



Vishwavidyanilaya Karyasoudha
Crawford Hall, Mysuru- 570 005

(Re-accredited by NAAC at 'A')

(NIRF-2023 Ranked 44 in University Category & 71 in Overall Category)

No.: PMEB-1/09(2)/Spl./2023-24

Date: 04-11-2024

NOTIFICATION

Sub.: Syllabus and Examination pattern of **Bachelor of Hospital Management** course under Specialized Programmes from the academic year 2024-25-reg.
Ref.: 1. Decision of the BOS Meeting held on 18-10-2024.
2. Decision of the Academic Council meeting held on 22-10-2024.

The Board of Studies in **Bachelor of Hospital Management (UG)** at its meeting held on 18-10-2024 has recommended approve the 1st year Syllabus of **Bachelor of Hospital Management** course in University of Mysore under specialized/specified programs from the academic year 2024-25.

The Academic Council has also approved the above said proposals at its meeting held on 22-10-2024 and the same is hereby notified.

The 1st year syllabus of **Bachelor of Hospital Management** course may be downloaded from the University website <https://uni-mysore.ac.in/PMEB/>.


REGISTRAR
REGISTRAR

University of Mysore
MYSURU - 570 005

To,

1. The Registrar (Evaluation), University of Mysore, Mysuru.
2. The Dean, Faculty of Commerce, Dept. of Commerce, Hemagangothri, Hassan.
3. Prof. D. Anand, DoS in Business Administration (BIMS), Manasagangothri, Mysuru.
4. The Principal, Cauvery College of Life Science & Management, #131/1, 2D, 2E, 2F, KBL Layout, Near Devegowda Circle, Alanahalli, Mysuru.
5. The Deputy Registrar/ Asst. Registrar/ Superintendent, Examination Branch, UOM, Mysuru.
6. The PA to Vice-Chancellor/Registrar/Registrar (Evaluation), University of Mysore, Mysuru.
7. Office Copy.

Proceedings of the BOS meeting related to **Bachelor of Hospital Management**, held at Cauvery College of Life Sciences and Management, Mysore - 28 on 18th October, 2024 at 11.30 AM, to discuss and approve the syllabus related to **Bachelor of Hospital Management**.

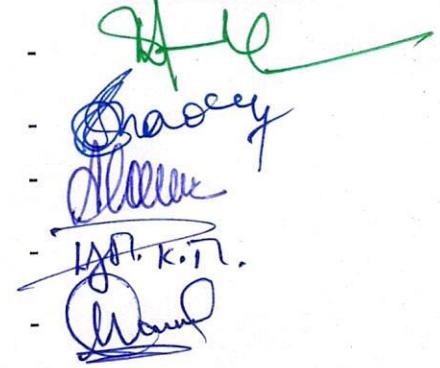
Ref: Letter from Registrar No. PMEB -5/spl/13/BOS.2023-24 dated 09.10.2024.

(17)

MEMBERS PRESENT:

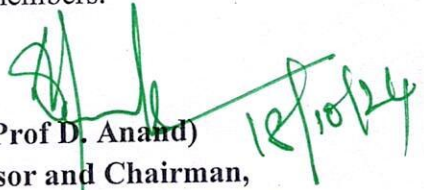
- | | | |
|-------------------------|---|-------------|
| 1. Prof. Anand D | - | Chairperson |
| 2. Prof. Srikantasway.S | - | Member |
| 3. Dr. Arvind R.M | - | Member |
| 4. Mr Prashanth | - | Member |
| 5. Mr Manohar C U | - | Member |

SIGNATURES



In the beginning, Chairman, BOS in Bachelor of Hospital Management welcome all the members for the meeting and brief the Agenda. The following decisions have been taken:

- (1) The scrutiny of Syllabus related to Bachelor of Hospital Management were carried out in I and II semester papers and the regulations has been approved.
- (2) Finally, Chairman proposed vote of thanks to all the members.


(Prof D. Anand)
Professor and Chairman,
BOS in Bachelor of Hospital Administration

Bachelor of Hospital Management & Administration (BHMA) syllabus

Bachelor of Hospital Management & Administration (BHMA) course is a 3 year undergraduate course. The Bachelor of Hospital Management & Administration (BHMA) program is designed to equip students with the knowledge, skills, and competencies necessary to excel in the dynamic and challenging field of healthcare management. The healthcare industry is continuously evolving, requiring competent administrators who can navigate complex healthcare systems, uphold ethical standards, ensure quality patient care, and drive organizational success.

The BHMA curriculum integrates multidisciplinary approaches, blending management principles with healthcare-specific knowledge. Students delve into subjects such as healthcare policy, financial management, human resources, information technology, quality improvement, and regulatory compliance. They also explore specialized areas like medical terminology, coding, transcription, and health information systems, preparing them for diverse roles in healthcare administration.

The program emphasizes practical learning experiences, including internships, projects, and case studies, enabling students to apply theoretical knowledge to real-world scenarios. Through industry partnerships, guest lectures, and field visits, students gain insights into current trends, best practices, and emerging technologies shaping the healthcare landscape.

Ethical decision-making, cultural competency, and effective communication are woven throughout the curriculum, nurturing compassionate leaders who prioritize patient well-being and organizational sustainability. Graduates of the BHA program are poised to contribute meaningfully to healthcare organizations, driving innovation, improving healthcare delivery, and making a positive impact on healthcare outcomes and communities.

The BHA program cultivates a cadre of professionals who possess the analytical, managerial, and interpersonal skills needed to navigate the complexities of healthcare administration and lead transformative change in the healthcare sector.

1. Eligibility:

A two-year Pre-University examination or its equivalent as recognized by Mysore University with any principal subjects of study

OR

Pre degree course from a recognized University / Board (two years after ten years of schooling) with any principal subject of study.

2. Medium of Instruction:

English shall be the medium of instruction for the subjects of study as well as for the examination.

3. Duration of Course:

The Course shall extend over a period of three years. The duration of the course shall be on full time basis for a period of three years consisting of six semesters from the commencement of the academic term. Each semester would be of minimum twenty weeks

4. Scheme of Examination:

There shall be six examinations one each at the end of each semester.



- d) A candidate passing the university examination in more than one attempt shall be placed in Pass class irrespective of the percentage of marks secured by him/her in the examination.
- e) The marks obtained by a candidate in the subsidiary subjects shall not be considered for award of Class or Rank.

11. Carry over Benefit:

A candidate can carry over only two subjects from any of the semester at a time. It is to be noted that He/ She shall clear all subjects of first to fifth semester to become eligible to appear for the final semester examination.

12. Number of attempts:

A Candidate is permitted not more than three attempts for each subject to pass the examination. Candidate will not be allowed to continue the course if He/She fails to comply with the above stipulation. However, the candidate shall complete the course within six years from the date of admission. A candidate shall complete the course within six years from the date of admission failing which the candidate will be discharged.

13. Eligibility for the award of Degree

A candidate shall have passed in all the subjects of first to sixth semester to be eligible for award of degree.

14. Course of Study:

The course shall be pursued on full time basis. No candidate shall be permitted to work in a health care facility or a related organization or laboratory or any other organizations outside the institution while studying the course. No candidate shall join any other course of study or appear for any other examination conducted by this university or any other university in India or abroad during the period of study.

Subject wise Distribution of Teaching hours

Semester	Main Subjects	Theory Hours	Hours of Practical Posting	Total
I	Principles of Management	100	120	520
	Medical Terminology and Introduction to medical transcription	100		
	Fundamentals of Accounting	100		
	Hospital & Health System (History & Evolution)	100		
II	Organizational Behaviour	100	120	520
	Biostatistics	100		
	Health Economics	100		
	Epidemiology & Public Health Administration	100		
III	Hospital Operations Management –I (Clinical Services)	100	120	520
	Research Methodology & Operations Research	100		
	Hospital Medical Records Management	100		
	Project Management	100		
IV	Hospital Operations Management –II (Non -Clinical Services)	100	120	520
	Management Information System& Medical Transcription Software	100		
	Human Resource Management	100		
	Cost Accounting in Healthcare	100		
V	Quality in Health Care	100	120	520
	Marketing Management in Healthcare	100		
	Hospital Hazards & Disaster Management	100		
	Financial Management in Healthcare	100		
VI	Material planning & Management	100	120	520
	Strategic Management	100		
	Management Accounting in Healthcare	100		
	Hospital Related Law	100		

Distribution of marks

Sl No	Main Subjects	Written Paper		IA	Total
		Duration	Marks	Marks	
First Semester					
1	Principles of Management	3hrs	70	30	100
2	Medical Terminology and Introduction to medical transcription	3hrs	70	30	100
3	Fundamentals of Accounting	3hrs	70	30	100
4	Hospital & Health System (History & Evolution)	3hrs	70	30	100
	Total				400
Second Semester					
5	Organizational Behaviour	3hrs	70	30	100
6	Biostatistics	3hrs	70	30	100
7	Health Economics	3hrs	70	30	100
8	Epidemiology & Public Health Administration	3hrs	70	30	100
	Total				400
Third Semester					
9	Hospital Operations Management –I (Clinical Services)	3hrs	70	30	100
10	Research Methodology & Operations Research	3hrs	70	30	100
11	Hospital Medical Records Management	3hrs	70	30	100
12	Project Management	3hrs	70	30	100
	Total				400
Fourth Semester					
13	Hospital Operations Management –II (Non -Clinical Services)	3hrs	70	30	100
14	Management Information System& Medical Transcription Software	3hrs	70	30	100
15	Human Resource Management	3hrs	70	30	100
16	Cost Accounting in Healthcare	3hrs	70	30	100
	Total				400
Fifth Semester					
17	Quality in Health Care	3hrs	70	30	100
18	Marketing Management in Healthcare	3hrs	70	30	100
19	Hospital Hazards & Disaster Management	3hrs	70	30	100
20	Financial Management in Healthcare	3hrs	70	30	100
	Total				400
Sixth Semester					
21	Material planning & Management	3hrs	70	30	100
22	Strategic Management	3hrs	70	30	100
23	Management Accounting in Healthcare	3hrs	70	30	100
24	Hospital Related Law	3hrs	70	30	100
	Total				400
25	Project work				100
	GRAND TOTAL				2500

FIRST SEMESTER

PRINCIPLES OF MANAGEMENT

UNIT -1: - 10 hours

Introduction to management - the evolution of management, definition and importance of management. Different schools of management thought- classical school, management sciences school, behavioural school, human relation school, operational approach, system approach and contingency approach to management.

UNIT- 2: - 10 hours

Management - Meaning, nature and characteristics of Management, Scope, functions and Principles of management. functional areas of management, Management as a science art or profession, Management & Administration,

UNIT- 3:- 15 hours

Planning- Meaning, Nature, importance and purpose of planning, Objectives, Planning process, Planning Premises & Types of plans. Decision making - importance & steps

Unit – 4: - 15 hours

Organizing - Meaning and importance, Nature and purpose of organization, Principles of organization, Types of organization, Organization structure / chart, Responsibility and Authority, Span of control, Delegation of authority, Centralization & Decentralization, Line and staff relationships, Types of organizations, formal and informal groups in organizations, Matrix organization, Departmentalization, Committees.

UNIT – 5 - 10 hours

Nature and importance of Staffing - Process of Selection & Recruitment (in brief) staffing function, Manpower needs & Manpower position, Training & development, Performance appraisal, Human resource audit.

UNIT – 6: - 10 hours

Directing -Meaning and nature of directing. Leadership - Nature, Styles, attitudes, Motivation, Theories & Models(Great man theory, Behavioural theory, Maslow's Need Hierarchy Model, Hygiene Model). Coordination- meaning, importance & Techniques of Co-ordination.

UNIT- 7: - 10 hours

Control- Meaning and steps in controlling, Concept of Managerial Control, Importance, Process, Essentials of a sound control system, Methods of establishing Control.

UNIT -8:- 10 hours

Communication- Meaning & Role of Communication, importance, Communication process, levels of Communication, forms, models and media of Communications, Verbal and non-verbal Communication-functions and types. Barriers to effective Communication

UNIT – 9 - 10 hours

Social Responsibility of Management - Professional Management as compared to traditional system of owner Management, Impact of political system, government Policy, national economic planning on managerial policy, CSR.

BOOKS FOR REFERENCE:

1. Stoner, Freeman & Gilbert Jr – Management- Prentice Hall of India Pvt Ltd New Delhi.
2. Heinz Weinrich & Harold Koontz- Management- A global perspective- Tata mcgraw Hill, New Delhi.
3. Terry Francicin - Principles of Management, AITBS Publishers and Distributors, New

Delhi

4. Rao V S P & Krishna Hari V (2006) – Management- Text & Cases, Excel Books.
5. Prasad L M – Principles and Practice of Management – Sultan Chand & Sons.
6. Tripathi P C & Reddy P N – Principles of Management.
7. C B Gupta - Principles of Management.
8. Appaniah & Reddy - Essentials of Management
9. Srinivasan & Chunawalla - Management Principles and Practice
10. J.S. Chandan - Management Concepts and Strategies

MEDICAL TERMINOLOGY& INTRODUCTION TO MEDICAL TRANSCRIPTION

UNIT - 1 - 20 hours

Introduction to medical terminology - Word formation & syntax - Greek alphabet - Greek & Latin prepositional & adverbial prefixes - Singular & plural endings

UNIT - 2 - 25 hours

Human Anatomy and Physiology – Structure & functions of following systems:

- a. Digestive System
- b. Respiratory system
- c. Circulatory system
- d. Central Nervous system

UNIT - 3 - 25 hours

Human Anatomy and Physiology – Structure & functions of following systems:

- a. Muscular Skeletal system
- b. Reproductive system
- c. Excretory system
- d. Endocrine Glands

UNIT - 4 - 20 hours

Commonly used prefixes in medical terminology - Commonly used suffixes in medical terminology - Commonly used root words in medical terminology.

Common Latin term used in prescription writing - Study of standard abbreviations- Commonly used medical terms to define different parts of the body

UNIT - 5 - 20 hours

Medical terminology used by Cardiologist - Medical terminology used by Neurologist Medical terminology used by Nephrologist - Medical terminology used by Gastroenterologist - Medical terminology used by ENT surgeon - Medical terminology used by Dentist - Medical terminology used by Orthopedician - Medical terminology used by Gynecologist - Medical terminology used by Oncologist - Medical terminology used by Dermatologist - Medical terminology used by Endocrinologist

UNIT - 6 - 15 hours

Introduction to Medical Transcription: Overview of medical transcription profession, importance of accurate medical documentation, ethical considerations & patient confidentiality

Transcription techniques: Listening skills development, Typing speed and accuracy improvement, Editing, formatting, and proofreading medical reports

BOOKS FOR REFERENCE

1. Ross & Wilson Anatomy and Physiology in Health and Illness - Textbook by Allison Grant, Anne Waugh, and Kathleen J. W. Wilson.
2. Fundamentals of Anatomy and Physiology- Textbook by Frederic H. Martini

3. Principles of Anatomy and Physiology - Book by Bryan H. Derrickson and Gerard J. Tortora
4. Quick & Easy Medical Terminology" by Peggy C. Leonard
5. Medical Terminology: A Short Course" by Davi-Ellen Chabner
6. The AHDI Book of Style: A Guide for Health Care Documentation" by American Health Information Management Association (AHIMA)
7. Medical Transcription: Techniques and Procedures" by Marcy O. Diehl

FUNDAMENTALS OF ACCOUNTING

UNIT – 1: - 15 hours

Introduction to Accounting - Meaning, Need for accounting, Internal and External uses of Accounting information, Accounting concepts and conventions, Basic Accounting Principles, Accounting practices, Generally Accepted Accounting Principles (Concept only of GAAP)

UNIT – 2: - 25 hours

Accounting systems & process - Nature of accounting, Systems of accounting (Single entry and double entry), Process of accounting, transactions, journal entries and posting to ledger.

UNIT – 3: - 25 hours

Subsidiary books - all subsidiary books (Sales book, sales return book, purchases book, purchase returns book, bills receivable book, bills payable book, cash book (Single column, double column, and three columnar cash book), petty cash book and journal proper. Bank reconciliation statement

- Need for reconciliation and preparation of bank reconciliation statement.

UNIT – 4: - 10 hours

Rectification of errors and Trial balance - Types of accounting errors and methods of rectification of errors, Preparation of Trial balance.

UNIT – 5: - 15 hours

Final Accounts - Preparation of Trading and Profit and Loss account and balance sheet (including adjustments for Sole Proprietor concern)

UNIT – 6: - 10 hours

Single Entry system of bookkeeping - Preparation of Opening & Closing statement of Affairs and Computation of profit.

BOOKS FOR REFERENCE:

1. V.A. Patil and J.S. Korlahalli - Principles and Practice of Accountancy
2. Grewal T.E - Double Entry book keeping
3. Shukla and Grewal - Advanced Accountancy
4. Gupta and Radhaswamy - Advanced Accountancy Vol I & II
5. Hrishikesh Chakraborty - Advanced Accounts
6. Jain SP and Narang KL - Basic Financial Accounting – I
7. S.N. Maheshwari - Fundamental of Accounting

HOSPITAL & HEALTH SYSTEM (HISTORY & EVOLUTION)

UNIT – 1 - 15 hours

Definition and meaning of Health - Concept of Health, Holistic approach to health, Determinants to health Responsibility for Health, Health & Development, Indicators of Health, Concept of Disease, Concept of Causation, Natural History of Disease, Spectrum of disease, Concepts of Control, Modes of Intervention

UNIT – 2 - 15 hours

Definition and meaning of hospital - historical development of hospitals globally, Systems of medicine, Modern medicine, changing concept of hospitals, present status of hospitals (public & private) in India, Classification of Hospitals

UNIT – 3 - 25 hours

Healthcare – Concepts, changing concepts, levels, healthcare delivery system in India, public, private sector, Indigenous system of medicine, Importance of Voluntary health agencies and health programs in delivering healthcare in India.

UNIT – 4 - 15 hours

Hospital as a system - Peculiarities of hospital system, Roles & Responsibilities of Hospitals, Administration of rural hospitals, staffing pattern & Job description.

UNIT – 5 - 10 hours

The reforms of Healthcare System- the healthcare system in US/UK, Canada, China, Singapore. Canadian lessons in Healthcare reforms & Future of Healthcare System.

UNIT – 6 - 20 hours

Recent trends in healthcare system: Green hospital – definitions, concepts, needs and benefits. Medical Tourism –Introduction, Ethics, Challenges, Standards and Future. Telemedicine - History, Definition & concepts, Types, Advantages & Disadvantages, Challenges, telemedicine in India.

BOOKS FOR REFERENCE:

1. The Evolution of International Health System, Cumper G.E, OUP New York, 1991
2. Management of Hospital (4 Vols), S.L Goel & R. Kumar, Deep & Deep Publications Pvt. Ltd.
3. Preventive and Social Medicine, K Park, Banarsidas Bhanot Publishers.

II SEMESTER

ORGANISATIONAL BEHAVIOUR

UNIT – 1 - 10 hours

Organization - Meaning and significance, Definition, Scope and Application in Management, need to study organizational behavior, Organisational structure, Emerging Organisations, challenges & opportunities for Organizational behavior.

UNIT – 2 - 10 hours

Perception – Meaning, Need, Perceptual Process, Perceptual Mechanism, Factors influencing perception & Interpersonal perception.

UNIT – 3 - 10 hours

Motivation – Meaning, Nature, Motivation process, Theories of Motivation (Maslow's Need Hierarchy theory - Herzberg's Two Factor Theory –Mcgregor Theory X & Theory Y. Financial and Non-Financial Incentives, Job enrichment.

UNIT – 4 - 10 hours

Attitudes – Meaning, Characteristics of Attitudes, Components of Attitude, Attitude and Behavior, Attitude formation and Measurement of Attitudes

UNIT – 5 - 10 hours

Learning and behavior modification - Principles of learning & Reinforcement, observational & Cognitive Learning. Organizational Behavior Modification - Steps in Organizational Behavior, Modification Process & Organizational Reward Systems

UNIT – 6 - 10 hours

Personality - Determinants of Personality, factors influencing personality - Biological, Cultural, Family, Social, Situational factors. Concept of Conflict – nature, process, types & resolution of conflict.

UNIT – 7 - 10 hours

Group Dynamics - Meaning, Types of Groups, Functions of small groups, Group Size Status, Managerial Implications. Group Behavior, Group Norms, Cohesiveness, Group Think

UNIT – 8 - 10 hours

Leadership - Formal and Informal Leadership, Characteristics, Leadership Styles, theories of Leadership (trait theory & Contingency theory)

UNIT – 9 - 10 hours

Organizational Change – Meaning, Nature of work change, Pressure for change, Change process, Types of change, Factors influencing change, resistance to change, overcoming resistance. Organizational Development.

UNIT 10- 10 hours

Managerial skills - Analytical & Decision-making skills, Decision making models, Problem solving skills, types of problem-solving techniques, delegation, Assertiveness, Time management, Interpersonal skills.

BOOKS FOR REFERENCE:

1. Organizational Behavior - Stephen Robbins
2. Organizational Behavior - John W. Newstrom & Kieth Davis
3. Organizational Behavior - Fred Luthans
4. Organizational Behavior - K. Aswathappa
5. Organizational Behavior - M. Gangadhar. V.S.P.Rao and P.S.Narayan,
6. Organizational Behavior - N.S. Gupta
7. Organizational Behavior - Jit. S. Chandan
8. Organizational Behavior - M.N. Mishra,
9. Management and Behavior Process - Sharma R.K & Gupta S.K,
10. Management and Behavioral Process - Appanniah & Reddy,

BIO STATISTICS

UNIT – 1: - 8 hours

Biostatistics - Introduction, Background, Basic Concepts, Definition, Functions, Scope, and Limitations.

UNIT – 2: - 15 hours

Diagrammatic and Graphic Representation – Introduction, Significance, Difference between Diagrams and Graphs & Types of Diagrams.

UNIT – 3: - 20 hours

Measures of Central Tendency – Introduction, Types of Averages, Arithmetic Mean (Simple and Weighted), Median, Mode.

UNIT – 4: - 20 hours

Measures of Dispersion – Range, Quartile Deviation, The Mean deviation and the Standard deviation, Coefficient of Variation.

UNIT – 5: - 15 hours

Correlation and Regression Analysis – Meaning, types, probable error, rank correlation (excluding bivariate and multi correlation)

UNIT – 6: - 12 hours

Time Series - Meaning and components, (Problems on moving average and least square method)

UNIT – 7: - 10 hours

Index Numbers – Classification, Construction of Index numbers, Methods of constructing index numbers, Simple Aggregative Method, Simple Average of Price Relative Method, Weighted Index Method, Laspeyres's method, Paasche's method, Fischer's method.

BOOKS FOR REFERENCE:

1. Statistical Methods - S.P. Gupta
2. Fundamentals of Statistics - Elhance D.N
3. Business Statistics - Dr. B.G. Sathyaprasad & Prof. Chikkodi
4. Fundamentals of Statistics - Gupta. S.C
5. Business Statistics - S. Saha
6. Business Statistics - Dr. J.S. Chandra, Prof. Jagjit Singh & K.K. Khanna,
7. Fundamentals of Statistics - D.N. Ellahance, Veena Ellahance, B.M. Agarwal
8. Business Mathematics and Statistics - Aggarwal S.L.

HEALTH ECONOMICS

UNIT – 1: - 10 hours

Business Economics - Nature & scope of Business Economics , Micro and Macro economics, Need , Objectives and importance of Business Economics. Goals of business – Economics Goals, social Goals, Below Poverty Line, Strategic Goals. Profit maximization Vs Optimization of profits.

UNIT – 2: - 15 hours

Consumer Behavior - The Law of Diminishing Marginal Utility, The law of equi-marginal utility, the indifference curve techniques, properties of indifference curve.

UNIT – 3: - 15 hours

Demand and Revenue Concepts - Meaning of demand, Determinants of demands, Demand Schedule, The Demand curve, The Law of Supply & Demand, Exceptions to the law of demand, Demand Distinction (types of demand), Elasticity of Demand. Price elasticity – Types, Measurement of Price elasticity, factors influencing elasticity of demand. Income elasticity of demand – Types, Cross elasticity of demand. Demand Forecasting – Types, Techniques. Revenue concepts – Total revenue, Average revenue, Marginal revenue.

UNIT – 4: - 15 hours

Production – Introduction, Production Functions, and Law of Variable Proportions, Production functions with two variable inputs (isoquants & iso costs). Equilibrium through Iso quants and Iso cost curves.

UNIT – 5: - 15 hours

Analysis of Market situations and Pricing - Kinds of competitive situation, features of perfect competition, monopoly, duopoly, oligopoly and monopolistic competition. Pricing - Meaning, Types of pricing, Pricing under different market situation, Perfect competition, Price determination under monopoly price discrimination and Price determination.

UNIT – 6: - 15 hours

National Income- Meaning, Methods & difficulties of Measuring National income, uses, Meaning of GNP, GDP, NNP, PI, DPI. Business cycles - Meaning, Features & Phases of a trade cycle, adjusting business plans to cyclical situations.

UNIT – 7: - 15 hours

Methods & Techniques of Economic Evaluation of Health Programmes, Cost benefit & cost effective methods, output & input analysis. Insurance programs – Advantages and disadvantages, Health insurance schemes in India, Public Private Partnerships in health sector

BOOKS FOR REFERENCE:

1. Business Economics - Reddy P.N and Appanniah H.R
2. Managerial Economics - Srivayya, Gangadhara Rao, Rao V.S.P.
3. Managerial Economics - Gupta G.S.
4. Managerial Economics - Dr. D.M. Mithani
5. Business Economics - Sharma N.K.
6. Business Economics - Wali and Kalkundikar
7. Managerial Economics - D.N. Dwivedi
8. Business Economics - Lekhi. R.K and Aggarwal S.L

EPIDEMIOLOGY & PUBLIC HEALTH ADMINISTRATION**Unit – 1 - 10 hours**

Demography Trends - World population trends, Indian Population trends & Health implications, vital statistics. National population policy – 2000.

Unit – 2 - 25 hours

National health policy - meaning, need and priorities, National health programmes, Health committees and their recommendations, Health services through Five Year Plans, Health for All by 2000 AD, and National Rural Health Mission, International Classification of Disease.

Unit – 3 - 20 hours

Health planning and management: health system in India- central, state and local. Nutritional problems in India & Geriatric care. Health Education – principles, methods & materials.

Unit – 4 - 20 hours

Organizations for Health: Voluntary health agencies in India – Indian Red Cross Society , Hind KushtNivaran Sang, Bharat Sevak Samaj, Central Social Welfare Board, Kasturba Memorial Fund, All India Women's Conference, FPAI, Indian Council for Child Welfare, Tuberculosis Association of India, The All India Blind Relief Society-Professional Bodies. International Health Organizations – WHO, UNICEF, UNDP, UNFPA, FAO, ILO, Rockefeller Foundation, CARE, International Red Cross Society

Unit – 5 - 25 hours

National Health Programmes related to Communicable diseases- Malaria, Filariasis, Tuberculosis, Leprosy, AIDS. National Health Programmes related to Non Communicable diseases – Cancer, Blindness, Diabetes, and Mental Health, Reproductive and child health programme. Health related national programme, Integrated Child development scheme, Mission Indradhanush, water supply and sanitation, minimum need programme.

BOOKS FOR REFERENCE:

1. Park K, Text Book on Hygiene and Preventive Medicine, Banarsidas, Bhanoy.
2. Francis CM & Mario Ode Souza, Hospital Administration, Jaypee Bros, New Delhi.
3. Study material on Hospital Administration – Vol.II, Health Care Systems in India.
4. Study Material – Vol.III, Health and Family Welfare Management

III SEMESTER**HOSPITAL OPERATIONS MANAGEMENT-I (CLINICAL SERVICES)****UNIT I - 25 hours**

Promoting and building a new hospital – Planning the Hospital, Guiding principles in planning hospital facilities & services, Space requirement, Stages in planning, Preliminary Survey (architect brief, site survey) , Financial Planning, Equipment Planning (Equipment Leasing, Turnkey Projects),

Need assessment survey of community, factors determining site, legal requirements, design considerations.

UNIT II- 15 hours

Organization of the Hospital – Organization Structure, Management structure, Types of hospitals, Governing body, Hospital committee and hospital functionaries, Roles and responsibilities of Hospital Administrators.

Unit III- 10 hours

Principles and methods of organizing Clinical services for hospitals, Role of clinical services/departments in the hospital management.

UNIT IV-25 hours

Planning, Designing, Functions & Management of General & Specialty departments – Out Patient Services, Emergency, OT, Anaesthesia, Labour Room & Delivery Suit. Ward Design of Medical & Surgical Intensive care units, General & Specialized Wards.

UNIT V – 25 hours

Planning, Designing, Functions & Management of Super Specialty Departments – Cardiology, Orthopedics, Plastic Surgery, Obstetrics & Gynecology, neonatology, Pediatrics, Oncology, Nephrology & Dialysis, Urology, Neurology, Dermatology, Burns, Nuclear Medicine, Transplantation Units.

BOOKS TO BE REFERRED:

1. Principles of Hospital Administration & Planning- B.M.Sakharkar
2. Management of Hospitals - S.L.Goel, R.Kumar
3. Hospital & Health Services administration-Principles & practices, Tabish, OUP
4. Hospitals- facilities planning and management – G D Kunders
5. Hospital Planning and Administration - Llewellyn and Davis Macaulay
6. The Hospital Administrator – George, Jaypee Brothers, N. Delhi, 2003
7. Hospital Services and Planning - Sakharkar.B M.

RESEARCH METHODOLOGY & OPERATIONS RESEARCH

UNIT – 1 - 15 hours

Introduction – Meaning, Objectives, Types of Research, and Research Approaches, Research methods Vs Research Methodology, Steps in Research - Defining the Research Problem, Meaning, Selecting the Problem & Techniques involved in defining the problem.

UNIT – 2 - 15 hours

Research Design – Meaning, Need, Features, Concepts, Types and basic Principles of Experimental Designs.

UNIT – 3 - 20 hours

Sampling – Meaning, Need, Census & Sample Survey Sampling Designs, Probability Sampling (Simple Random - Systematic - Stratified - Cluster – Area Multistage - Sequential Sampling Methods), Data Collection and Processing Collection of Primary data, Collection of data through Questionnaire & Schedules, Secondary data, Qualitative techniques of data collection, Interview, Observation & Tabulation of Data.

UNIT – 4 - 15 hours

Analysis and Interpretation of Data and Research reporting - Meaning of Interpretation, Technique of Interpretation, Significance of Report writing, Steps, Layout of the Research Report, Types of Reports, Precautions while writing Research Reports.

UNIT – 5 - 15 hours

Quantitative Techniques- Introduction, Statistical and operations Research techniques, Scope and application of quantitative techniques, scientific approach in decision making, Limitations. Probability and probability, distributions - Laws of probability, Baye's theorem, Mathematical Expectation, Binomial, Poisson and normal probability distribution.

UNIT – 6 - 20 hours

Decision Theory: Decision making under certainty, uncertainty and Risk, Decision tree analysis. Linear Programming: Graphical and Simplex Solutions of LPP, Primal and its dual, Transport and Assignment Problems. Network Analysis: Programme Evaluation and Review Technique (PERT) and critical path Method (CPM), Cost Analysis and Crashing the Network, Theory of Games and Queuing Models: Two persons Zero sum games, pure and mixed strategy, Queuing mode Single channel queuing theory Application of queuing theory in business decision making. Simulation: Advantages, Limitations, Monte Casio Method.

BOOKS FOR REFERENCE:

1. Research Methodology - O.R. Krishna Swamy
2. Research Methodology - CR. Kothari
3. Methodology and Techniques of Social Research - Wilkinson & Bhandarkar
4. Research Methodology in social science - Sadhu Singh
5. Research Methodology in Management - V.P. Michael
6. Operations Research -Kapoor, V.K.
7. Quantitative Techniques – Sultan Chand & Sons.

HOSPITAL MEDICAL RECORDS MANAGEMENT

Unit I - 20 hours

Records Management- Introduction, meaning and importance, definition of registers, records & forms, principles of record keeping, merits and limitations, recent trends in record maintenance, electronic forms of records – EHR/EMR.

Unit – 2 - 20 hours

Hospital Records - Meaning, Functions, Importance of medical records to Patients, Doctors, Hospitals, Public health, Press, Insurance, Police, Court of Law, Education and Research.

Unit – 3 - 20 hours

Hospital Records – Types - Out Patient record, Causality Emergency, Surgery, Obstetrics and Gynecology, Pediatrics, investigation and diagnosis. Hospital Statistics - Evaluation of Medical Care (Medical, Nursing, Pharmacy etc Audits).

Unit – 4 - 20 hours

Records organization and Management - Classification of records, Bases for classification, Indexing and Filing of records, Problems associated with medical records, International classification of Diseases (ICD) and Diagnostic Related Groups (DRG)

Unit – 5 - 10 hours

Medical Registers - Meaning, Principles, Types, Purposes, Advantages of designing registers, Registers in various departments & common problems faced.

Unit – 6 - 10 hours

Medical forms and Reports - Meaning, Types and significance, Principles of designing of forms & reports, Statutory registers and reports to be maintained.

BOOKS TO BE REFERRED:

1. Rajendra Pal Korlahalli JS, Essentials of Business Communication, Sultan Chand and Sons, New Delhi, 1999.
2. Prasantha Ghosh K. Office Management, Sultan Chand and Sons, New Delhi, 1995.

3. Francis CM & Mario C de Souza, Hospital Administration, 3rd Ed., Jaypee Brothers, N. Delhi.
4. George, MA, Hospital Administrator, Jaypee Brothers, N.Delhi, 2003.
5. Mogli. J D., Medical Records-Organisation & Management, JAYPEE Brothers.

PROJECT MANAGEMENT

UNIT – 1 - 20 hours

Project Management - Introduction, Meaning & Definition of project. Defining - Project Managers, Functional Managers & Executive's role. Project Manager as a planning agent, Project Driven Vs Non-Project Driven organization, marketing in the Project Driven Organization, Programs and Projects, Product Vs Project Management, Project Life Cycles, program evaluation, project analysis & management.

UNIT – 2 - 15 hours

Project Planning- Identifying strategic project variables, Project planning, Statement of work, Project specifications, Milestone schedule, Work breakdown structure, Planning cycle, Management Control, categories of project. Consulting process

UNIT – 3 - 20 hours

Project Feasibility - technical feasibility, marketing feasibility, socio-economic feasibility, managerial feasibility, financial feasibility and potential feasibility.

UNIT – 4 - 15 hours

Project Evaluation and Review techniques - Estimating activity time, Estimating total program time, PERT/CPM planning, Crash time, project sustainability, operations research.

UNIT – 5 - 15 hours

Project Management Functions - Controlling, Directing, Project authority, Team building, Leadership, communications, Project review meetings, Management policies and procedures, proposal writing.

UNIT – 6 - 15 hours

Pricing Estimating & Cost Control - Types of estimates & Pricing process, Labor distributions, Overhead rates, Material/Support costs, Pricing review, Budgeting for projects variance & earned value, Status reporting, project accounting.

BOOKS FOR REFERENCE:

1. Project Management - Choudary S
2. Project management - Joseph J Moder and Philips C.R.
3. Total Project management - Joy P.K.
4. Project Management - Harold Kerzer
5. Project Management - Josh S
6. Project Management - Saprthe R.K
7. Project Management and Control - Narendra Singh
8. Project Management and Entrepreneurship - Vasanth Desai

IV SEMESTER

HOSPITAL OPERATIONS MANAGEMENT-II (NON-CLINICAL SERVICES)

Unit I - 10 hours

Principles and methods of organizing - Administrative & support services for Hospitals, Importance & Role of supportive services / departments in the hospital management.

Unit II - 25 hours

Planning, Designing, functions & management of Non-Clinical Services - Pharmacy, Physiotherapy, Clinical laboratory & Blood bank, Radiology & Imaging, Nuclear medicine, Radio therapy, Medical Records department, CSSD.

Unit III - 20 hours

Nursing Services - Objective, Nursing administration, Duty of nursing officers, nursing and support staff in the ward, nursing by-laws, rules, policies and procedures, nursing audit – determining nursing complement in hospital.

Unit IV – 20 hours

Planning, Designing, functions & management of Support Services: Enquiry, Reception and Admission, Dietary and catering, Linen & Laundry, Housekeeping, Security, General & Medical Stores, Ambulance & Transport service.

UNIT V - 10 hours

Planning, Designing, Functions & Management of- Administrative Services, Hospital Administration Unit, Financial Management Unit, Hospital Information System, Human Resource Management, Marketing & Public Relations Unit.

UNIT - 6 - 15 hours

Planning and Designing Systems – Engineering Department, Maintenance Department Biomedical Engineering, Electricity & water supply system, HVAC - Heat ventilation & Air Conditioning System, Centralized Medical Gas System, Communications System, Environmental Control.

BOOKS TO BE REFERRED:

1. Principles of Hospital Administration & Planning: B.M.Sakharkar
2. Management of Hospitals: S.L.Goel, R.Kumar
3. Hospital & Health Services administration-Principles & practices, Tabish, OUP
4. Hospitals- facilities planning and management – G D Kunders
5. Hospital Planning and Administration- Llewellyn and Davis Macaulay
6. George, The Hospital Administrator - Jaypee Brothers, N. Delhi, 2003
7. Hospital Medical International Pvt. Ltd., Hospital Administration,
8. Kusum Samant, Hospital Ward Management, Vora Medical Publications, Mumbai.

MANAGEMENT INFORMATION SYSTEMS & MEDICAL TRANSCRIPTION SOFTWARE

UNIT – 1: - 10 hours

Introduction to MIS – Concept, roles & objectives of MIS, emergence of MIS, MIS and computers, Impact of MIS, systems approach to MIS, Advantages and disadvantages of computer based MIS, Importance of information in decision making and strategy building, information systems and subsystems.

UNIT – 2: - 15 hours

Information - Classification of information, Levels of information, Methods of data and Information collection value of Information. Conceptual foundations - The decision making process, systems approach to problem solving, support systems for planning. Role of MIS in surveillance for healthcare.

UNIT – 3: - 15 hours

Technical foundations of Information System - Introduction to computer concepts, hardware and software concepts applied to Information System, Database and file management, determining the information requirements. Development of MIS - factors responsible for development of MIS, Implementation of MIS & evaluation of MIS.

UNIT– 4: - 20 hours

System Analysis and Design - Introduction, System Analysis for existing system, system analysis for new requirements, MIS and system /system analysis, cost benefit analysis, Subsystems of MIS (Transaction processing systems, DSS and GDSS, ES). Decision making and MIS - decision making concepts, organizational decision-making, MIS as technique for programme decisions, Decision support system, MIS and role of DSS.

UNIT – 5: - 15 hours

Information Subsystems and Organization- Introduction to ERP, BPR, AI, EIS, KMS and ECRM. Data base Management systems- Data base concepts, data base models data base design, RDEMS, MIS and RDEMS, Introduction to oracle & Data Access Management systems. Network - Introduction, topology, LAN and WAN & Data communication.

UNIT – 6: - 15 hours

MIS in operations, MIS for Finance, MIS for Marketing, MIS for production, MIS for Human resource Management, MIS for marketing & MIS for Diagnostics. Network Usage, MIS and client server, Data Processing/Transaction processing.

UNIT – 6: - 10 hours

Introduction to transcription software tools, Usage of transcription software for dictation playback and editing

BOOKS FOR REFERENCE:

1. Javedkar, W.S.-Management Information Systems (Tata McGraw-Hill Publishing Company Ltd., New Delhi)
2. Mardic R.G., Ross J.E.&clagget J.R. - Information System for Modern Management (Prentice Hall of India)
3. James A.O. Brien Management Information Systems, (Galgota Publications)
4. Locus, Analysis, Design and Implementation of Information System (McGraw-Hill Book Co.)
5. Anderson, Lavid L. Post, Gerald V., Management Information System (Tata-McGraw Hill Publishing Co.)

HUMAN RESOURCE MANAGEMENT

UNIT – 1 - 10 hours

Human Resource Management - Meaning of HRM, Importance of HRM, Objectives and Functions, process of HRM, Systems and Techniques, Role of human resource manager, duties and responsibilities of human resource Manager, typical organization set up of human resource department.

UNIT – 2 - 20 hours

Human resource planning, Recruitment, Selection and Placement in hospitals- Meaning and importance of human resource planning, benefits of human resource planning, Meaning of recruitment, selection, placement and training, Methods of Recruitment and Selection, Uses of tests in selection, Problems involved in placement.

UNIT – 3 - 10 hours

Training and Induction in hospitals - Meaning of Training and Induction, Objective and purpose of induction, Need for training, benefits of training, Identification of training needs, methods of training, executive development.

UNIT – 4 - 10 hours

Performance Appraisal – Meaning, objectives, methods of performance appraisal and limitations, productivity analysis. Reference checking- concept, definition, process, benefits and challenges.

UNIT – 5 - 20 hours

Principles and techniques of wage fixation - meaning & objectives of compensation. Promotion & Transfers in Hospitals – Purpose & basis of promotion, Meaning, reasons & types of transfer, right sizing of work force. Need for right sizing, Developing Policies for Compensation, Incentive, promotion & Employee Welfare Programmes.

UNIT – 6 - 20 hours

Work Environment - Meaning of work environment, Quality of work life, Fatigue, Implications of fatigue, causes and symptoms of fatigue. Monotony and boredom - factors contributing to monotony and boredom. Industrial accidents, Employee safety in health care & Morale, Grievance & Grievances handling, Personnel records & Personnel Audits.

UNIT – 7 - 10 hours

HRD - Meaning of HRD, Role of training in HRD, Knowledge management, Knowledge resources, Impact of globalization on human resource management, problems in relation to Hospitals. Labour laws applied to healthcare workforce

BOOKS FOR REFERENCE:

1. C.B.Mammoria - Personnel management
2. Edwin Flippo - Personnel management
3. Aswathappa - Human Resource Management
4. Subba Rao - Human Resources management
5. Michael Porter - HRM and human Relations
6. Biswanath Ghosh - Human Resource Development and Management.
7. Reddy & Appanniah - Personnel Management.
8. Sahni - Personnel Management.

COST ACCOUNTING

UNIT-1:18 Hours

Cost accounting – Introduction, Meaning and Definition of Cost, Costing and Cost Accounting Objectives of Costing- Comparison between Financial Accounting and Cost accounting- Scope and Uses of Cost Accounting- Classification of Costs- Cost Unit- Cost Center- Elements of Cost Preparation of Cost Sheet- Tenders and Quotations.

UNIT-2:18 Hours

Material cost control – Meaning, Types- Direct Material- Indirect Material- Purchasing Procedure- Material Control- Techniques of Inventory Control- Setting of Stock Levels- EOQABC Analysis- VED Analysis- Perpetual Inventory System- Methods of Pricing Material Issues: FIFO, LIFO, Simple Average Price Method, Weighted Average Price Method.

UNIT-3:18 Hours

Labour cost control – Meaning, Types, Direct Labour, and Indirect Labour. Time Keeping, Time Booking, Idle Time, Over Time, Labour Turn Over- Time Rate System- Piece Rate System Incentive Systems- Halsey Plan- Rowan Plan- Taylors Differential Piece rate System and Merricks Differential Piece rate System- Employee welfare Cost and Fringe Benefits.

UNIT-4: 20 Hours

Overhead cost control- Meaning and Definition, Classification of Overheads, Procedure for Accounting and Control of Overheads, Allocation of Overheads, Apportionment of Overheads Primary Overhead Distribution Summary, Secondary Overhead Distribution Summary: Repeated Distribution Method and Simultaneous Equations Method, Absorption of Overheads, Methods of Absorption: Machine Hour Rate.

UNIT-5: 16 Hours

Reconciliation of cost and financial accounts - Need for Reconciliation, Reasons for Difference in Profit or Loss shown by Cost Accounts and Financial Accounts, Preparation of Reconciliation Statement.

UNIT-6: 12 Hours

Methods and techniques of costing- Costing Methods: Output Costing, Contract Costing, Service Costing, and Process Costing (only theory), Cost Control Techniques: Budgetary Control, Standard Costing and Marginal Costing (only theory)

BOOKS TO BE REFERRED:

1. M.N.Arora: Cost Accounting
2. S.P.Jain and K.L.Narang: Cost Accounting
3. S.P.Iyengar: Cost Accounting
4. S.N.Maheshwari Cost Accounting
5. M.L.Agarwal: Cost Accounting

V SEMESTER

QUALITY IN HEALTHCARE

UNIT – 1 - 10 hours

Fundamentals of Quality Management: Introduction, Objectives, Historical Background, Concept of Quality Management, contributions by Quality Management Gurus (Kaoru Ishikawa, Juran's trilogy, Kaizen, Philip Crosby's principles, Deming, Pareto)

UNIT – 2 - 10 hours

Quality control tools & techniques - Brain storming, Bench marking, Business process reengineering (BPR), statistical process control, fish bone diagram, six sigma concept, poka yoke, Quality Assurance, Continuous quality improvement (CQI), quality circles.

UNIT – 3 - 20 hours

Techniques of Quality Management - Improving Hospital Performance, Patient Participation, Quality Health Care through Patient Satisfaction, conceptual model for assessing quality in health care.

UNIT – 4 - 20 hours

Organization wide Quality Improvement in Health Care – Introduction, organizing for Quality Assessment, Quality Improvement fundamentals, A Quality Improvement model of daily Patient Care.

UNIT – 5 - 20 hours

Assessing Quality Health Care - Attributes of Quality in Health Care, Attributes of a Good Patient Practitioners Relationship, Patient Satisfaction Survey, and the measurement of Quality in health care.

UNIT – 6 - 8 hours

Total quality management - The implementation of Total Quality, Planning Quality, organizing Quality, Evaluating Quality, Transforming organizations to a Total Quality Philosophy and Culture. Outcome Management and Total Quality - Background of Quality outcome, what is quality outcome and what is outcome Management?

UNIT – 7 - 12 hours

Concepts of Accreditation in Hospitals: NABH, NABL, JCI - ISO 9000 Quality Management, Effects and Benefits of ISO 9000 management System & clauses. Audits for quality assessment & management-Antibiotic audit, Infection control Review & Tissue Committee review.

BOOKS TO BE REFERRED:

1. Raandi Schmidt J. Trumbo and R. Jonson, Quality in Health Care Sector – ASQC Quality

Press.

2. Quality Improvement in Health Care, 2nd Ed, Nelson Thrones

3. Total Quality Management, S.K.Joshy

MARKETING MANAGEMENT & PUBLIC RELATIONS IN HEALTHCARE

UNIT— 1: - 15 hours

Introduction to marketing- definition, nature, scope and importance of marketing, approaches to the study of marketing and economic development, traditional and modern concept of marketing, functions of marketing.

UNIT - 2: -10 hours

Marketing environment- analysing needs & trends in the micro & macro- environment. Marketing mix- the elements of marketing mix (for both Product & services). Market segmentation - bases for market segmentation, requisites of sound marketing segmentation. Market positioning, Market targeting strategies – positioning, undifferentiated marketing, concentrated marketing & Services marketing.

UNIT— 3: -10hours

Analysing consumer markets and buying behaviour – factors influencing buying behaviour (cultural, social, personal, psychological), the buying decision process & stages of the buying decision process

UNIT— 4: -10hours

Product – classification of products, product mix decision, product line, product addition & deletion. Product lifecycle, product planning, diversification, product positioning. New product development process and strategies, concepts of branding, packaging & labelling

UNIT— 5:-05 hours

Pricing – pricing objectives, policies, factors influencing pricing policy, method of pricing policies and strategies.

UNIT— 6:-10 hours

Channels of distribution – definition, need, channel, design decision, channel management decision, factors affecting channels & types of marketing channels.

UNIT— 7:-10hours

Promotion – nature and importance of promotion, promotional methods – advertising decisions, differences between sales promotion & public relations, direct selling, advertising copy, evaluation of advertising, differences between personal selling and sales promotion.

UNIT— 8: -10hours

Marketing research – marketing information system, components, marketing intelligence system, marketing research, process, types and techniques of organizing marketing research.

UNIT— 9:-10hours

Recent trends in hospital marketing – e- business, tele-marketing, m-business, and relationship marketing, Retailing, concept marketing & virtual marketing. Application of social media in hospital marketing & Concepts of digital marketing.

UNIT-10:- 10 hours

Public relations (PR) – theory and concept, branches of public relations, roles of public relations staff in hospitals, functions of public relations department, differences between HRM & PR, liaison with government agencies.

BOOKS FOR REFERENCE:

1. Philip Kotler - marketing management
2. William J. Stanton - marketing management
3. Sherleker S. A - marketing management
4. J. C Gandhi - marketing management
5. Davar - modern marketing management.
6. Joel R. Evans and Barry Berman - marketing in the 21st century, Biztantra pub.
7. P. K. Gupta. eph - Marketing management & Research.
8. M. V. Kulkarni. eph - Marketing research.

HOSPITAL HAZARDS & DISASTER MANAGEMENT

Unit 1- 10 hours

Hospital hazards – meaning, types (physical, biological, mechanical & psychological), its impact on employees, preventive measures. Hospital hazards management- meaning, need, principles, purpose

Unit 2 - 15 hours

Control of hospital acquired infection- types of infection, Common Nosocomial infections and their causative agents, prevention of hospital acquired infection, role of central sterile supply department, infection control committee, monitoring and control of cross infection, staff health, and patient safety.

Unit 3 - 15 hours

Biomedical waste management – meaning & categories of biomedical wastes, disposal of biomedical waste products, incineration and its importance. Government rules and schedules, standards for waste autoclaving, microwave and deep burial, segregation, packaging, transportation & storage.

Unit 4 - 12 hours

Human waste disposal and sewage disposal- diseases carried from excreta, sanitation barrier, methods of excreta disposal. Sewage wastes – meaning, composition, aims of sewage disposal, decomposition of organic matter, modern sewage treatment, drawbacks of improper disposal of wastes – solid and liquid – effluent treatment plan.

Unit 5 - 15 hours

Medical insurance: IRDA – roles and functions, national insurance companies, paramount health care services, TPA and third-party insurance, payment terms and conditions & limitations of liability and indemnity. Government health insurance schemes in India.

Unit 6 - 15 hours

Disaster – meaning, types, manmade, natural, need for disaster Management. Management of natural disasters - flood, earthquake, drought, cyclone, tsunami etc. Epidemics - cholera, plague, typhoid, jaundice & management of epidemics.

Unit 7 - 10 hours

Management of man-made disasters - nuclear, biological & chemical disasters, Accidents - road, train & fire. Management of food poisoning, alcoholic and drug addiction, organization of medical camps.

Unit 8 - 8 hours

Management of disaster – prevention, method precautions, ambulance management. Role of Hospitals – hospital codes, community, voluntary agencies and government in disaster management.

BOOKS TO BE REFERRED: