Needs: Local: Pink; National: Orange; Regional: Blue; Global: Green

Global GREEN
Regional National ORANGE
Level (State)

# Syllabus of Master's in Hospital Administration ocal (State)

Competency based training programme aims to produce a post-graduate student who after undergoing the required training should be able to deal effectively with the needs of the community and should be competent to handle all problems related to his/her specialty including recent advances. He/She should also acquire skill in teaching of medical / para-medical students in the subject that he/she has received his/her training. He/She should be aware of his/her limitations.

#### PROGRAMME OUTCOME

The goal of Master's in Hospital Administration (MHA) is to produce a competent Hospital Administrator who:

- 1. Is aware of *contemporary advances & developments* in medical sciences as related to the subject of hospital administration.
- 2. Has acquired the competencies pertaining to management science in general and hospital administration in particular for the purpose of application in the hospital and health services, that are required to be practiced in the community and at all levels of health system. In order to (i) improve the quality of patient care and (ii) ensure optimum utilization of the resources and facilities.
- 3. Recognizes the health needs of subject and families and carries out professional obligations in keeping with principles of the National Health Policy and professional ethics. The student will acquire an understanding of the complex nature of health and hospital administration and to foresee the antagonizing and synergizing variables towards the role performance of the hospitals.
- 4. Is oriented to *principles of research methodology*.
- 5. Has acquired *skills in educating* medical and paramedical professionals.
- 6. Has acquired skills in effectively communicating with the person, family and the community.

Additionally, the student should have developed administrative and executive leadership skills founded on thorough understanding and knowledge of organizational problems, employee productivity and social responsibilities in the existing milieu.

The learning objectives of the Masters in Hospital Administration programme are broadly categorized as:

- 1. General Administration and Management of Hospital
- 2. Health Administration and Medical Care
- 3. Hospital Administration and Hospital Planning
- 4. Management of Clinical and Non-Clinical Services

By the end of the course, the student should have acquired knowledge (cognitive domain), and PINK professionalism (affective domain) as given below:

#### A. Cognitive domain

At the end of the course, the student should have acquired following theoretical competencies:

### Module I: General Administration and Management of Hospital

- The student should be able to conceptualize the strategic plan formulation and decision making in administration of hospitals, which emerge from judicious and meaningful combination of technological, economical, social, political and psychological processes.
- ii) The student should follow scientific approach to management in general and the hospital administration in particular.
- iii) The student should be able to work independently in financial & materials management. He will be able to assess on sound basis the total financial needs of a hospital and thus plan and measure the results scientifically.
- iv) After the student is exposed to the techniques of inventory control, he on his own should be able to evolve economic quantity orders and methods for proper storage and flow of drugs and dressings, which is a must for smooth running of a hospital.
- v) The student should be able to solve the problem pertaining to inter human relations i.e. the tension between the workers and the managements, as he will be fully conversant with the principles of personnel management.
- vi) The student should be able to handle man-power planning, personnel selection, job analysis, job specifications and development of staffing pattern to suit the needs of an organisation.
- vii) The student should be fully conscious of the fact that the hospital is a social institution; and should be able to integrate the job of different professionals to work as a team to run the hospital efficiently and meet the health needs of the community.

# Module II: Health Administration and Medical Care

- The student should be able to apply health administration principles in delivering medical care in the hospital as well as through its outreaches in the community.
- ii) The student should be able to assess socio-economic and cultural conditions, and their impact on health and disease for planning of appropriate medical care to the community generating their participation.
- iii) The students should be able to work independently in studying the patterns of diagnosis and treatment both preventive and curative of the diseases in the hospital as well as in the community, and be able to organise medical care within the resources as per availability with appropriate measures to control cost.
- iv). The student should learn epidemiological and bio-statistical techniques to help proper planning of the medical care programme incorporating appropriate disciplines of medical, health and health related sciences.

v) The student should be able to plan, organise, direct, and evaluate urban as well as rural medical care, with special reference to the medical care provided by a hospital.

#### Module III: Hospital Administration and Hospital Planning

- i) The student should be able to acquire an idea about hospital and its role in health care delivery system, review the history of hospitals, role of political and economic factors in the growth of hospitals and classification of hospitals.
- ii) The student should be able to outline the peculiarities of health care institutions, factors influencing hospital care and role of hospital administration in providing of good patient care including special problems of administration of a teaching hospital, voluntary hospital, district hospital, PHC, nursing home, etc.
- would be the most suitable person to know what, where and how to build. He should be able to guide the architects regarding the essential requirements in hospital planning and constructions and get effective utilization of space at minimum cost. The student would thus be able to plan and design a hospital from the smallest to the largest ones as per the needs and resources of the community. He should also become competent to modernize, modify and extend the existing ones as needed.
- iv) The student should acquire training in maintenance of the buildings and organise hospital engineering services.
- v) The student should acquire competencies to resolve conflicts through human relation approach.
- vi) The student should acquire knowledge of the laws and regulations applicable to hospitals and hospital employees, understand medico-legal aspects of practice of Medicine in hospital setting and the laws applicable to setting up of a new hospital.
- vii) The student should acquire knowledge of major types of hospital hazards, hazards of biomedical waste and its proper disposal.
- viii) The student should acquire knowledge of types of disasters in the community, and be able to set forth policies and procedures for disaster preparedness and be able to execute disaster management plan for a hospital.
- ix) The student should be able to learn to establish equipment management process and its various components for a hospital.
- x) As a future hospital administrator, the student should be able to plan how to manage various administrative support areas of the hospital and to visualize into the future needs and expectations of the community from the hospital.

- i) The student should be able to assess clinical and non-clinical needs of the patients, physicians and other para-medical personnel and organize appropriate services.
- iii) The student should be able to improve patient care and augment quality of services by his leadership, determination and foresight.
- iv) The student should acquire knowledge of planning, operational aspects of hospital eg., staffing pattern, utility services, work load and staff utilization, maintenance of records, equipments and supplies.
- v) The student should acquire knowledge of planning and commissioning of different types of hospitals including specialty hospitals.
- ix) The student should to make a project report and supervise its implementation.

#### B. Affective Domain

# At the end of the course, the student should have acquired the following attitudinal competencies:

- Demonstrate self-awareness and personal development in routine conduct.
- **Behavior and Emotional Stability:** Dependable, disciplined, dedicated, stable in emergency situations, shows positive approach.
- Motivation and Initiative: Takes on responsibility, is innovative, enterprising and does not shirk duties or leave any work pending.
- Honesty and Integrity: Is truthful, admits mistakes, does not cook up information, has ethical conduct and exhibits good moral values.
- Interpersonal Skills and Leadership Quality: Has compassionate attitude towards patients
  and attendants, gets on well with colleagues and paramedical staff, is respectful to seniors, has
  good communication skills.
- Should be able to maintain confidentiality with regards to history, physical examination and management of patients.
- Identify social, economic, environmental, biological and emotional determinants of patients, and institute diagnostic, therapeutic, rehabilitative, preventive and promotive measures to provide holistic care to patients at individual and community level against skin, venereal disease and leprosy.
- Recognize the emotional and behavioral characteristics of patients and keep these fundamental attributes in focus while dealing with them.
- Demonstrate empathy and humane approach towards patients and their families and respect their sensibilities.
- Demonstrate communication skills of a high order in explaining management and prognosis, providing counseling and giving health education messages to patients, families and communities.
- Organize and supervise the desired managerial and leadership skills.
- Should be able to function as a part of a team, develop an attitude of cooperation with
  colleagues, and interact with the patient and the clinician or other colleagues to provide the
  best possible diagnosis or opinion.
- Always adopt ethical principles and maintain proper etiquette in dealings with patients,

Colour Coding
Global GREEN
Regional BLUE
National ORANGE
PINK

relatives and other health personnel and to respect the rights of the patient including the right to information and second opinion.

#### SYLLABUS

### **Programme Structure and Course Contents:**

#### I. PROGRAMME STRUCTURE

### Module I - General Administration (GA)

GA 1.	General Management
GA 2.	Human Resource Management
GA 3.	Materials Management in a (HRF,

#### IRF)Hospital

- GA 5. Financial Management
- GA 6. Cost Accounting
- GA 7. Organizational behaviour
- GA 8. Marketing Services
- GA 9. Information Systems
- GA 10. Business Law and Regulations

#### Module II - Health Administration (HE)

- HE 1. Medical Sociology
- HE 2. Health Economics
- HE 3. Health Administration in India
- HE 4. Medical Care Systems
- HE 5. Biostatistics
- HE 6. Research Methodology
- HE 7. National Health Programmes
- HE 8. Epidemiology General
- HE 9. Health Information Systems
- HE 10. Legal Aspects of Health Care
- HE 11. International Health
- HE 12. Community Health Administration

# Module III - Hospital Administration & Hospital Planning (HA)

- HA 1. Hospital Organisations
- HA 2. Hospital Planning
- HA 3. Nursing Service Administration
- HA 4. Quality Assurance
- HA 5. Legal Aspects of Hospitals.
- HA 6. Human Relation in Hospitals
- HA 7. Hospital Hazards including Disaster Management and Fire-Safety management
- HA 8. Biomedical Waste Management

- HA 9. Equipment Management
- HA 10. Recent Trends

### Module IV - Administration of Clinical & Non-Clinical Services (AS)

- AS 1. Hospital Planning General consideration
- AS 2. Organization & administration of clinical services.
- AS 3. Organization & Administration of Supportive & Utility Services.
- AS 4. Project Management and related case studies

### **II. Course Contents**

# Module I: General Administration (GA)

# GA.l: Management Principles: General Management

- Introduction
- Definition
- Characteristics of Management
- Management A Profession
- Principles of Management
- Management and Administration
- Evolution of the management theory: Traditional Versus Modern
- Management as a behavioral Science
- Functions of Management
- Principles of Scientific Management
- Modern Management Systems Approach.

### Managerial Planning:

- Introduction
- Nature of Planning
- Objectives of Planning
- Limitations of Planning
- Process of Planning
- Types of Planning
- Strategies of Planning
- Policies
- Rules
- Procedures
- Programmes
- Budgets (National budget, State Budget, Health budgeting)

# Mechanics and Dynamics of Organising:

- Process of Organising
- Principles of Organising
- Formal and Informal Organisation
- Span of Control

Line and Staff Authority Relationship

- Line Organisation
- Line and Staff Organisation
- Functional Organisation
- Need of Flexibility in an Organisation

# Authority & Delegation:

- Introduction
- Authority defined
- Bases of Authority
- Modern Context
- Types of Organizational Authority
- Delegation
- Barriers of Delegation
- Encouraging Delegation
- Conclusion

# Direction & Leadership:

- Importance of Direction
- Principles of Direction
- Element of Direction
- Leadership
- Nature of leadership
- Leadership and Management
- Leadership Styles
- Leadership as a Continuum
- Functions of Leadership
- Importance of Leadership
- Theories of Leadership
- Qualities of a Good Leader

# **Management Control:**

- Process of Controlling
- Requirement of Adequate Control
- Significance of Control
- Techniques of Managerial Control
- Traditional Techniques
- Budgetary Control
- Non budgetary Control
- Modern Control or Network Techniques
- PERT (Programme Evaluation & Review Technique; Global and National examples Metro etc.)
- CPM (Critical Path Method)

#### MBO:

- Introduction
- Objectives

Key Result Areas (KRA)

- Top Man's commitment
- Conclusion

# Communication:

- Introduction
- What is communication
- Basic concepts
- Types of communication
- Major problems in communication
- Barriers of communication
- Principles of good communication
- The manager and the communication network
- Grief Counselling as in for SOTTO, patient counselling.

#### **Tools and Techniques of Modern Management:**

- Introduction
- Application of newer management techniques for health care
- Methods of modern management techniques

# **Operational Research:**

- Concepts
- Techniques
- Applications of OR techniques in Hospital
- Simplex Method
- Transportation Method
- Simulation models
- Queing theory
- Inventory Control (Examples from UPMSCL, HRF Store management, IRF store management)
- Definition of operational research (OR)
- Techniques of applying modern mathematical model

# Office procedures

- Definition of office
- Drafting official letters
- Office procedures
- Service rules and procedure (CCS Act)
- Conduct rules
- Disciplinary proceedings
- Conclusion

# GA. 2: Human Resources Management

# **Personnel Management in Hospitals:**

- Definition and importance
- Needs of employees
- Essence of personnel management
- Policies
- Elements of personnel programme
- Need for continued evaluation
- Conclusion

#### Man Power Planning:

- Introduction
- Importance of manpower planning
- Types of planning
- Methods and factors involved in planning (As per National guidelines in MOHFW and other agencies)
- Manpower control and review
- Manpower management
- Practice in India
- Limitations of manpower planning
- Conclusions

#### **Industrial Relations:**

- Introduction
- Evaluation of Industrial Relations
- Definition, scope and disputes of industrial relations
- Scope and aspects of industrial relations
- Objectives of industrial relations
- Causes of dispute
- Trade Unions
- Functions of Trade Unions in India
- Approach to Industrial relations
- Scope of the Industrial Relations Functions
- Functional requirement of successful industrial relation programme
- Organs of industrial peace
- Industrial relations in health services industries
- Reasons why health care employees join union
- Industrial laws relating to the hospitals in India
- Role of the administration in labour relations

# Wage fixation and negotiation techniques:

- Individual bargaining

- Formalized machinery
- Collective bargaining
- Requisites for collective bargaining
- Position in India
- Joint negotiating committee
- Limitations of collective bargaining
- Statutory methods of wage fixation(Minimum Wages Act, Industrial Dispute Act etc)
- Some important judicial findings
- Conciliation Officers
- Wage Board
- Industrial courts, industrial tribunals and national tribunals.

# **Employees Welfare:**

- Introduction
- Differences between wages and fringe benefits
- Benefits and services
- Objectives of fringe benefits
- Theory of individual protection
- Factors influencing employees benefit and services
- Coverage of benefits
- Classification
- Employee services
- Problems raised by benefit programme
- Stress Management
- Safety in hospitals

Grievance redressal, occupational (Vishakha Committee, Internal Grievance Redressal Cell)

# Performance Appraisal:

- Introduction
- Meaning and purpose of appraisal
- Methods of appraisal
- MBO approach to appraisal
- Layout of a model proforma
- Conclusion

# Counseling:

- Introduction
- Counseling for H.R.D.
- Situations demanding counseling
- Structural requirements
- Counseling as a process (Grief Counselling as in SOTTO)
- Skill for counseling
- Conclusions
- Human relation

Absenteeism in hospitals

# GA. 3: Materials Management In Hospitals

- Equipments, planning, procuring, storing and dispensing including maintenance.
- Concept of stores
- Importance of stores in the hospitals
- Storing
- Types of stores medical, surgical, linen, general
- Supply and replacement of stock
- Cardex systems and use of bin cards
- Stock verification
- Control of pilferage
- Inventory control meaning, scope, definition
- ABC/VED Analysis
- Economic order quantity
- Lead time
- Safety stock
- Quality control over supplies
- Purchase controls
- Pricing rate contract, tendering
- Purchase of capital equipments
- Purchase verses leasing
- Import policies, procedures
- Customs and excise and exemptions

# - Letter of credit

- Maintenance of equipments, plants, property
- Preventive maintenance, repair
- Maintenance contract
- Store audit
- Materials planning
- Disposal of unserviceable articles
- Price forecasting
- Inspection
- Dispensing/distribution
- Condemnation

### **GA.4: Basic Accounting**

- Principles of Book keeping
- Accounting concepts
- Importance and scope of financial accounting
- Books of accounts, accounting entries
- Cash and accrual accounting, revenue and capital Expenditure
- Income and expenditure accounts
- Trial balance
- Operation of bank accounts, bank reconciliation

- Preparation of final accounts with adjustments for positions
- Issues in the determination of income
- Depreciation
- Inventory valuation
- Audit of final accounts of companies
- Analysis and interpretation of financial statement

#### **GA.5: Financial Management**

- Functions of finance
- Management of current assets
- Dividend decisions
- Concept in taxation of income(Income tax Act, TDS etc)
- Internal control and internal audit
- Budgeting and control budget for revenues, inpatient revenue, special service revenue, cash budgets, capital reporting income and financial expenditure budgets
- Forecasting
- Financial information system
- Short term and long term financing
- Issue of shares, debenture bonds
- Convertible debentures
- Loan from commercial, industrial banks
- Lease financing

# Structures:

- Concepts of financial management and their application in hospitals.
- Trends in financing of health and hospital services
- Sources of financing
- Resource mobilization and preparing proposals for financing
- Capital investment analysis
- Capital finance decisions
- Allocation of resources
- Capital and operating expenditure
- Budgeting and control Budget for revenues, inpatient revenue, special service revenue, cash budgets, capital expenditure budget, techniques of analysis, budgeting process, forecasting and planning for bed-need and other facilities.

#### GA. 6: Cost Accounting

- Introduction to cost systems
- Resources, cost centres, products
- Systems for operational control and performance measurement
- Activity based cost systems in service functions
- Activity based cost systems to influence behaviour
- Hospital rate setting
- Break even analysis

#### Structures:

- Cost of health care
- Costing of the hospital services
- Hospital financial management
- Hospital financing
- Resource generation
- Cost containment
- Role of gate keeping in hospitals
- Impact of finances on the high technology medical Health economics equipment decision
- Decentralisation of financial resources

#### GA.7: Organizational Behaviour

- Basics of sociology.
- Basics of anthropology

# Basics of Psychology

- Concepts and issues
- Application of behavioural sciences concepts in hospitals
- Dynamics of organizational behaviour
- Human behaviour
- Formal and informal groups
- Motivation process

# Motivation:

- Meaning
- Process of motivation
- Importance of motivation
- Principles
- Techniques
- Importance of behavioural sciences and Sound motivation system
- Theories of motivation
- Maslows need hierarchy theory
- Herzburg's two factor theory
- McGregor's theory X and theory Y
- Morale
- Joharry window
- Briggs-Myers scale of personality test
- Personality assessment tests
- Team building skills
- Concepts of political sciences

# - Machivilien principles vis-a-vis Hippocratic oath

- Organizational climate and design
- Conflict management
- Organizational dynamics and change
- Stress management
- Organizational Development (OD) concept, objectives and goals, process, behavioural

# science approach to O.D

- Team building
- OB Labs

# GA. 8: Marketing Management

# Meaning and importance of marketing

- Marketing concept and issues nature, importance, purpose policy
- Business cycle
- Marketing strategies
- Strategies evaluation and control
- Marketing management principles
- Marketing information and research
- Source of marketing information
- Measurement and scaling
- Environment analysis and research
- Marketing research
- Consumer analysis-
- Planning a marketing mix of hospital services
- Service Pricing policy and professional fee
- Demand analysis, cost analysis, competitive analysis
- Promotion of hospitals services-advertising etc
- Marketing of health services
- Developing new services
- Customer relationship management (CRM)
- Public relations in hospitals
- Social marketing
- Patient satisfaction
- Marketing ethics
- Privatisation of health and hospital services

# GA.9: Information Systems Management

# Fundamentals of Computers

- Input to computer
- Storage Devices
- Central Processing Unit
- Computer Output

# Data Communication and Networks

- Electronic Mail
- Data Communication
- Local Area Networks
- Wide Area Networks

# Systems Software

- Microsoft Disk Operating System Compilers
- Interpreters

- Windows

# **Application Software**

- Word Processing
- Electronic spread sheet
- Database Management software
- Graphics

# Basics of Programming

- Programming Languages
- Flow Charts
- Structural Programming

# Computer Applications

- Hospital Information Systems (NIC Portal, e Hospital, HIS in SGPGIMS)
- Office Automation
  - Decision Support Systems
  - Expert Systems
  - Multimedia
- Microsoft office (Microsoft word, excel, power point, one point), Internet,
- Searching scientific databases (e.g. Pubmed, Medline, Cochrane reviews).

# Image Archiving

- Computer Applications in Medicine
- Desk Top Publishing

# Computer Resources Management

- Planning for Computerization.
- Selection of computers.
- Selection of Software packages
- Computer manpower
- Uninterrupted Power Supply for Computers Protection from Computer Viruses
- Computer Maintenance

Introductory concepts of System Analysis and Design

# GA.10: Business Law & Regulations

- Law of contracts
- Special contracts
- Sale of goods act
- Types and characters of negotiable instruments
- Companies act
- MRTP, Monopolies, restrictive and unfair trade practices
- Pollution control

# Module -II: Health Administration (HE)

# **HE.1: Medical Sociology**

- Introduction to Sociology of Health (Medical Sociology) Branches of Medical Sociology.
- Sociological perspectives of Health, illness and Healing.

# Culture, Health and illness

- Sick role behaviour
- Illness behaviour

# Psychosocial models of illness behaviour.

- The profession of Healing (a phenomenological approach)
- Doctor-patient interaction

# Making of a Health Care Professional

- The institutional perspective.
- Dynamics of institutional behaviour.
- Hospital as an institution
- Medicine as an institution
- Medicine as an institution of Social Control.
- Organizational perspective
- Organizational culture
- Case study of organisations.
- Health and illness (a philosophical perspective) Alternatives for the future
- Social issues and health
- Doctor patient relation

# HE. 2: Health Economics:

- Basic economics
- Analysis of Demand and supply.
- nature of demand of hospital services and its determinants
- Economic aspects of health care in India.
- Budgets of central & state Governments.
- Health insurance in India-schemes, National(ABPMJAY, RAN) and state level financial assistance schemes (Deendayal Upadhyay Rajya Karchari DDRK and TPA's,, health insurance in other parts of theworld, evolution of DRGs and its prerequisites.
- Concept of managed care

# HE.3: Health Administration In India:

- Health in Indian constitution.
- General introduction to organisation of health services in India Central, **State**, Defense, Railways & other public sector undertakings and voluntary health agencies.
- Evolution of corporate hospitals.
- Review of Reports on Health Care:
  - Bhore Committee, Mudaliar Committee, Jain Committee, Mukherjee Committee, Rao Committee, Kartar Singh Committee and Srivastava Committee reports.
- Five year plans with special reference to health plans.

National health policy.

# **HE.4: Medical Care System:**

- Need and Demand for Medical Care
- Availability and cost of Medical Care
- Study of the entire hospital and medical care system of the country in the context of the overall community health service
- Primary care

### Rural Medical Care

# - Urban Medical Care

- Medical care system in Metropolitan cities
- Relationship of the medical care provided by hospitals with medical care services that are provided through dispensaries and primary health centres. Study of the Administration of Health Insurance Schemes like C.G.H.S. and E.S.I., Social security measures
- Medical Care System in other countries which should include health care delivery system, types of hospitals, cost of care, accreditation of hospitals system of levying charges and health insurance schemes in other developing countries.
- Quality of Medical Care Medical Audit
- Progressive patient care
- Organisation and administration of better medical care
- Indigenous system of Medical Care
- Alternative health Strategy
- Comprehensive Health Projects with rural development

# Regionalisation - Organisation and functioning

- Rehabilitation
- International organisations related to health services

# HE. 5: Biostatistics and Health Statistics:

- Basic concepts Introduction, definitions
- Elementary ideas
- Basis of Medical Research
- Presentation of data
- Frequency distribution
- Measurements of central tendency Mean, Median, Mode.
- Measurement of dispersion-mean and standard deviation,
- Sampling.
- Testing of hypothesis.
- Tests of significance, Normal test, "t" test asquare test
- Fisher's exact test, Non-parametric tests of significance, One-way and two-way analysis of variance, Multivariate analysis, Survival analysis-log rank test, Relative risk calculation Odd's ratio, familiarity with commonly used statistical software.

# HE. 6: Research Methodology:

- Introduction
- Planning a research project and selecting a research problem, Research Design

- Bibliographical data.
- Field data.
- The schedule & questionnaire.
- The interview.
- Observations unstructured & structured.
- The case study.
- Measurement & analysis of data.
- Interpretation and report writing.

# HE. 7: National Health Programmes:

# Control of communicable diseases:

- Leprosy
- Malaria
- T.B.
- polio
- Helminthiasis
- Filaria
- Trachoma
- S.T. Diseases
- Cholera
- AIDS, diabetes, Cancer control programmes, RNTCP
- Family Welfare
- Immunization
- Family Welfare
- MCH/RCH
- National Rural Health Mission

# HE. 8: Epidemiology:

- Evaluation and uses of epidemiology
- Definitions and terminology
- Natural history of disease and role of hospital in various levels of prevention
- Types of epidemiology
- Methods of epidemiological studies
- Socio-economic status and occupation as determinant in disease distribution
- Cause and effect relationship
- Age as variable in epidemiology
- Epidemiology of an acute infectious disease (Cholera)
- Epidemiology of a chronic disease (Rheumatic Heart Disease)
- Epidemiology of a non disease entity (accidents)
- Epidemiology of hospital infection
- How to investigate an epidemic and role of the hospital in its control
- Common diseases in India their epidemiology and prevention
- Common causes of disability resulting in dependency and non productivity Screening and surveys

- Concept of Health indicators

# HE. 9: Health Statistics:

- Need for health statistics
- Methods of registration fallacies and difficulties and model and sample registration scheme
- Common rates and ratios in India
- Incidence and Prevalence rates
- Morbidity Statistics problems of measurement, sources of morbidity and morbidity surveys
- Health reports
- ICD
- Notifiable diseases
- Health Management Information Systems
- National Health Accounts

# HE.10: Legal Aspects of Health Care:

- Laws relating to communicable diseases
- International Health Regulations
- Notifiable diseases
- Vaccination certificates
- AIDS Bill.
- Environmental Protection Act
- Occupational Hazards
- Food and drug laws
- Law relating to vital events central births and death registration act
- Mental health bill
- CPA, Industrial Laws
- Labour Laws
- Ethical issues in healthcare

# HE.11. Community Health Administration

- Concept in Community Health
- Health for All and Primary Health Care
- Basics of Epidemiology and Biostatistics
- Occupational Health
- Health Insurance

# HE.12. International Health

- International Health agencies / NGOs
- International Health Regulations

# Module - III: Hospital Administration & Hospital Planning (HA)

# **HA.1.** Hospital Administration:

- Introduction to the hospital field

- Definitions hospitals and medical care institution, types, control
- Functions Medical Care, Prevention, Professional education and Research Role of hospital in Health Spectrum
- History and Development of Hospitals
- Hospitals of India today
- Number, Type, Size, Distribution, Ownership, Utilization Ratios, Trends, Problems Features and distinction between Govt., Corporate, Private, Voluntary and Public Undertaking hospitals

# Management of a hospital

- Responsibilities
- Hospital Organisation:
  - Organizational Structure
- The Governing Authority
- The Administrator
- Clinical Aspects
- Channels of authority and communication
- Different models of organizational structures in various types of hospitals
- Merits and Demerits of different models
- Job description of various positions
- Chain of authority, authority responsibility and operational relationship between various positions.
- The Hospital Administrator:
- Qualification
- Responsibilities
- Authority Relationship
- Motivation
- Role
- Functions
- Medical Director v/s Chief Executive. Job description and operational relationship.
   Medical v/s Non Medical Administrator.

# **Specialized Hospitals:**

- Chronic diseases hospital
- Cancer hospital
- Infectious disease hospital
- Psychiatric hospital
- Ayurvedic hospital
- Children' hospital
- Maternity hospital
- Geriatric hospital
- Problems of hospital administration

- Case Method Study of Hospital Problems
- Nursing Problems in Hospital
- Human relations in Hospital
- Importance of public understanding and support Techniques of Public Relationships
- Health Education in Hospital-responsibilities of the hospital to the general public,

# Methods of health education in Hospital and their importance

- Hospital Hazards and Fire Safety
- Disaster programmes
- Administration of a teaching hospital, special problems
- Administration of a voluntary hospital including private nursing homes

# Administration of a General Hospital, District Hospital, Taluk Hospital and Municipal

#### Hospita

- Recent trends in hospital administration
- Training of medical manpower in hospitals
- Administrative & Biosocial Researches in hospitals Hospital Management Information System
- Hospital Statistics
- Evaluation of hospital care and methods of evaluation

# **HA.2: HOSPITAL PLANNING:**

#### General Introduction:

- Community Diagnosis
- Planning of the hospital in general:
- What to build, where to build and how to build
- Bed allotment

# Hospital Planning - Role of Hospital Consultant:

- Strategic planning
- Project conceptualisation
- Enumeration and description of project as an entity: laws/legalties associated with setting up of hospitals
- Space programming
- Adjoincy delineation
- Functional requirements
- Preparing architects briefs
- Operations planning
- Human resource planning
- Equipment planning
- Functional zoning of hospital building
- External and internal traffic inside the campus
- Internal functional layout
- Functional specific input for structural design
- Rodent and pest control for hospital building
- Hospital furniture planning

- Computer networking in hospital building
- Communication and P.A. system in hospital building.

#### Role of the Architect:

In the planning stages, preliminary sketches, final plans, working drawing, specifications, cost estimates, construction problems and contract modifications

### Site Survey:

Physical environment, possibility for expansion utilities water, electricity, sewer lines, telephone, transportation and others.

# **Hospital Buildings:**

- External Architectural aspects
- Internal arrangements
- External services
- Residential accommodation
- Hospital hygiene importance thereof
- Hospital lighting
- Ventilation
- Planning of individual services and departments
- Landscaping in hospitals
- Role of administrator in building a hospital
- Processing a hospital project

# Planning of specific hospitals:

- 1000 bed hospital teaching or general
- 200 bed hospital
  - 500 bed hospital (district level)
- Taluka Hospital
- Tuberculosis hospital
- Long term care hospitals
- Primary health Centre
- Other specialized hospitals
- day care centre
- trauma centres
- Taking over and commissioning a new hospital
- Alteration and additions in an existing hospital

# Planning the maintenance department:

- Engineers Office
- Workshop of various types
- Repair and Maintenance schedule

# Preparing equipment list for the new hospital:

- Built in equipment
- Non expendable, locally available or to be Imported
- Expendable equipment

# **Medical Equipment Plans**

- Need identification
- Enumeration, description and specification of each equipment
- Market Survey
- Tender Notification
- Short listing of suppliers
- Technical evaluation of equipment
- Negotiation
- Purchase
- Installation and Commissioning
- After sales maintenance Mechanical services in hospitals: Lifts, boilers, incinerators, A.C. plants etc.
  - Utility items in hospitals.

Hospital planning and indigenous system of medicine

# **HA.3: Nursing Service Administration:**

- Nursing profession
- Definition and Classification
- Professional & Hierarchical classification
- Nursing Education Scenario
  - Job description of nurses at various levels and various Departments
- Nursing Organisation structure
- National, State Hospitals and Community levels.
- Nurses and doctors relationship
- Nurses and patients relationship
- Nurse as a social and professional entity
- Staffing norms in various types of hospitals and different departments Service condition of hospital
- Recent trends in nursing profession and nursing practices

# **HA.4: Quality in Hospital Services**

- Medical audit and evaluation of health care
- Quality concept
- Quality assurance in various hospital services, medical
- Verifiable standards and parameters in evaluation of quality
- Evaluation as a tool of quality assurance programmes

# - Legislation, certification, grading, accreditation

- Accreditation process and bodies offering accreditation
- Concept of concurrent evaluation

- Cyclic evaluation
- Terminal evaluation

# **HA.5: Legal Aspects of Hospitals:**

- Introduction of hospital as an Industry
- Similarities and distinction between production industry and hospitals
- The comparative similarities and distinctive features between workers (workforce) in production industry and hospital. Medico-legal procedure requirements and patient care conflict Broad introduction to medical jurisprudence. Consent.

# Negligence, Law of Torts

- Legal position regarding patient confidentiality and ownership of medical records.
- Laws and regulations applicable to hospitals
- Labour Laws
- Workman Compensation Act, 1923
- Minimum Wages Act, 1948
- Delhi Nursing Home Registration Act, 1953 (& similar state laws)
- Employees State Insurance Act, 1948
- Essential Services Maintenance Act, 1968
- Court procedure and attendance in court
- Settlement of Disputes
- BARC Guidelines
- Emergency services in hospital Supreme Court guidelines
- Permits and Licences in hospitals
- Pre Conception Pre Natal Diagnostic Techniques Act, 1994
- Medical Termination of Pregnancy Act, 1971
- Transplantation of Human Organs & Tissues Act, 1994
- Environmental Protection Act, 1986
- Clinical Establishment Act, 2010
- Case law on Medical Negligence British & Indian
- CConsideration of complaints for professional misconduct by State Medical Council & medical Council of India
- Drugs & Cosmetics Act, 11940
- Mental Health Act, 1987

# HA.6: Human Relation in Hospitals

- Public Relations and hospital
- Training of medical and paramedical manpower in hospitals
- Interpersonal relationship
- Conflict management

# HA.7: Hospital Hazards Including Disaster Management

- General Safety
- Fire Safety
- Hospital Hygiene
- Hospital Acquired infection
- Definition, types
- Components of Disaster plan Pre hospital and hospital
- Disaster preparedness
- Disaster plan formulation and implementation

# HA.8: Biomedical Waste Management

- BMW management and handling rule
- Segregation
- Collection
- Transportation
- Disposal
- Modern technology for handling BMW
- Radioactive waste handling

# HA.9: Equipment Management

- Demand estimation
- Strategies of Hospital Equipment Planning and Selection
- Purchase procedure
- Installation and commissioning
- Hospital Equipment Utilization and Audit and Maintenance
- Quality control in equipment planning

#### **HA.10: Recent Trends**

- Recent trends in hospital administration
- Challenges to administrators
- Reengineering
- Outsourcing
- Telemedicine
- Artificial intelligence
- Accreditation
- Recent trends in nursing profession and nursing practices
- Medical Tourism

# MODULE- IV: Management of Clinical & Non - Clinical Services (AS)

# AS 1: Hospital Planning and General Consideration

- □ Changing system of Health Services concepts in planning, designing and space
- □ Site surveys for planning a hospital

□ Hospital buildings - an overview
 □ External architectural aspects
 □ Internal arrangements
 □ Hospital Hygiene
 □ Lighting and Ventilation

# AS2: Organisation and Administration of Clinical Services:

Role of administrator in building a hospital

- Outpatient Department

- Medical Services (including STD, Leprosy & Chest Diseases)
- Surgical services (Orthopaedics, reconstructive, Urology, Cardiothoracic, Eye & ENT)
- Operating Department
- Paediatric Services
- Dental Services and Maxillofacial surgery
- Psychiatric Services
- Radiological and other imaging services
- Casualty and Emergency Services
- Hospital Laboratory Services
- Anaesthesia Services
- Obstetrics and Gynaecology services including IVC
- Neurosurgery Services
- Neurology Services
- Pediatric Surgery services
- Intensive care unit
- Acute cardiac care Unit
- Special clinics
- Cardio-respiratory services
- Gastroenterology services
- Endocrinology services
- Nuclear Medicine Department including PET and other developments
- Physical Medicine Department
- Burns, Paraplegic and Malignant Diseases Treatment Centre
- Nephrology Services
- Renal dialysis unit
- Trauma services
- Radio-Imaging (MRI, CT)
- Cardiac Cath Lab

# AS.3: Organisation and Administration of Supportive and Utility Services

- Enquiry, Registration

- Admission Office
- Transfer to other hospitals including Sanatoria
- Medical Superintendent's Office, Reports and Returns, Medical Boards, Entitlement of treatment, filing and book keeping
- Hospital standing orders
- Hospital welfare service including canteen stores
- Indian Red Cross Society and Hospitals
- Ward management
- Medical Stores and Pharmacy Services
- Pharmacy & Drug and Cosmetics Act
- Manufacturing in hospitals
- Blood Bank and Transfusion services
- Central Sterile Supply department (C.S.S.D.)
- Oxygen Manifold/Concentrator
- Hospital Risk Management
- Dietary Services
- Hospital Laundry
- Hospital gardens
- Medical Records
- Death in hospital: Brought in dead
- Fatal documents
- Mortuary
- Maintenance and repair including sophisticated equipments
- Pest and Rodent Control
- Inspection, Medical Superintendent's rounds
- Purchase Dept
- □ House Keeping Services
- □ Hospital Engineering Services
  - Hospital maintenance services
- □ Hospital Stores
- ☐ Medical Records, Admission, enquiry and registration
- ☐ Hospital establishment and offices
- □ Cafeteria services
- □ Welfare services
- □ Mortuary

# Transportation in hospital:

- Intramural
- Extramural
- Staff, Patient, Visitors, Vendors
- Administrative measures for control of Hospital Infection
- Exit interview & discharge procedure

# **AS4: Project Management**

Feasibility study Project conceptualization Functional requirements External and Internal traffic Space Programming Adjoincy delineation  $\Box$ Architects brief Enumeration and description of project as an entity Human Resource Plan 

#### TEACHING AND LEARNING METHODS

### Teaching & Learning Methods

The following methods will be used by the departments of hospital administration to impart training in this course:

- Lectures by the faculty members and experts from different fields to update their knowledge of hospital/General Management. These may be a combination of both didactic and interactive types.
- 2. Symposia/seminars to familiarize newer developments and emerging trends in hospital administration.
- 3. Journal clubs to familiarize with research methodologies and analysis of the result. The resident to whom the journal is allotted should present the journal summaries (as photocopies) to the group where each article is fully discussed. They are expected to show their understanding of the aspect covered in the article and on which the other residents are questioned by each other and clarification sought by the faculty. Such discussion enables the residents to prepare for general discussion in the class.
- 4. Practical Competencies/exercises: Under the supervision of faculty in charge, each candidate will be posted in different areas of the hospital, where he/she will have to critically examine the infrastructure and operational mechanism of the area, etc., find out the lacunae in the services and provide constructive suggestions to improve the services on the latest available guidelines/works which are nationally/internationally accepted. These observations will be presented by the post graduates at the end of their posting in the class room session.

### 5. Case Studies

Students will be individually attached in rotation to the different departments/services of affiliated hospitals. Students will spend 18 hours per week (3 hours daily on all days) except in the first 12 weeks.

Each student will study the allotted department as comprehensively as possible and will write out a case study report (minimum four dissertations) of approximately 3000 words, which shall be presented to the rest of the group and the subject will be discussed by members of the faculty and the students.

A list of suggested departments for case studies is given below: This list is illustrative but not exhaustive.

- Outpatient department including emergency services
- Medical Superintendent's office
- Stores-general including furniture
- Medical Stores and Pharmacy
- Dietary Services
- Linen and Laundry Services
- Nursing Services and ward management
- OT, ICU, Specialized Service

#### Clinical Areas:

- Imaging Services
- Invasive/Non invasive Cardiac Diagnostic Laboratory
- Medically Assisted Reproduction Centres
- Bed Utilization.

# Support services:

- Blood Bank Services
- Laboratory Services
- Pharmacy and Manufacturing
- Hospital Gas Supply
- Medical Records

# Behavioural and Sociological Aspects:

- Absenteeism in Nursing / sanitation / housekeeping Staff
- Emergency call system and response pattern
- Patient satisfaction
- Visitors satisfaction
- Communication to patients and their relatives
- Patient Guidance System
- Effectiveness of Medico Social Department

# Operation Research Techniques:

- Scheduling of patients for operations
   Scheduling of patients for special investigations
- Transmission of patient samples and reports

# Administrative Areas:

- Admission/discharge procedures
- Investigation procedures of patient's complaints
- Administrative office procedures
- Decision making procedures in administrative areas
- Waste disposal and universal precautions.

#### Financial Areas:

- Billing Section
- Pricing of diagnostic/therapeutic procedures

#### Legal:

- Medico-legal cases
- Consumer forum cases
   Legal cases relating to personnel matters

### 6. Attendance at Scientific meetings, CME programmes

The post graduate students are expected to attend meetings related to their discipline, present papers/posters in these meetings.

# 7. Paper/poster presentation:

A post graduate student of a post graduate degree course in broad specialities/super specialities would be required to present one poster presentation, to read one paper at a national/state conference and to present one research paper which should be published/accepted for publication/sent for publication during the period of his postgraduate studies so as to make him eligible to appear at the postgraduate degree examination.

#### 8. Teaching skills:

The post graduate students shall be required to participate in the teaching and training programme of undergraduate students and interns.

- 9. A logbook should be maintained recording the duration of posting, the period of absence, if any, skills performed, and remarks if any by the teacher/faculty member. The logbook should also record journal clubs, seminars attended and partaken as well as undergraduate teaching activities the post graduate student has participated and should be signed by the faculty in charge.
- 11. Department should encourage e-learning activities

### 12. Special administrative attachments

The aim of the attachment is to familiarize the students with the special features and functioning of various types of medical institutions and medical administrative offices (Government / Non-Government). One, two or three or more days will be allotted depending upon the size and importance of the place.

Medical Institutions to be visited will be contacted in advance and purpose of the visit/attachment explained so that a responsible person conducts these students and explains things adequately.

# Suggested Places of attachment

- Hospital for chest diseases
- Dental College
- Artificial Limb Centre
- Manufacturing Section
- School of Nursing
- A Taluk Hospital

- A Rural Health Centre and peripheral centres
- An Urban Health Centre
- A multi specialty/single specialty corporate hospital
- Maternity and Child Welfare Centre
- Government Hospital
- Taluk Office for Vital Registration
- ESI Hospital
- Transfusion Centres
- An Ayurveda Hospital
- Office of Drug Controller
- Any other Institutions decided by the Department.

# SUMMATIVE ASSESSMENT, ie., at the end of training

The summative examination would be carried out as per the Rules given in POSTGRADUATE MEDICAL EDUCATION REGULATIONS, 2000.

The examination shall be in three parts:

#### a) Thesis & 2 dissertations

Thesis shall be submitted at least six months before the Theory and Clinical / Practical examination. The thesis shall be examined by a minimum of three examiners; one internal and two external examiners, who shall not be the examiners for Theory and Clinical examination. A post graduate student shall be allowed to appear for the Theory and Practical/Clinical examination only after the acceptance of the Thesis by the examiners.

# b.) Theory examination:

Students will be assessed theoretically by a written theory examination. These papers are as follows:

Paper I: General Administration

Paper II: Health Administration

Paper III: Hospital Administration and Hospital Planning

Paper IV: Management of Clinical and Non-clinical services

# b.) Clinical/Practical and Examination:

The following methods will be used to assess the student in the practical examination

- i) Long case A long case will be given to students for which they will answer specific questions theoretically and may be examined by a viva voce regarding this case
- ii) Short case A short case will be given to students for which they will answer specific questions theoretically and may be examined by a viva voce regarding this case
- Spots Spots will be given to students and they will have to answer specific questions regarding the spot.
- iv) Viva voce The student will be assessed by a viva voce examination on topics

#### pertaining to Hospital Administration.

#### E. Suggested Reading

#### **Books (latest edition)**

- Charney William: Handbook of Modern Hospital Safety-Lewis Publishers Pvt Ltd, London.
- 2. DF Buck: Basic Hospital Finance Management.
- 3. Davies Llewellyn R & Macaulay HMC: Hospital Planning and Administration, Jaypee Brothers, New Delhi.
- 4. Francis CM: Medical Ethics, Jaypee Brothers, New Delhi.
- Guy Carrin and Marc Vereecke: Strategies for Healthcare Finance in Developing Countries, Macmillan, London (Case Studies).
- Gupta Shakti & Kant Sunil: Hospital Stores Management An Integrated Approach, JP Brothers, New Delhi.
- Goel, SL: Healthcare Systems and Management, Vol 1-4; Deep And Deep Publications, New Delhi
- 8. Hyman Stanley: Supplies Management in Healthcare.
- 9. Jain & Narang: Cost Accounting, S Chand & Co, New Delhi.
- JE Park & K Park: Text Book of Preventive and Social Medicine, Banarisdas Bhanot, Jabalpur.
- 11. Kulkarni, GR: Managerial Accounting for Hospitals, Mumbai.
- 12. Knight Bernard: Legal Aspects of Medical Practice.
- Kunders, GD: Facilities Planning and Arrangement in Healthcare, Prism Books Pvt Ltd, Bangalore.
- 14. Kunders, GD: Designing for Total Quality in Healthcare, Prism Books Pvt Ltd, Bangalore
- National Commission on Macro Economics and Health: Ministry of Health and Family Welfare, GOI. Financing and Delivery of Healthcare Services in India, NCMH New Delhi.
- 16. Pena, Jesus: Hospital Quality Assurance.
- 17. Quality Management in Health Care, Principles and Methods, Donald Lighter and Douglas C Fair, Jones and Bartlett Publishers.
- 18. Rajkumar: Acts applicable to hospitals in India.
- 19. Srinivasan AV: Managing a modern hospital, Response Books, New Delhi.
- Sarma RK, Sharma Yashpal: A handbook on hospital Administration, Durga Printers, Jammu.
- 21. Sharma, Madhuri: Essentials for Hospital Supportive Services, Jaypee Brothers, New Delhi.
- 22. Tabish, Syed Amin: Hospital Planning, Organisation and Management.
- 23. James R Evans: Total Quality Management South Western Publishers.

#### Journals

# 3-5 International and 2 National (all indexed) Journals

Elective Courses to offer the Post Graduate (PG) students in Master's in Hospital Administration (MHA) Programme at Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGIMS):

- 1) Financial Management in Healthcare
- 2) Healthcare Analytics
- 3) Heath Technology Assessment
- 4) Health Policy
- 5) Branding & Customer Relationship Management