THEORY
Syllabus

FIRST SEMESTER

PAPER – I : BASIC CONCEPT OF HEALTH

Code  MHA 101
Credit- 3
Total Hours - 30

Concept of Health and Disease

- Concept of health & disease and well being.
- Natural history of disease and role of hospitals to offer various levels of care
- Prevention aspect of diseases
- Dynamics of disease transmission
- Changing pattern of diseases
- Concept of health indicators

Suggested Reading:
- Textbook of Preventive & Social Medicine- Dr. K. Park

Preliminary Human anatomy and Physiology

- Basic concepts of human anatomy
- Basic concepts of human physiology

Suggested Reading:
- Human Anatomy- Prof. Samar Mitra
- Human Anatomy- Prof. A. K. Dutta
- Text Book of Human Physiology- Dr. C. C. Chatterjee

Common Pathological Conditions

- Basic concepts of pathogenesis of common diseases
- Basic concepts of interpretation of investigations reports

Suggested Reading:
- Robbin’s Textbook of Pathology – Robbin, Cotran, Kumar
- Textbook of Microbiology – Ananantnarayan & Paniker

Basic concepts of Pharmacology:

- Commonly used Medicine in a hospital, Narcotic drugs, use and abuse of drugs. Dispensing of medicine, drugs store, drug stock / purchase of medicine, oxygen, I/V Fluid, Chemicals etc.

Suggested Reading:
- Textbook of Pharmacology: Dr. K. D. Tripathi
MHA
(Master of Hospital Administration)

PAPER - II : HEALTHCARE SERVICES

Demography & Vital Statistics

- Demography – its concept
- Vital events of life & its impact on demography
- Significance and recording of vital statistics
- Census & its impact on health policy

Health scenario of India

- Health scenario of India- past, present and future

National Health Policy & Population policy

- National Health Policy & Inter-sectoral Co-ordination
- National Population Policy
- National Five year plans

National Health Programme

- Background objectives, action plan, targets, operations, achievements and constraints in various National Health Programme.

Healthcare of the Community

- Healthcare delivery system in India at Primary, Secondary and Tertiary Care
- Indigenous system of medicine in India
- Community participation in healthcare delivery system
- Health system in developed countries.

Suggested reading:

- Textbook of Preventive & Social Medicine- Dr. K. Park
- Textbook of community medicine: V. K. Mahajan
- Population studies – Asha Bhendre

PAPER III : HOSPITAL BASED HEALTHCARE & ITS CHANGING SCENARIO

Overview of Hospital

- Concept of Modern Hospital & Privatization in Health Sector
- Public Sector Hospitals and Level of care / offered facilities
MHA
(Master of Hospital Administration)

- Effects of Globalization in Health care
- Concept of Corporate Hospital in developing countries
- Infrastructure and lay out of an ideal corporate hospital
- Functioning of modern hospitals & changing need of patients
- Hospitality in Hospital Care
- Invasive and non-invasive diagnostic facilities in modern hospital
- Care offered in Specialty and Super specialty Hospitals

Suggested Reading:
- Hospital Management module II- NIHFW, New Delhi
- Hospital Administration – G. D. Kunders
- Hospital Administration - Tabish

PAPER IV : EPIDEMIOLOGY

Code MHA 104
Credit- 3
Total Hours - 30

- Principles of Epidemiology
- Natural History of disease
- Methods of Epidemiological studies
- Epidemiology of communicable & non-communicable diseases, disease transmission
- Host defense immunizing agents, cold chain, immunization, disease monitoring and surveillance.
- Screening and surveys
- Investigation of an epidemic and role of hospital in its control.

Suggested Reading:
- Textbook of Preventive & Social Medicine- Dr. K. Park
- Textbook of community medicine: V. K. Mahajan

PAPER V : HEALTH EDUCATION

Code MHA 105
Credit- 3
Total Hours - 30

- Aims & Principles of Health education
- Methods of Health Education
- Effects of health education
- Levels & practice of health education
- Need of Health education to attain positive health
MHA
(Master of Hospital Administration)

➤ Health care reporting and role of NIC

Suggested Reading:
    ❖ Health Education – V. K. Mahajan
    ❖ Effective communication methods – Asha Kaul
    ❖ Hospital Administration - Tabish

PAPER VI :  COMMUNICATION

Code MHA 106
Credit- 3
Total Hours - 30

➤ IEC activities in health sector
➤ Basic concepts & principles of good communication
➤ Special characteristics of health communication
➤ Types & process of communication
➤ Barriers of communication & how to overcome
➤ Communication with the media / press
➤ Counseling in health care & its different methods
➤ Management and co-ordination of IEC activities

Suggested Reading:
    ❖ Effective Business Communication
    ❖ Health Education – V. K. Mahajan
    ❖ Effective communication methods – Asha Kaul
    ❖ Hospital Administration - Tabish

PAPER VII :  BASIC INFORMATION TECHNOLOG

Code MHA 107
Credit- 3
Total Hours – 30

➤ Basic concepts about computer Hardware & Software
➤ Working knowledge of commonly used hospital software
➤ Application of Computer in hospitals
➤ Computer programme and operating system
➤ Data Based Concept ( ER diagram )
➤ Microsoft Office, SQL, V.B.
➤ ERP system with all modules
MHA
(Master of Hospital Administration)

➢ Importance of effective Health Information system
➢ Digital maintenance of Medical Records

Suggested Reading:

❖ An introduction to computers
❖ Peter Norton - Tata McGraw Hill
❖ Computers today S. K. Basandra – Galgolia Books
❖ Introduction to Computers – C. Xavier – New Age publishers

PAPER VIII: PRINCIPLES OF MANAGEMENT

Code MHA 108
Credit- 3
Total Hours – 30

➢ History and growth of management science
➢ Traditional management vs. modern health care management
➢ Evolution of management theory
➢ Healthcare management as a profession
➢ Evaluation of Management Concepts
➢ Management components i.e. Planning, Organizing, Staffing, Motivating, Leading,
  Co-ordination and Controlling.
➢ Modern Management concept and its implication in health sector

Suggested Reading:

❖ Principles of Management - L. M. Prasad - S. Chand
❖ Essential Management - Koontz - Tata McGraw Hill
❖ Management - Peter Drucker

PAPER IX: ORGANIZATIONAL BEHAVIOUR (O. B.)

Code MHA 109
Credit- 3
Total Hours – 30

➢ Concept of Organizational Behaviour
➢ Major Components of organizational behaviour – Personality development, Motivation, Group, Leadership, Co-
  operation and Conflict
➢ Behavior of people of their work place and its relation in team building for achieving organizational goals
➢ Sociology and Anthropology,
➢ Basics of Psychology
➢ Characteristics of workgroups
Dynamics of organizational behavior
Motivation and Leadership
Conflict management
Transactional analysis

Suggested Reading:
- Organizational Behavior – Fred Luthans – McGraw Hill
- Organizational Behavior – M. L. Prasad – S. Chand

PAPER X: QUANTITATIVE MANAGEMENT

Code MHA 110

Total Hours – 30
Credit - 3

Basic concepts – Introduction, Definitions
The role of statistics in the estimation of burden of disease and the methods applicable to calculate the same.
Basic Mathematics
Collection, Presentation of Data
Probability and Frequency of distribution
Estimation and testing of hypothesis
Index Number, time series
Measurements of central tendency
Measurement of dispersion
Sampling and Sampling error
Testing of hypothesis
Test of significance
Correlation Regression

Suggested Reading:
- Statistics for management – R. I. Levin and D. Rubin – Prentice Hall
- Basic Statistics – Goon, Gupta and Dasgupta – World Press
- Business Statistics – S. P. Gupta - S. Chand

SYLLABUS

SECOND SEMESTER

PAPER – I: HOSPITAL SUPPORT SERVICES

Code MHA 201

Credit - 3
MHA
(Master of Hospital Administration)

Total Hours - 30

To consider various aspects of planning, operating and evaluation of different utility services in hospitals

- Methods of Sterilization CSSD
- Nosocomial infection and hospital acquired infection control committee
- Laundry services
- Security Services (General & Others like fire, gas etc.)
- Transportation Services (External & Internal)
- Ambulatory Care
- Hospital Stores
- Mortuary (Preservation, transportation & religious formalities)
- Kitchen services
- House Keeping
- Maintenance

Suggested Reading
- Principles of Hospital Administration - S. A. Tabish
- Hospital Administration - S. L. Goel
- Hospital Administration - Francis
- Hospital Administration - McGibony

PAPER – II : MATERIAL MANAGEMENT

Code MHA 202 Credit- 3

Total Hours - 30

To help, learn the scientific methods, materials and equipment planning, procuring, storing and dispensing scope, definition including maintenance

- Importance of material management
- Principles of material management, material forecasting
- Inventory management and analysis
- Import formalities relating to Medical Equipments
- Letter of credit, service contracts.
- Purchase style, need assessment
MHA
(Master of Hospital Administration)

- Tender system
- Condemnation and disposal
- Economic order quantity, safety stock, lead time

Suggested Reading
- Materials Management - Gopalakrishnan
- Materials Management - Sundaram
- Inventory Control - A. C. Dutta

PAPER – III: PERSONNEL MANAGEMENT

Code  MHA 203  Credit- 3  Total Hours - 30

To emphasize the importance of human resource in a hospital and to know in detail about the functions of personnel management

- Concepts & Evolution of personnel Management in Hospital
- Public Relation
- Methodology & tools of Personnel Management
- Office rules & regulation & discipline
- Performance appraisal.

Suggested Reading
- Human Resources Management - L. M. Prasad
- Personnel Management - P. C. Tripathy
- Personnel Management-Mamoria

PAPER – IV: BIOMEDICAL WASTE MANAGEMENT

Code  MHA 204  Credit- 3  Total Hours - 30

To understand the significance of nosocomial infections, biomedical waste and its proper disposal.

- Definition of Biomedical Waste
- BMW – Segregation, collection, transportation, disposal
- Liquid BMW, Radioactive waste, Metals / Chemicals / Drug waste
MHA
(Master of Hospital Administration)

- BMW Management & methods of disinfection
- Modern technology for handling BMW
- Monitoring & controlling of cross infection (Protective devices)
- BMW from Administrative point (Budget, Health check-up, Insurance)

Suggested Reading
- Principles of Hospital Management - S. A. Tabish
- Hospital Management - S. L. Goel
- Hospital Administration - Francis
- Bio-Medical Waste Act & Rules Govt. of India
- Current Issues In BMW Waste Handling-ISHA, Bangalore

PAPER – V :  INDUSTRIAL RELATIONS

Code  MHA 205  Credit- 3

Total Hours - 30

To get an understanding about the industrial relations and its influence on the staff behavior.

To understand the policy covering wage and salary administration, to dispose of the grievance fairly and equitably.

- Wage fixation and collective bargaining
- Definition, scope and importance of industrial relations
- Industrial Disputes Act
- Trade Unions
- Industrial relations in health services industries

Suggested Reading

- Human Resources Management and Industrial Relations - P. C. Tripathy
- Managing Manpower in Industry - Sahani
- Personnel Management- Mamoria

PAPER – VI :  FINANCIAL MANAGEMENT – I

Code  MHA 206  Credit- 3

Total Hours - 30

To understand the issues and scope of financial management

- Cash flow and fund flow
- Basics of financial management
Issues and scope of financial management
- Recording Business transactions
- Financial Statement & its analysis
- Fund allocation & department performance reports
- Concept of business plan, project plan

Suggested Reading
- Financial Management - T. K. Maheshwari
- Business Finance - Dey & Dutta
- Principles of Accounting - Sandip Sharma
- Financial Management - Prakashan

**PAPER VIII – FINANCIAL MANAGEMENT –II**

**Code** MHA 207

**Credit- 3**

**Total Hours – 30**

To understand financial management’s utility as an indispensable part of administration and quality control

- Elements of cost and costing methods
- Hospital Rate setting – Managerial cost and Break-even analysis
- Cost control and cost reduction
- Budgeting – Revenue and Capital Budgeting, Cash Budgeting
- Productivity
- Resource mobilization
- Cost containment
- Money Market and Capital Market, Merger and acquisition.

Suggested Reading
- Basic Financial Management - Khan
- Economics - Lipsey

**PAPER – VIII : HEALTH MANAGEMENT INFORMATION SYSTEM**

**Code** MHA 208

**Credit- 3**

**Total Hours - 30**

To study the need of management and information together forming a system integration of different aspects of MIS and preparation of information system manual
Why to have HMIS in Hospital set up
Health Information System
Hospital Information System
Management Information System
MIS as a tool to managerial control

Suggested Reading
- Management Information System - Srivastava
- HIMS - NIHF Monograph, Govt. of India

**PAPER – IX : MARKETING MANAGEMENT – I**

**Code** MHA 209 **Credit- 3**
**Total Hours - 30**

To understand the role of marketing in health care industry, its importance in quality management and organizational development

- Basic concept of Marketing Management – Consumer Behaviour
- Marketing research & information
- Pricing of various services
- Marketing strategy, evaluation and control
- Promotion of Business in Hospital
- Service Marketing – Patient care and communication

Suggested Reading
- Marketing Management - Kotler
- Service Marketing Management - Kotler & Keller

**PAPER – X : MARKETING MANAGEMENT – II**

**Code** MHA 210 **Credit- 3**
**Total Hours - 30**

To understand the market forces, which determine the services, rendered by the organization.

- Advertisement and Branding
- Marketing promotional activities
- Corporate marketing
- Marketing for TPA and Cash Patients
- Marketing and medical ethics
- Social aspect of marketing
Suggested Reading

- Services Marketing - Kotler & Keller
- Advertising Management - S. Krishnan
- Marketing Management - Kotler
- Advertisement Management - Geeta Pandey

SYLLABUS

THIRD SEMESTER

PAPER I – HEALTH ECONOMICS’

To study the economics and its relation to health status

- Basics of health economics
- Nature & Scope of Managerial Economics
- Micro- and macro-economics
- Demand/Supply of Medical Care
- Concept of Cost analysis, price elasticity
- Theory of Production
- Theory of pricing
- Price & output decision under different market condition

Suggested Reading

- Economics - Samuelson
- Economics - Lipsey
- Managerial Economics - S. Mukherjee

PAPER II – MANAGEMENT ACCOUNTING

To understand the managerial accounting and its proper application

- Managerial Accounting – an overview
- Nature, Scope & Purpose of managerial accounting –
  - Some tools & techniques of managerial accounting
- Profitability analysis
MHA
(Master of Hospital Administration)

- Receivable Management
- Working Capital

Suggested Reading

- Principles of Accounting - Sharma
- Accounting for Managers - Dutta

PAPER III - PRINCIPLES OF HOSPITAL MANAGEMENT

Code MHA 303
Credit- 3
Total Hours - 30

To introduce principles of hospital management and the functional organization of a hospital

- Concept of Health Care Industry & its ever-changing character
- Understanding functioning of Corporate multi-specialty hospital
- Managerial activities for effective hospital functioning
- Duties and responsibilities of Hospital Managers
- Qualities of effective Managers
- Effective inter and intra departmental co-ordination

Suggested Reading

- Hospital Administration - Tabish
- Hospital Administration - S. L. Goel
- Hospital Administration Sakaharkar

PAPER IV – LEGAL ASPECTS OF HEALTH

Code MHA 304
Credit- 3
Total Hours - 30

Rules and regulations of international health policy.

- Medico- Legal Problems in relation to health administration
- Law of Contracts, Specific Performance
- Law applicable to Hospital employees
- Medical jurisprudence and functioning of hospitals
- Consumer Protection Act and Hospitals
- I. D. Act, W.C. Act
MHA
(Master of Hospital Administration)

- West Bengal Clinical Establishment Act and Rules
- ESI Act, Trade Union Act
- Organ transplantation Act
- PNDT - Act
- International health organization / NGOs
- Medical Ethics

Suggested Reading

- Law of Consumer - Universal Publications
- Law and Medical Profession - Eastern Law Book Co.
- Related Acts - Kamal Law Book House

PAPER V – STRATEGIC MANAGEMENT

Code MHA 305
Credit- 3
Total Hours - 30

To understand strategic management in a hospital set up

- Strategic Management Process
- Situational analysis in health sector
- Strategy formulation and strategy implementation
- Forecasting methods, stakeholder analysis
- Monitoring techniques, evaluation procedures and tools

Suggested Reading

- Principles of Management - L. M. Prasad
- Essential Management in Global Perspective - Koontz

PAPER VI – OPERATIONAL RESEARCH

Code MHA 306
Credit- 3
Total Hours – 30

To understand the quantitative methods and modern management techniques as applicable in health care settings as a tool to system development and better managerial control

- OR techniques and in applications in hospital
- Linear Programming
- Decision tree Analysis
- Queuing theory, PERT, CPM, Assignment Model
- Management by objective
- Management by result
Suggested Reading

- Operational Research - L. M. Prasad
- Operational Research - P. C. Tripathy
- Management by objectives - Drucker

PAPER VII – HUMAN RESOURCE DEVELOPMENT

Code MHA 307 Credit- 3

Total Hours – 30

To define different rules and regulations which are necessary in a hospital and personnel management

- Rules & Regulation as applicable to Hospital employees
- Hospital need assessment: Creation of new post & abolition of existing post
- Job description and full utilization of manpower. Cost effectiveness
- Selection & Recruitment procedure
- Wage & Salary. Qualification, Experience, Pay fixation, E.B.
- Manpower Need Assessment and Performance Indicator Tools
- Manpower Audit in Hospital Care Industry
- Training Need Assessment & in-service training
- Code of Conduct and disciplinary proceeding

Suggested Reading

- CDA Rules - Navi Publications
- Law of Employment and Services in India - Kamal Law Book House
- Fundamental Rules-Navi Publications
- Supplementary Rules- Navi pulications

PAPER VIII – NUTRITION & DIETETICS

Code MHA 308 Credit- 3

Total Hours – 30

To understand about human nutrition and good dietary practices

- Food & Nutrition. Role of Antioxidants
- Overview of Metabolism & Balance Diet for patients
- Diet for Patient – Selection of food, Cooking methods, Tasty Food, Food to be avoid / Added in diet, Need of complementary food.
- Steps to prevent food adulteration and Food Adulteration Act.
MHA
(Master of Hospital Administration)

- Overview of Clinical Dietetics. Quality control of Food
- Hygiene and special precautions in Hospital Kitchen
- Management of Hospital diet / Catering service
- Role of dietitian in hospital diet service

Suggested Reading
- Text Book of Social and Preventive Medicine – K Park
- Preventive and Social Medicine – Prabhakar Rao

PAPER IX – DRUG MANAGEMENT

Code MHA 309
Credit- 3
Total Hours – 30

To understand different aspects of drug management and quality control

- Drug Management ; Present scenario
- Hospital Pharmacy Licenses, Drug Licenses, Narcotics drugs
- Purchase of drugs and other consumable materials. Drug Storage
- Pharmacy Billing. Computerized drug management system
- Rational use of drugs and Prescription Audit
- Spurious drugs, Banned drugs
- Procedure of Drug Indenting, On time Drug dispensing
- Inventory Control – ABC, VED, SDE, FSN Analysis
- Methods of ordering –
  a) Two bin system (Lead Time, Buffer stock, Reorder Level)
  b) Cyclic System

Suggested Reading
- Materials Management - Gopalakrishnan
- Matgerials Management - A. C. Dutta

PAPER X -

HEALTH STATISTICS AND HEALTH INFORMATION SYSTEM IN INDIA

Code MHA 310
Credit- 3
Total Hours – 30

To understand the various indicators of health, population dynamics, importance of health statistics in future planning for health care services and understand health information system in India

- Ratio analysis
- Incidence and prevalence rates. Morbidity statistics
- International classification of diseases
MHA
(Master of Hospital Administration)

- Health reports and Notifiable diseases
- Health information system in India
- Health Systems Research (HSR) - Introduction to WHO’s concept of HSR
- Use of systems research for strengthening health systems
- Getting research into policy and practice (GRIPP)
- Developing research protocols / proposals

Suggested Reading
- Population Studies - Asha Bhendre
- Elementary Statistics - Goon, Gupta, Dasgupta
- Bio Statistics - Mahajan
- Research Methodology in Social Sciences - P. C. Tripathy
- Preventive & Social Medicine – Rabhaka Rao

SYLLABUS

PROJECT WORK

SYLLABUS

FOURTH SEMESTER

PAPER I – SYSTEM MANAGEMENT & MEDICAL TRANSCRIPTION

Code MHA 401 Credit- 3
Total Hours – 30

To introduce the system concept in a hospital and different aspects of medical transcriptions

- Management as System. Open and close system
- Implication & Limitation of System approach
- Tools of Transcription. Transcription Skill
- Ethical& Legal Responsibilities, Confidentiality
- Preparation of Miscellaneous Medical Reports
- General Principles for complete documentation in Medical Records.

Suggested Reading
- Medical Records - Geeta Sahay
- Principles of Management - L. M. Prasad
- Laws related to Medical Profession - Kamal Book House
- Ethical issue related to Medical Profession - NIHFW, Monograph, Govt. of India
MHA
(Master of Hospital Administration)

PAPER II – OT & WARD MANAGEMENT / FLOOR MANAGEMENT

Code  MHA 402  
Total Hours – 30
Credit- 3

To understand management of wards and OT

- Different types of ward, Position of Nursing Station
- Ward facilities, duties and responsibilities of ward staff
- Manpower Need Assessment in Hospital Ward
- General concept on OT design and function of OT
- Advantages and importance of zoning of OT
- Advantages of Centralized OT complex

Suggested Reading

- Hospital Management - Tabish
- Hospital Management - Goel
- Hospital Management McGibony

PAPER III - MEDICAL EQUIPMENTS & BIO – MEDICAL ENGINEERING

Code  MHA 403  
Total Hours – 30
Credit- 3

To learn about the equipment management process and its various components and their roles in hospital system

To learn to establish equipment management procedure for a hospital

- List of common Medical Equipments used in Hospital
- Justification of purchase proposal, Hospital Need Assessment
- Equipment selection guideline, Estimation of cost and Q.C. Planning
- Purchase / Installation / Commissioning of Medical Equipments
- Replacement of old equipments and Buyback Policy
- Estimation of Breakeven point and Profit – Projection in hospital budget
- Medical Equipment Maintenance (In-house and AMC)
- Local, National and International availability of Medical Equipments

Suggested Reading

- Materials Management - Gopalakrishnan
- NIHFW Monograph - Govt. of India

PAPER IV – PATIENT CARE SERVICES

Code  MHA 404  
Total Hours – 30
Credit- 3
To consider various operational aspects of important services

- Patient Admission / Discharge
- All patients related services and assistance. Good communication.
- Nursing care with full devotion / commitment
- Diagnostics Services
- Blood transfusion services
- Housekeeping services
- Cafeteria and Dietary services
- Proper and respectful disposal of deceased person.

Suggested Reading

- Hospital Administration - Tabish
- Hospital Administration - Goel
- Hospital Administration McGibony

**PAPER V – HEALTH INSURANCE**

*Code MHA 405  Credit- 3  Total Hours – 30*

To familiarize with concept of health insurance, its scope and applicability

- Health Insurance in Private Health Sector
- Health Insurance in developing and developed countries
- Different Health Insurance Policies – Analysis and Management
- Concept of combined Life Insurance and Health Insurance
- GOI & State Govt. Policy in implementation of Health insurance
- Hospitals / TPA / Insurance Company / Relationship and Problems.

Suggested Reading

- Insurance Management - Dave
- National Insurance - Monographs on Insurance Management
- IRDA Guidelines on Health Insurance - Govt. of India

**PAPER VI – DISASTER MANAGEMENT**

*Code MHA 406  Credit- 3  Total Hours – 30*

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

- Basics of disaster management and Mass casualties
- Components of disaster plan : pre-hospital and hospital
MHA
(Master of Hospital Administration)

- Disaster alertness in Hospital
- Disaster management planning and implementation
- Severity of illness amongst disaster victims and risk assessment
- Mock exercise on disaster management in Hospital

Suggested Reading

- Quality Management – Janakiraman & Gopal
- Total Quality Management - BIS Monographs

PAPER VII – QUALITY MANAGEMENT

Code  MHA 407
Credit- 3
Total Hours – 30
To understand the concept of quality and its relation to health care scenario, its importance as regards patient satisfaction and marketing of services provided

- Quality Management Programme, ISO clauses, quality manual, quality of clinical services, Critical Pathways, Medical Audits, NABL, NABH, JCI, BIS
- Performance review – Assessment / Methods
- Quality Management of diagnostic facilities
- Quality of assurance procedures, Deming’s Principles, Juran Trilogy, Kaizen, Philip Crosby’s Principles
- Management of Social Services. Assessment of Client satisfaction
- Quality Circle of India

Suggested Reading

- Total Quality Management – Aswathappa – Himalaya Books House
- Quality Management – Barnett – Pitman Publishing
- Quality Management – P. C. Tripathy

PAPER VIII – NURSING ADMINISTRATION

Code  MHA 408
Credit- 3
Total Hours – 30
To study the role of nursing administration in health care delivery

- Introduction to Noble Nursing Profession
- Nursing organization structure
- Nurses – Doctors and Nurses – Patients’ relationship
- Nurses : A dedicated social and professional entity
- Staffing norms in various types of hospitals and departments
- Recent trends in nursing profession and education
- Specialization in nursing practices
Suggested Reading

- Ward Administration and Management - N. R. Brothers
- Hospital Administration and Planning - Paras, Hyderabad
- Nursing Administration - Jhora Medical Pub, Mumbai

**PAPER IX- HOSPITAL PLANNING**

**Code** MHA 409  
**Credit** 3  
**Total Hours – 30**

To understand all aspects of planning and commissioning of different types of hospital including specialty hospitals and project management

- Changing health care concept in planning / designing.
- Site surveys for planning a hospital (Techno-Commercial)
- Hospital building, architectural patterns, landscaping
- Internal arrangements, sanitation, lighting, ventilation and traffic control
- Planning of 30,100,250 bedded hospital (general/specialty)
- Planning of 500, 750 and above bedded hospital (teaching/super-specialty/non-teaching specialty hospitals)
- Project cost and total budget: Feasibility and viability study of Hospital
- Project conceptualization, functional requirements. Implementation.

Suggested Reading

- Principles of Hospital Administration - Tabish
- Principles of Hospital Administration - M C Gibony
- NIHFW Monographs – Govt. of India, New Delhi

**PAPER X- HOSPITALITY MANAGEMENT**

**Code** MHA 410  
**Credit** 3  
**Total Hours – 30**

To visualize into the future the needs and expectation of the community from the hospitals

- Treat your patients and treat also like your guest
- Changing mind set of patients necessitate Hospitality Management
- Aims and objectives of Hospitality Management (Commercial point)
- Methods of Hospitality Management in a Hospital set-up
- Attractive look, Effective conversation, Multi lingual, Smart dress.
- Role of Hospitality Management in a Hospital set-up
➤ Etiquette and manners

Suggested Reading

❖ Hospital Administration - S. L. Goel

---

PRACTICAL TRAINING

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1  E D P / I T Department</td>
<td>22.1  Laboratory Services</td>
</tr>
<tr>
<td>11.2  Reception</td>
<td>22.2  Imaging Services</td>
</tr>
<tr>
<td>11.3  Registration</td>
<td>22.3  Personnel / H R Dept.</td>
</tr>
<tr>
<td>11.4  Admission</td>
<td>22.4  Laundry &amp; Linen Services</td>
</tr>
<tr>
<td>11.5  Billing &amp; Discharge</td>
<td>22.5  Kitchen &amp; Dietary Services</td>
</tr>
<tr>
<td>11.6  OPD Services</td>
<td>22.6  Marketing</td>
</tr>
<tr>
<td>11.7  Public Relation Office</td>
<td>22.7  Computerized Medical Record</td>
</tr>
<tr>
<td>11.8  Pharmacy Services</td>
<td>22.8  Security Services</td>
</tr>
<tr>
<td>11.9  Stores</td>
<td>22.9  Transportation Services</td>
</tr>
<tr>
<td>11.10 House Keeping</td>
<td>22.10 Wards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Fourth Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>33.1 Central Sterile Supply Dept.</td>
<td>44.1 Maintenance Department</td>
</tr>
<tr>
<td>33.2 Library in Hospital</td>
<td>44.2 Bio-Medical Department</td>
</tr>
<tr>
<td>33.3 Emergency</td>
<td>44.3 Diagnostic Imaging</td>
</tr>
<tr>
<td>33.4 Critical Care Unit</td>
<td>44.4 Dental Service</td>
</tr>
<tr>
<td>33.5 Medical Record</td>
<td>44.5 Dialysis Unit</td>
</tr>
<tr>
<td>33.6 Operation Theatre</td>
<td>44.6 Burn Units</td>
</tr>
<tr>
<td></td>
<td>44.7 Blood Bank</td>
</tr>
<tr>
<td></td>
<td>44.8 Mortuary</td>
</tr>
<tr>
<td></td>
<td>44.9 Telemedicine</td>
</tr>
<tr>
<td></td>
<td>44.10 Medical transcription</td>
</tr>
</tbody>
</table>

---

**First Semester**

**11.1  E D P / I T Department**

Participation in the process of:-
1) Lay out of EDP / IT Department
   a) Server Room
   b) EDP Lab.
   c) Manager’s Office
   d) Hardware Engineer
   e) Software Engineer / Programmer
   f) Data Entry Operator

2) Different sections for data entry
3) Data collection
4) Data analysis
5) Dissemination of information
6) Storing and preservation of information / record
7) Optimum utilization of LAN / WAN / MAN system
8) Different modules used in EDP through ERP system like;
   - Registration, OPD, Admission, Discharge, Billing, Emergency, Laboratory, Nursing Station, Operation Theatre, Stores, Pharmacy, Pay-roll, different modules of Oracle and Envision system, Management Information System.
9) Maintenance of Computer including its accessories
10) Updating of modules on need based
11) Application of antivirus system

11.2 Reception

Participation in the process of:-

1) Receiving patients and providing information
2) Providing information of availability of doctors
3) Fixing appointment with doctors
4) Arrangement of direct admission for urgent cases
5) Public Address System
6) Supervising internal transportation system
7) No. of Receptionist required to handle the Desk

11.3 Registration

Participation in the process of:-

1) Infrastructure – Lay out, Physical facilities,
2) Patient registration
3) Assisting in collection of hospital charges
4) Transmitting information to respective doctor
5) Assisting in sending patient to the respective departments
6) Computer based functional activity by Receptionist

11.4 Admission

Involvement in the process of:-

1) Documentation of registration for Admission of patients
2) Preparation of files with relevant papers
3) Observing the process of receiving advance payment during admission either by cash or credit card
4) Formalities of procedures for ensuring availability of payee’s fund
5) Distribution of visiting card, literatures, brochure etc. to the client
6) Transfer of Patient to ward
7) Ambulance management and billing  
8) Deployment of no. of Receptionist-cum-Office Assistant  
9) Foreign Exchange facilities

11.5 **Billing & Discharge**

Involvement in the process of:-

1) Assimilation of information through LAN from the different departments  
2) Checking of data in the computer  
3) Observation of different billing system like;  
   a) Cash Billing – As per hospital’s prevailing rate schedule  
   b) TPA Billing – As per hospital’s prevailing rate schedule  
   c) Copt. Billing – Tailor-made billing as per agreement  
4) Handing over the bill to the patient party  
5) Providing Birth Certificate, Amputed Certificate, Death Certificate, Referral Letter, as and when required  
6) Providing discharge certificate in original along with all relevant documents for cash payee patient and photo copy of discharge certificate to the corporate and TPA patients  
7) Deployment of no. of Receptionist-cum-Office Assistant  
8) Facilities – Computer, Swapping Machine, Note Counting Machine, Communication facility

11.6 **OPD Services**

Involvement in :-

1) Layout of Reception Desk in OPD  
2) Registration and department wise OPD Card segregation  
3) Location of the concerned Department  
4) Reception of patients  
5) Physical facilities in OPDs  
6) Close supervision of Doctor’s Chamber for the followings:-  
   Availability of  
   a) Prescription Pad,  
   b) Stethoscope  
   c) View Box,  
   d) Bed Trolley  
   e) Weigh Machine  
   f) Torch Light  
   g) Gloves  
   h) Liquid soap and towel  
5) Records maintenance of OPD  
6) Supervision of patient waiting area and its seating arrangement  
7) Adequate communication with other departments / units / wards etc.  
8) Public Addressing System  
9) Deployment of Staff like Jr. Doctor, Para Medical Staff, Receptionist, Assistant etc.

11.7 **Public Relations Office**

(a) **General**

Helping patients regarding the followings:  
1) Information – Over phone / e-mail / letter / fax / across the table  
2) Dispatch reports for outstation patients  
3) Providing different types of brochure  
4) Liaison between doctor and patient
5) Appointment for doctors
6) Estimation of treatment expenditure
7) Billing status of IPD patient
8) Visiting indoor patients to enquire about their facilities
9) Availability of Public Relations Officer everyday including Sundays and holidays

(b) Corporate

1) Coordination of admission of company patients and patient having medical insurance for cashless treatment.
2) Ensuring validity of ID card and referral letter
3) Filling up the pre-authorization letter and facsimile the patient case history, investigation report, clinical notes etc. to the concerned TPA for verification and approval.
4) Provide different additional queries regarding the health status and treatment procedure of the patients to concerned TPA.
5) Informing the admission counter about the status of the patient awaiting admission.
6) Close liaison with concerned department or doctor of Corporate Houses
7) Coordination with Billing and other Depts. for collection of paper documentation

11.8 Pharmacy Services

Involvement in:-

1) Space requirement as per act
2) Lay out
3) Storage facility – different set up for different type of drugs
4) Equipments
5) Organizational structure (role and function)
   a) In-charge
   b) Pharmacist and Chemist
   c) Sales Technician
   d) Cash Counter
   e) Computer Operator / Office Assistant
   f) Attendant
6) Purchase of drugs – disposables, consumables etc.
7) Purchase of food items
8) Quality control
1) Proper storage of drugs
10) Sales policy
11) Record maintenance
12) Preparation of Accounts
13) Pharmacy Audit

11.9 Stores

Observation and participation in:-

Different stores like Medical Stores, Linen Stores, Housekeeping Store, Maintenance Store, Printing & Stationary Store etc.

1) Space requirement
2) Lay out (as per category of store)
3) Storage facility, proper set up for particular type of medical and non-medical items
4) Issuance policy
5) Safety measure
6) Practical application of E O Q
7) Minimum stock level
8) Deployment of staff like;
MHA
(Master of Hospital Administration)

- In-charge
- Store keeper
- Record maintenance clerk
- Attendant / Delivery person
- Security etc.

9) Proper storage procedures
10) Indents
11) Issue of item as per indent
12) Record keeping of issued materials as well as balance stock
13) Delivery system
14) Physical verification of stored items periodically

11.10 **House Keeping**

Observation of:-

1) All departments, wards and adjacent areas within the hospital premises
2) Cleaning process – Moping, Sweeping, Washing, Shampooing (Carpet), Brooming
3) Process of selection of detergents and disinfectants
4) Disposal of waste materials
5) Sources of waste in different areas of hospital
6) Categories of waste identification in the hospital
7) Waste segregation according to Biomedical Waste Management & Handling Rules
8) Application of colour code, including poly pack, bin etc.
9) Waste transportation process
10) Internal waste storage system
11) Disposal process of biomedical waste (solid & liquid)
12) Management of infected healthcare worker
13) Use of Personnel Protective Equipment (PPE)
14) Supervision / leadership style
15) Staff training for precaution taken
16) Pest control system
17) Record maintenance
18) Waste Tracking
19) Equipment for wet and dry scrubbing machine
20) Usage of vacuum cleaner
21) Garbage Trolley
22) Roll of
   (a) Operation Manager,
   (b) Housekeeping Manager,
   (c) Supervisor (round the clock) in different shift
   (d) Sweeper
   (e) Ward boy

**Second Semester**

22.1 **Laboratory Services**

Observation of:-

1) Location
2) Structural facility
3) Administrative Area
4) Laboratory equipment
5) Lighting in laboratory
6) Laboratory furniture
7) Special mechanical and electrical equipments
8) Various functional units
   a) Clinical pathology
   b) Hematology
   c) Bio Chemistry
   d) Histology
   e) Bacteriology and Serology
9) Auxiliary service area
10) Collection of samples and delivery of reports
11) Requirements for various quality accreditation systems
12) Organization
   a) Sr. Microbiologist
   b) Microbiologist
   c) Lab. In-charge
   d) Technician
   e) Research Fellow
   f) Computer Operator
   g) Attendant

22.2 **Imaging Services**

Observation of:-
1) Layout of X-ray rooms
2) Various types of imaging machines and its usages
3) Maintenance of imaging machines
4) Protective gears
5) Precaution taken for Hazardous radio activity
6) Licenses required
7) General and special investigations
8) Layout of Reception area
9) Dress changing area of patient
9) Film processing room
10) Analysis of developed film and preparation of report
10) Storing of developed film
11) Delivery of film to patient / ward
12) Roll of Radiologist, Technicians, and Office Assistant of Radiology Dept.

22.3 **Personnel / H. R. Department**

Observation of:-
   a) Present employee status
   b) Selection and recruitment procedure
   c) Employee appraisal system
   d) Employee training and development system
   e) Retirement and retirement benefit system
   f) H. R. Audit
   g) Wage Administration

22.4 **Laundry & Linen Services**

Observation of
1) Location
2) Work flow
3) Physical facilities of Laundry
   a) Receiving, Storing, Sorting, washing area
b) Central Disinfection Area  
c) Cleaned Linen processing room  
d) Laundry Manager’s Office  
e) Staff Room  
f) Sewing and inspection area  
g) Supply storage room  
h) Solution Preparation area  
i) Cleaned Linen issue area  
j) Natural ventilation and light  
k) Free Linen movement area  

4) Other facilities  
a) Adequate Water supply  
b) Drainage system  
c) Adjacent power supply  
d) Steam  
e) Compressed air  

5) Arrangement of equipments  
6) Soiled linen receiving from ward, OT, other areas  
7) Process of sorting and cleaning, washing, drying, ironing  
8) Collection and storing process of cleaned linen  
9) Sorting of discarded linen and sending them to the Store  
10) Process of linen distribution  
11) Maintenance of hygiene  
12) Infection control process  
13) Process of staff training  
14) Process of co-ordination among the related departments  
15) Manpower for Laundry  
   (a) Laundry Manager  
   (b) Supervisor  
   (c) Supporting staff  

22.5 Kitchen & Dietary Services  

1) Overview of kitchen lay out and its adjacent areas  
2) Physical facilities  
   a) Receiving area  
   b) Washing area  
   c) Preparation area  
   d) Cooking area  
   e) Storing area  
   f) Food Distribution area  
   g) Garbage disposal area  
   h) Office of Kitchen Manager  
   i) Office Kitchen Staff  

3) Work Flow  
4) Patient visit and observation of the diet chart preparation  
5) Observation and process of :-  
   i) Coordination with Dietitian before preparing process of food for patient  
   ii) Receiving and storage of perishable and non-perishable food  
   iii) Process of calculation the quantity of perishable & non-perishable items to be cooked  
   iv) Washing, cutting, preparation and cooking process  
   v) Storage of cooked food and precaution to be taken  
   vi) Delivery process of hot food (Hot Trolley) to patient according to diet chart  
   vii) Process of distribution of food in the cafeteria and dining hall  
   viii) Maintenance of hygiene by kitchen staff  
   ix) Safety measure
x) Receiving of soiled utensils and left over food
xi) Collection of utensils and washing process
xii) Garbage disposal system
xiii) Maintenance of Accounts
xiv) Pest control system
 xv) Process of supervision and leadership style
xvi) Educational programme, research, dietary counseling etc.
 xvii) Periodical audit

6. Organization
  i) Qualified Kitchen Manager
  ii) Dietitian
  iii) Head Cook, Cook, Stuart, Masalchi, Helping Staff

22.6 Marketing

Observation / involvement in:-

1) Office Lay out
2) Different types of advertisement for projection
3) Fixture required for marketing
   (a) Banner
   (b) Leaflet
   (c) Hoarding
   (d) CD / VCD / DVD
4) Media Management (Print, Electronic)
5) Event Management (Camp, Seminar, CME)
6) Institutional / Corporate marketing
7) Direct marketing
8) Channel / Franchise marketing
9) Data analysis
10) Patient feedback
11) Organization
    a) Head of Marketing
    b) Departmental Manager
    c) Regional and Territory Manager
    d) Marketing Executive
    e) Office Assistant

22.7 Computerization of Medical Record

Observation / involvement in

All elements of physical records maintenance plus
1) Alphanumeric data
2) Machine generated data
3) Image data
4) Interpretation of data
5) Derived data
6) Storage process of electronic data
7) Data classification
8) ICD – 10 System and its use in electronic records maintenance system.

22.8 Security Services
MHA
(Master of Hospital Administration)

Observation of:-
1) Security room and posts
2) Security services in the hospital
3) Role of Security during patient visiting hours
4) Traffic control inside the hospital
5) Maintenance of fire precautions
6) Process of medico legal activities

22.9 Transportation Services

Observation of:
 a) Different internal and external transport
 b) Different ambulances
 c) Ambulances enmarked for communicable disease
 d) Facilities given in the emergency ambulance
 e) Maintenance of ambulance
 f) Maintenance of internal transportation

22.10 Wards

Observation of:-
1) Ward Composition - Beds Patient Ratio
1) Lay out
3) Types of ward
4) Physical facilities
   a) Nursing Station
   b) Doctor’s room
   c) Dirty utility room
   d) Dress Changing room
   e) Sanitary facilities
   f) Dressing room for minor treatment
   g) Isolation room
   h) Ward Pantry
   i) Day room
   j) Barrier Nursing
   k) Other facilities
      i) Ward side Laboratory
      ii) Linen Store
      iii) Drug Store etc.
5) Other Equipment facilities
   a) Electronic Monitoring Devices
   b) Ventilation Devices – Natural & Mechanical
   c) Ward Lighting
   d) Calling Bell
   e) Fire Alarm System
6) Organization
   a) Resident Medical Officer
   b) Nursing Superintendent
   c) Floor Co-coordinator
   d) Nursing In-charge
   e) Nursing Personnel
   f) Nursing Trainee
   g) Ward Boy
7) Communication facilities
8) Methods of patients’ record keeping in wards / technical / medical details
9) Admission and Discharge procedures
10) Billing system / generation of bills based on bed head ticket entry
11) Cleanliness
12) Duty arrangement of various medical and para medical staff

**Third Semester**

**33.1 Central Sterile Supply Department (CSSD)**

Observation of

1) Location
2) Name and function of 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) Function of different equipments used for sterilization
9) Process of receiving and distribution of materials
10) Technique of Gauge folding
11) Cleaning, drying and packing of sterilized materials
12) Segregation of Dirty zone and clean zone
13) Process of receiving and distribution of materials
14) Quality control checking of sterilization in collaboration with Micro-biology Lab.
15) Organization
   a) CSSD Supervisor
   b) Technologist
   c) Technical Assistant
   d) Para medical staff
   e) Attendant
16) CSSD Committee

**33.2 Library in Hospital**

Observation the functioning of :-

1) Library work flow
2) Physical facilities
3) Procurement of books and journals as per Good Office Committee (GOC) norms
6) Receiving the purchased books / periodicals, audio visual journals etc.
7) Preservation of books in the Shelves
8) Catalogue preparation
9) process of issue and collection of books
10) Updating of catalogue annually
11) Library rules and regulations
12) Preparation of Membership Card
13) Repair of damaged books
14) Ascertaining of lost books and journals
15) Arrangement of educational programme through Video Satellite system
16) Stock verification of Library items periodically

33.3 **Emergency**

Observation of:-
1) Location of Emergency in hospital
2) Basic lay out of Emergency
   (a) Receiving patients
   (b) Patient examination zone
   (c) Patient investigation zone
   (d) Procedure room
   (d) Cardio Pulmonary Resuscitation Unit
   (e) Dead patient barrier
   (f) EMO’s Office
   (g) Nursing Station
3) Infrastructural facilities
   a) Office of EMO
   b) Nursing Office
4) Equipments
5) Legal procedure system
6) Emergency Operation Theatre
   (a) Arrangement of instruments and oxygen for minor Operation
   (b) Sterilization and fumigation of O.T. Room
7) Admission procedure
8) Billing for day care procedure in Emergency Dept.
8) Staffing
   i) Medical
   ii) Para Medical
9) Security

33.4 **Critical Care Unit**

Observation / involvement in:-

Physical structure and facilities
1) Organizational structure
2) Bed orientation pattern
3) Lighting system
4) Monitoring system including connection to centralized monitoring system
   (a) Invasive
      (i) Central Venous Pressure (CVP)
      (ii) Arterial Blood Pressure monitoring
      (iii) Cardiac output monitoring
      (iv) Pulmonary Arterial monitoring
   (b) Non-invasive
      (i) Heart bit rate
      (ii) Blood Pressure
      (iii) Respiratory rate
      (iv) Intake & output monitoring

Maintenance of sterility and general cleanliness
1) Maintenance of sterility of the ward
2) Maintenance of sterility of clothing used in CCU
3) General sterilizing procedures before examination of the patient

Administration of CCU
1) Qualified doctor having experience in CCU (as per WHO ratio)
2) Qualified nurse having experience in CCU (as per WHO ratio)

3) Deployment of qualified paramedical staff as per WHO ratio

Workflow
1) In flow of patient
2) Type of patients commonly admitted in CCU
3) Pattern of treatment patient receive in CCU
4) Type of patient actually needs life saving support
5) Out flow of patient
6) Counseling with outside visitors / patient party

Equipment maintained in CCU
1) Monitor
2) Ventilator
3) Defibrillator
4) ECG and other equipments used in CCU

Equipment maintained in specialized CCU
1) Intra Aortic Balloon Pump
2) Photo Therapy Machine

Maintenance of uninterrupted gas and power supply system and their utilization
1) Continuous wall flow oxygen
2) Compressed air
3) Suction Apparatus (Vacuum Pump)
4) Uninterrupted Power Supply (UPS) line

33.5 Medical Records

Observation / involvement in:-

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

33.6 Operation Theatre

Observation / involvement in:-

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
   a) Medical Superintendent
   b) In-charge
   c) Anaesthetist
   c) Nursing personnel
   d) Technician
   e) Ward Boy
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
14) Equipments procurement and maintenance

Fourth Semester

44.1 Maintenance Department

Observation of

a) Location of different maintenance department
b) Lay out
c) Power Generation and supply
d) Water Treatment Plant and distribution system
e) Demineralization Plant with R.O. facility for Dialysis unit
f) Oxygen Plant
g) Effluent Treatment Plant
h) Air Condition Plant and distribution system
i) Maintenance of the medical equipments, calibration
j) Maintenance of total hospital building – civil, electrical and mechanical
k) Organization
   a) Chief Engineer
   b) Engineer (Civil, Electrical, Mechanical)
c) Supervisor (Electrical, Mechanical, Civil)
d) Technician
   e) Helper
   f) Office Assistant

44.2 Bio-Medical Department

1) Bio Medical equipment and their function
2) Observation of Bio-Medical Equipments
3) Knowing the name of the Bio-Medical Equipments
4) Importance and fundamental functions of Bio-Medical Equipments
5) Maintenance procedures of Bio-Medical Equipments
6) Need assessment and procurement procedure
7) Periodical audit of Bio Medical Equipment
8) AMC of Bio Medical Equipments
44.3 **Diagnostic Imaging**

Observation / involvement in:-

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

44.4 **Dental Services**

Observation / involvement in :-

a) Location
b) Laboratory
c) Recovery Room
d) Waiting Room
e) Storage
f) Administrative Office
g) Floors / Walls / Ceiling
h) Lighting
i) Plumbing
j) Ventilation
k) Equipment and maintenance of equipments

44.5 **Dialysis Unit**

Observation / involvement in:-

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

44.6 **Burn Unit**

Observation / involvement in :-

1. Location
2. Infrastructural facility
3. Special equipment requirement for Burn Unit
4. Attached Laboratory facility
5. Communication facility
6. Maintenance of Asepsis
7. Manpower requirement of
   a) Medical
   b) Para Medical
   c) General Staff

8. Mechanism for specialized training need assessment

44.7 Blood Bank

Observation / involvement in :-
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) Receive 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) Other facilities
20) Issuance of Blood Donor Card
21) Safety devices
22) Liquid waste management
23) Procedure for discarding
24) Staffing
   a) Medical Officer
   b) Paramedical Staff
   c) Non-medical Staff

44.8 Mortuary

Observation / involvement in :-
1) Location
2) Physical facilities
3) Body refrigerator
4) Walk in refrigerator
5) Capacity decision of Mortuary
6) Autopsy facility
7) Requirement for autopsy room
8) Preservation / identification/leveling of viscera / body fluids and other materials for medicolegal purposes
9) Embalming procedures
10) Methods of long distance transport of dead bodies
11) Arrangements for religious rides
12) Mortuary traffic control
   a) Internal
   b) External
13) Identification of bodies using triple check system
14) Maintenance of records
15) Various legal requirements
16) Disposal of unclaimed bodies
17) various religious rites

44.9 **Telemedicine**

1. Infrastructure – both end – (1) Hospital end (2) Nodal Centre
2. Requirement
   a) Computer Monitors
   b) Cameras
   c) Internet connection
3. Observation of telemedicine techniques and taking part in the process
4. Manpower requirement
   a) Medical Officer
   b) Technician

44.10 **Medical Transcription**

1. Observation of techniques and taking part in the process
2. Infrastructural requirement
3. Trained manpower
4. Transmission modes