuous Quality Improvement (NABH)**- Quality Vs Total Quality, Difference between Quality, Management and Total Quality Management, Quality Control and Quality Assurance, Continuous Quality Improvement Process, Differences between Traditional Management and Continuous Quality Improvement, Principles and Essentials of Continuous Quality Improvement, Application of Quality Management and CQI to Health Care settings

**Unit-III: Components and Assessment of Quality Improvement Tools-** Need for Quality Assessment, Framework of Quality Assessment, and Methods of Quality Assessment. Tools of Quality Improvement, Construction Quality Assessment Tools, Framing the Quality Improvement Flows, Strategic Management towards Quality Improvement process

**Unit-IV: Medical Audit:** Need for Medical Audit, Definition and Measures of Medical Audit, Pre-requisites for Conducting a Medical Audit, Development of Medical Audit for Local Organization, Structuring Data Base for Medical Audit (i. Equipment Audit, ii. Intensive Care Unit Audit, iii. Cost Audit for Operation Theatre, IV. Clinical Audit)

**Unit-V:** Introduction to NABH, NABL JCI, NABH chapters, Standards, Benefit of quality assurance in hospitals, Basic structure of QCI, NQAS, Kayakalp

#### **Reference Books:**

1. Quality management in hospitals. S.K. Joshi.
2. Basics of Quality Assurance, WHO.
3. Making Quality Count, Dr J Jacob.
4. Total Quality Management in Healthcare, Hugh CH Koch.

### **Theory Paper 5: Hospital Management Information System**

**Paper Code- MHM-35**

**Teaching hours: 64**

**Credit-04**

**Maximum marks 30 (IA) + 70 (ESE) = 100**

**Course description-** This course deals with understanding the basic concept about computer software and hardware, Application of HIS in Hospitals like (Patient registration, Appointment scheduling, admission discharge transfer, billing, Radiology information system, Pharmacy, Blood bank etc), Hospital functions, Utilization and Statistics, Medical Health Records, Telemedicine.

**Learning Objective-** To learn and (Hands on Practical) understand HIS process and its Application and Functions.

**Competencies-** After completion of the course student will be able to understand all the work process of Hospital Management Information System in different department and will be able to work on it.

#### **Broad outlines**



**Unit-I: Introduction to Hospital Management Information System (HIS):** Basic concept about computer software and Hardware- Application of computer in Hospital, Computer Programme and operating system, Office Automation Software, Data Base Concept , Microsoft Office (MS word, excel and power point), Database management software (MS Access ,SQL),Basic of computer network – Intranet and internet Approaches to HIS – Patient based, functional organization based ,user department based, clinical based HIS, Medical records, nursing information system; appointments scheduling, dissemination of tests and diagnostic information, general administration, productivity and concept of ESS (Employee Support System)

**Unit-II: Application of HIS in Hospital:** Back office & front office, IPD & OPD – Patient Registration, Appointment Scheduling, Admission discharge Transfer (ADT), Wards Management Module, Computerized Physician Order Entry (CPOE),Nursing workbench, Clinical Specialties, Roster management, Laboratory Information System, Radiology Information System, CSSD, Pharmacy, Blood Bank , Operation Theatre ,Dietary ,Pharmacy, Medical Records, Patient Billing, Insurance and Contract Management.

**Unit-III: Hospital Functions, Utilization and Statistics:** Routine Admission, Discharge Procedures, Discharge summary ,Hospital Utilization Indices, Average Length to stay (ALS) Bed Occupancy rate, Turnover Interval, Hospital statistics- Definition of Hospital Census, Uses of Hospital Census, Types of Hospital Census, Uses of Hospital Statistics, Measure of evaluation of quality of care, Helps in planning, Allocation of resources in different areas , Identify deficiencies at various levels, Types of Hospital Statistics – Report related to hospital Beds daily census, Daily Average Attendance, Bed occupancy rate, bed turnover interval bed turnover rate, Total Patient day care vacancy rate hospital beds sanctioned beds functional bed, Bed supply rate.

**Unit-IV: Medical Health Record- HER:** What is EHR, Benefits of electronic medical records, Paper Record vs Electronic Health Record, EHR Standards for India , Goals of Standards in EHR, Guidelines for Hardware, Guidelines for Networking , Guidelines for software , Data Ownership of EHR , Disclosure of information, Patient Privilege , EHR preservation, Data privacy and security, Indian vs International EHR scenario, International classification of diseases.

**Unit-V: Telemedicine- Introduction:** Origin of Telemedicine, Definition, telemedicine in India, Objective of Telemedicine, Functions & Application of Telemedicine, Type of telemedicine, Necessary equipment's, Benefits, Health care in rural area, Telemedicine show mobile van.

#### **Reference Books:**

- 1. Hospital Information System, S.A. Kelkar**
- 2. Medical Record, Bennard Benjamin**

## Theory Paper 6: Legal framework in Hospital; Paper Code MHM- 36

Teaching hours: 64

Credit-04

Maximum marks 30 (IA) + 70 (ESE) = 100

**Course description:** Legal issues & Industrial relations deals with the several factors and issues that can go to make up Indian healthcare, the focus of this course work will be on the knowledge developmental aspect that deals with the legal compliance & statutory requirement applicable for the hospitals in India. It focuses on the perspective and adherence that is needed to understand the various legislations & industrial relation issues related to healthcare.

### Learning Objectives:

1. Knowledge development on legal issues & industrial relations in healthcare sector.
2. Learn to meet the statutory requirements while commissioning a healthcare facility.

**Competencies:** After completion of this course student will understand the various laws related to healthcare statutory requirements & industrial relations and will be able to apply the various machinery to handle healthcare resources. He/ She will be able to work in a team and will be able to manage social security laws optimally.

### Broad outlines

**Unit-I: 1.1 Introduction to Indian Penal Code:** (Medicare Related Laws-General (IPC 52, IPC 80, IPC 88, IPC 89, IPC 90, IPC 92, IPC 93, IPC 269)

**1.2 Doctor Patient Relationships:** (Rights of the Patient, Duties of the Patient, Rights of the Doctor, Duties of the Doctor)

**1.3 Consent:** (Meaning, Implied Consent, Express Consent, Informed Consent, From Whom Consent to be Obtained, When Consent is not Required, Consent from Spouse to be Taken, When Consent is not valid).

**Unit-II: 2.1 Medical Ethics** (Definition, Code of Medical Ethics, The Charak Oath, The Hippocratic Oath, Declaration of Geneva, International Code of Medical Ethics, Declaration of Helsinki, Professional Secrecy, Privileged Communication, Confidentiality of Medical Records, Ethical Relations with Fellow Colleagues.)

**2.2 Medical Negligence:**(Definition, Elements of Negligence, Four Ds, Conditions Essential For RES IPSA LOQUITUR, Doctor – Patient Relationship, Duty to Exercise Reasonable Degree of Skill and Care, Damage Suffered By a Patient, Types of Medical Negligence, How The Negligence Can Be Caused, Contributory Negligence, Corporate Negligence, Products Liability, Novus Actus Interveniens, Vicarious Responsibility, Comparative Negligence, Defense Against An Allegation of Negligence, Guidelines to Avoid Negligence Suites.)



**2.3 Medical Council of India:** NMC (National Medical Commission) Composition, Rules regulation, guidelines and function.

**2.4 New Regulations From Medical Council of India :** (Notification, Code of Medical Ethics, Duties of Physicians to their Patients, Duties of Physician in Consultation, Responsibilities of Physicians to Each Other, Duties of the Physician to the Public and to the Paramedical Profession, Unethical Acts, Misconduct, Punishment and Disciplinary Action.)

**2.5 Introduction to the Indian Medical Degrees Act** (Sect. 3, Sec. 6, Section 7)

**Unit-III: 3.1 Consumer Protection Act and Medical Profession:** (Meaning, Courts, Procedure of Filing a Complaint, Consumer Protection Act and Medical Profession, Post-inclusion Scenario of Medical Profession in CPA, 1986) (The Consumer Protection Act, 1986, along with Latest Rules), violence against medical professionals and workplace sexual offences.

**3.2 RTI ACT:** Introduction and salient features

**3.3 Drug and Cosmetic Act 1940**

**3.4 Medical Device Regulatory Framework**

**3.5 The Drugs and Magic Remedies (objectionable advertisements) Act, 1954**

**3.6 ESI Workmanship Compensation Act 1923**

**3.7 Employee Compensation Act 2015**

**3.8 Introduction to the Medical Termination of Pregnancy Act (MTP), 1971,**

**3.9 Introduction to the Transplantation of Human Organs Act, 1994,**

**3.10 Minimum wage Act,**

**3.11 INTRODUCTION OF EPIDEMIC DISEASE ACT,**

**3.12 Atomic Energy Act, 3.13 Fatal Accidents Act and Dangerous Machines (Regulation) Act.**

**Unit-IV: Hospital Waste Management:** (Introduction, Pollution Caused by Biomedical Waste, Occupational Health Issues of Biomedical Waste, Bio-Medical Waste (Management and Handling) (Second Amendment) Rules, 2000), current biomedical waste management guidelines 2016.

**Unit-V: Medico Legal Responsibilities of a Medical Practitioner:** (Definition, Registration of a Case as Medico Legal, Can treatment be refused to a medico legal case, Formalities to be completed in a medico legal case, Cases to be labeled as medico legal, How to communicate to Police, Failure to communicate to police, Preservation of trace evidences, Opinion, Grievous hurt).

**Reference Books:**

1. Law and the practice of medicine. S.K.Joshi.
2. Consumer Protection and Medical Profession, PC Chaubey, Jaypee.
3. Medico Legal aspect of Clinical and Hospital Practice, R Basu & TK Bose, English Edition Mumbai.
4. Medical Laws and Ethics in India, Mehta.