

SYLLABUS FOR M.H.A SRI DEV SUMAN UTTRAKHAND UNIVERSITY

First Semester (All papers are compulsory)

SEMESTER - 1

MHA 101	Basic Concept Of Health & Epidemiology	100 marks
MHA 102	Hospital Based Healthcare & Its Changing Scenario	100 marks
MHA 103	Communication & Health Education	100 marks
MHA 104	Basics in Information Technology	100 marks
MHA 105	Principles Of Management & Organizational Behaviour	100 marks
MHA 106	Quantitative Management	100 marks
MHA 107	Healthcare Services	100 marks

Second Semester (All papers are compulsory)

SEMESTER - 2

MHA 201	Hospital Support Services	100 marks
MHA 202	Material Management	100 marks
MHA 203	Personnel Management & Industrial Relations	100 marks
MHA 204	Biomedical Waste Management	100 marks
MHA 205	Financial Management	100 marks
MHA 206	Marketing Management	100 marks
MHA 207	Health Management Information System	100 marks

Note : *Summer Training for 6 to 8 weeks in corporate hospitals or in Designated Organization shall be compulsory for all students immediately after Second Semester Examinations (Internal Exercise)*

Third Semester

SEMESTER - 3

MHA 301	Health Economic & Legal Aspects of Health	100 marks
MHA 302	Management Accounting	100 marks
MHA 303	Principles of Hospital Management	100 marks
MHA 304	Health Statistics And Health Information System in India	100 marks
MHA 305	Strategic Management & Operational Research	100 marks
MHA 306	Human Resource Development	100 marks
MHA 307	Nutrition, Dietetics & Drug Management	100 marks
MHA 308	Summer Training Report	100 marks

Fourth Semester (All papers are compulsory)

SEMESTER - 4

MHA 401	System Management & Medical Transcription	100 marks
MHA 402	OT & Ward Management/Floor Management	100 marks
MHA 403	Medical Equipments & Bio-Medical Engineering	100 marks
MHA 404	Patient Care Services & Hospitality Management	100 marks
MHA 405	Hospital Planning & Health Insurance	100 marks
MHA 406	Disaster Management	100 marks
MHA 407	Nursing Administration & Quality Management	100 marks

1. Pattern of Examination: The maximum marks for each paper, except in case of Project Report, Training Report, Seminar, Viva- voce, shall be of 100 (one hundred) marks of which 70 (seventy) marks shall be awarded on the basis of the external Semester Examination and 30 (Thirty) marks shall be awarded on the basis of Internal Examination. However, in the matter of Examination papers related to Information Technology group the External Semester Examination paper shall be of 50 (Fifty) marks & the Practical Examination shall be of twenty (20) marks. The practical Examination twenty (20) marks shall be conducted by the External Expert appointed by the University in similar manner as Viva – voce Expert is appointed. In case of training Report, Seminar, Viva – voce the maximum marks shall be 50 (Fifty) 100 (One Hundred) as the case may be and the project (Dissertation shall be of 200 (two Hundred) marks. The Seminar, training Report, shall be assessed by the Internal Expert appointed by the head of Department/ Director of the Affiliated Institution for the students of the respective Department/ Institution. The project report (Dissertation) shall be evaluated by the External expert appointed by the University. The Viva – voce will be conducted jointly by an Internal expert nominated by the head of the Department / Director of the Affiliated Institution in case of their respective students and by an External Expert appointed by the University with the approval of the Vice- chancellor on the basis of the panel of the experts submitted by the Head of department. On similar line the Viva – voce Expert shall be appointed by the University.

Marks for Internal Examination shall be awarded on the basis of the Assignments, Internal tests and students general performance – class participation in Assignments of 5 (five) marks each for each paper, except in Seminar, Viva – voce, Training Report, Project Report, shall be required to be completed by each student, out of which the best one shall be assessed for the Internal Assessment. 3 (Three) Internal tests of 10 (ten) marks each in each paper, except in Seminar, Viva – voce, Training Report, Project Report shall be conducted by the Department / Affiliated Institution, out of which the performance in best 2 (Two) shall be counted for the purpose of the Internal Assessment. Accordingly there shall be a Maximum of (five) 5 marks for Assignment, 20(twenty) marks for Internal Test and 5 (five) marks for general performance in class participation and attendance of the student. These 5 marks in each paper as mentioned above shall be awarded by the teacher concerned on the basis of the class participation and attendance of the student.

In so far as the External Semester questions paper is concerned each examination paper shall be of three hours duration with the maximum marks being 70 (Seventy). The pattern of Question Paper setting for External Semester Examination is indicated at Annexure – 1. The duration of the Internal Tests and the modalities of the Tests shall be decided by the teacher concerned in the respective subjects in consultation with the head of the Department/ Director of the Affiliated Institution as the case may be. The maximum marks for Internal Assessment shall be 30 (Thirty) as indicated above.

The Department/ Affiliated Institute shall forward the Internal Examination marks awarded by the teacher/ Internal Expert concerned in the respective paper to the registrar before start of the External Semester Examination for being incorporated with the result of the Semester Examination.

2. Presentation of Seminar: Each student shall be required to present a seminar in each semester, except in the fourth semester where the emphasis is on the Project report, lasting approximately for one hour divided into 5 minutes for introduction of the topic by the chairperson, 35 minutes for presentation of the seminar by the student concerned, 15 minutes for summing up by the chair person. The marks shall be awarded by the Internal Expert appointed by the Head of the Department/ Director of the Affiliated Institute for respective students, on the basis of pre determined criteria illustrated at Annexure- II. In the First Semester, the Student being fresh to the environment and coming from different academic background, the topic of the Seminar shall be on general subjects of their choice. In second Semester the seminar shall be on the topics related to Trade, Industry, Commerce, Corporate world and Corporate Affairs. The seminar in the Third Semester shall be based on the training Report.

3. Summer Training And Project Report: It is compulsory for all the students to attend and complete 45-60 days training at the end of Second Semester in any trading, commercial, Industrial, Financial or similar organization to be approved by the Department/ Affiliated Institution as the case may be for their respective students. On completion of the training the student shall submit Training Report to the Department/ Affiliated Institution within fifteen days of the completion of the training. In the Fourth Semester. The students are required to undertake a Project under the supervision of a Teacher and for that purpose the topic of the project

work and time schedule shall be allotted by the designated teacher concerned to the students under their charge immediately at the beginning of a third Semester so that the project report shall be in the form of Dissertation and two copies of the report shall be submitted by the students in the Department/ Affiliated Institution before conclusion of the Fourth Semester Examination. The Department/ Affiliated Institution Immediately shall forward one copy of the said Project Report to the registrar after the students, for getting it evaluated by the External Expert, have submitted it. The teacher concerned under whose supervision must certify the Project report and the guidance the Project has been undertaken.

4. Eligibility for Passing the Examination: The Minimum marks for passing the examination in each of the Semester shall be 50% (Fifty Percent) in aggregate subject to a minimum of 45 % (Forty Five %) in each paper. Further a student who has secured minimum marks to pass in each paper as mentioned above but has not secured the minimum marks to pass in aggregate for the Semester concerned shall be eligible to reappear in two papers in which he/she secured minimum marks in that semester so as to improve the aggregate marks in the concerned Semester

5. Provisions regarding Promotion: No student shall be admitted to Second year of the course unless he/she has passed in at least 12 (Twelve) papers out of Sixteen (16) papers offered by him /her during the first year of the course (First & Second Semester Examinations Taken together) In that way a student can be allowed to reappear, in 4 (Four) Examination paper of External Semester Examination in which he/she failed in respective Semester Examination, during Second year of the course as back paper. Further the student will be allowed to re-appear in any paper in the respective External Semester Examination subject to the condition that the total numbers of papers shall be within the total limit of (four) (4) back papers in a year as mentioned in this Para and further that total number of attempts for a paper shall not exceed the total span period of programme of 4 (four) years. Further all students shall have to pass the Degree programme within the span period of the programme which is four years from the date of the admission in the programme. In case of those students whose back papers are more than 4 (Four) as mentioned above, they shall not be allowed to proceed to Second Year (Third Semester) unless they pass the First year course (First Semester and Second Semester) The students who have thus failed shall be Ex-students and shall repeat the respective Semester. The back paper examination held with the respective regular Semester Examination. If a student fails to clear the degree programme during the span period of four years from the date of admission then he or she shall not be eligible to be readmitted in the MBA degree programme. The Ex-students shall be exempted from paying Fees and may be exempted from attending the classes. Back papers facilities shall not be available in Internal Examination.

It is here by clarified that promotion from First Semester to the second Semester shall be further subject to the condition that at the end of the First Semester , a student would be promoted provisionally to the Second Semester provided he/she has appeared in the First Semester Examination and his/her continuation to the second Semester shall be subject to the condition that on declaration of the result of the First Semester he/she should not have failed in more than four Examination papers. In case the student fails in more than four Examination papers, his/her admission to the Second Semester shall stand cancelled.

Similarly, promotion from Second Semester to the Third Semester shall be subject to the condition that at the end of the Second Semester, a student would be promoted provisionally to the Third Semester provided he/she has appeared in the second Semester Examination and his/her continuation to the Third Semester shall be subject to the condition that on declaration of the result of the Second Semester Examination he/she should not have failed in a total of more than four Examination Papers First and Second Semester Examinations taken together. In case if the student fails in a total of more than four Examination papers in the First and Second Semester taken together, his/her admission to the third semester shall stand cancelled.

The promotion to the subsequent Semester shall also be subject to the condition that at the end of the previous Semester a student would be promoted provisionally to the subsequent Semester provided that he/she has appeared in the previous Semester Examination and his/her continuation in the concerned subsequent Semester shall be subject to the condition that on declaration of the result of the previous Semester Examination and any back papers that the student may have appeared in, he/she should not have a cumulative of more than four back papers.

It is further approved that the provisions mentioned in these ordinance are also applicable to the ongoing students of respective courses.

6.Provisions for Attendance: To constitute a regular course of study a student must attend at least 75% (seventy five percent) of the lectures in each paper. If the attendance is short than 75% (seventy five percent) then he or she shall not be eligible to sit in the respective Semester Examination.

7. Award of Division: A student who obtained 60% (Sixty Percent) or more marks in aggregate in all the semester taken together shall be awarded First Division, those with 50% (Fifty percent) or more marks less than 60% shall be awarded Second Division. In case of those students whose aggregate marks are 75% (Seventy five percent) or more shall be declared passed with distinction and this fact shall be indicated in the mark sheet of Final Semester.

8. Medium of Instructions: The medium of Instruction of study and the examinations shall be English.

9. Admission Criteria : MBBS/BDS/BVsc/B.Sc. (Nursing), BBA or any other discipline from a recognized university with min. 45% marks.

10.Admission fees & Other Charges: Admission fee and other charges to be levied from the students shall be as such decided by the University from time to time.

11. Omnibus Clause: This ordinance and the syllabus shall come into effect from the academic session 2013 - 2014 with effect from July, 2013. In case of any clarification on any points mentioned in the ordinances and the syllabus or for any dispute on any points the decision of the university with the approval of the Vice-Chancellor would be final and binding on all concerned.

Annexure - I

Pattern for question Paper Setting-External Semester Examinations:

In the External Examination paper in each subject, except Training Report, Project, Seminar& Viva voce, the examination paper will carry a maximum of *70 marks normally divide among the questions and will be for duration of three hours. The question paper will be divide into two sections. There will be a compulsory short case study or some problem seeking solution under section A. In section b, there will be four questions all of which have to be attempted. First question Section B will ask for a short note (to answers any 4 out of 8) **Each of the other three (3) questions will include an alternate choice.** A model of the question paper is present below.

Note: All questions have to be attempted.

Section – A

1. Short case study / problem – Case study/ Problem given should not be of more than five hundred words

Section - B

2. Write short notes (up to fifty words) on any **four** of the following **3 marks each**

- (a)
- (b)
- (c)
- (d)
- (e)
- (f)
- (g)
- (h)

3. Describe X Y Z .?

OR

Describe A B C .?

14 marks each

4. (Pattern as same in 3)
What is A.B.C.?

14 marks each

OR

What is X.Y.Z.?

5. (Pattern as same in 3)

Explain the U. V .W

OR

Explain R. S. T

14 marks each

(* Incase of the papers related to Information technology Group the question paper will be of 50 marks consisting of 10 marks each question as above mentioned since in this group there will be practical examination in each paper of 20 marks.)

Note: Their must be 8 questions in examinations papers as per indicated above and should be within the syllabus – copy enclosed.

Annexure – II

Seminar Assessment Sheet

Name of the Student:

Chair Person:

Topic of Seminar:

Date of Seminar:

Parameter	Maximum marks	<i>Marks Obtained</i>	Parameter	Maximum marks	<i>Marks Obtained</i>
<u>Text</u> Abstract	04		<u>Handling Queries</u>		
Text Reference	04		Confidence	10	
Data Source (Credibility)	04		Adequacy	10	
Data Analysis	04		Tactics	05	
Quality of Text	04				
<u>Presentation</u> (Appearance)	04		<u>Chair Person Role</u>		
Gesture	04		Opening Address	02	
Audibility (Clarity)	04		Summarizing	02	
Confidence	04		Leading	02	
<u>OHP/LCD</u> Presentation	04		Command	02	
Reading (Extempore)	05		Control	02	
Time Management	05		Conclusion	05	
Innovative Method	05				
Slides Explanation	05				

Total marks – 100

No. of participants attended the Seminar:

Marks Obtained:

Signature of Expert:

Syllabus-MBA (Hospital Administration)

PAPER – I: Basic Concept Of Health & Epidemiology-Code MHA 101

Concept of Health and Disease

- Concept of health & disease and well being.
- Determinants of health and concept of causation, concept of control
- Natural history of disease and role of hospitals to offer various levels of care
- Prevention aspect of diseases
- Modes of intervention
- Public Health
- Dynamics of disease transmission
- Changing pattern of diseases
- Concept of health indicators

Suggested Reading

Textbook of Preventive & Social Medicine – K.Park

Preliminary Human anatomy and Physiology

- Basic concepts of human anatomy & physiology

Suggested Reading:

Human Anatomy- Prof. Samar Mitra

Human Anatomy- Prof. A. K. Dutta

Text Book of Human Physiology- Dr. C. C. Chatterjee

Basic concepts of Pharmacology: Commonly used Medicine in a hospital, Narcotic drugs, use and abuse of drugs. Dispensing of medicine, Drugs store, drug purchase.

Suggested Reading:

Textbook of Pharmacology: Dr. K. D. Tripathi

Epidemiology

- Concept of Epidemiology
- Components & aim of Epidemiology
- Epidemiological Approach
- Basic Measurements in Epidemiology
- Measurement of Mortality & Morbidity
- Methods of Epidemiological studies
- Uses of Epidemiology
- Epidemiology of communicable & non-communicable diseases
- Host defense immunizing agents, cold chain, immunization, disease monitoring and surveillance.
- Screening for disease
- Investigation of an epidemic and role of hospital in its control.

Suggested Reading

Textbook of Preventive & Social Medicine – K.Park

PAPER – 2: Hospital Based Healthcare & Its changing scenario-Code MHA 102

Overview of Hospital

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

Suggested Reading:

Hospital Management module II- NIHFW, New Delhi

Hospital Administration – G. D. Kunders

Hospital Administration – Tabish

PAPER – 3: Communication & Health Education -Code MHA 103

COMMUNICATION

- Communication Process
- Types of communication
- Health Communication functions
- IEC activities in health sector
- Basic concepts & principles of good communication
- Barriers of communication & how to overcome

HEALTH EDUCATION

- Aims & objectives of Health education
- Approach to Health Education
- Model of Health Education
- Contents of Health Education
- Principles of Health Education
- Methods of Health Education
- Planning and Management

Suggested Reading:

Textbook of Preventive & Social Medicine- Dr. K. Park

Textbook of community medicine: V. K. Mahajan

Health Education – V. K. Mahajan

Effective communication methods – Asha Kaul

Hospital Administration - Tabish

PAPER – 4: Basic Information Technology -Code MHA 104

- Operating Systems: WINDOWS 98: Basic Operations, utilities and features. UNIX: Introduction, features and basic commands
- Application Software (MS-Office 2000)
 - MS Word 2000: word basics, formatting text and documents, working with headers, footers and footnotes, tabs, tables and sorting working with graphics, templates, wizards and sample documents, introduction to mail merge & macros.
 - MS Excel 2000: Excel basics, rearranging worksheets, excel formatting tips and techniques, introduction to functions, Excel's chart features, working with graphics, using worksheet as databases.
 - MS PowerPoint: Different presentation styles, editing slides, inserting menu facility, slide sorter, Slide Miniature, Slide show, inserting chart, slide transaction, formatting slides, tool menu, present animation of slides, animation preview.

- Internet: Concepts & Services, Hardware and software requirements, type of Internet connections, advantages and disadvantages of Internet, modems, World Wide Web, e-mail, chat, browsers, search engines. Overview of Intranets and Extranets.
- Information Technology: Introduction to IT and its development, Impact and Future of IT in Business Organizations, Overview of the following: 4 GL, Image Processing, Virtual Reality, Video Conferencing, Artificial Intelligence, and Information Super Highways.
- ERP system with all modules
- Importance of effective Health Information system
- Digital maintenance of Medical Records
- Working knowledge of commonly used hospital software
- Application of Computer in hospitals

Suggested Reading:

Effective Business Communication

Health Education – V. K. Mahajan

Effective communication methods – Asha Kaul

Hospital Administration - Tabish

An introduction to computers

Peter Norton - Tata McGraw Hill

Computers today S. K. Basandra – Galgolia Books

Introduction to Computers – C. Xavier – New Age publishers

PAPER – 5: Principle of Management & Organizational Behaviour - Code MHA 105

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

Organizational Behaviour

- Concept of Organizational Behaviour
- Major Components of organizational behaviour – Personality development, Motivation, Group
- Behavior of people of their work place and its relation in team building for achieving organizational goals
- Sociology and Anthropology,
- Learning, classical & behavioural approach
- Characteristics of workgroups
- Motivation and Leadership
- Conflict management
- Transactional analysis

Suggested Reading:

Principles of Management - L. M. Prasad - S. Chand

Essential Management - Koontz - Tata McGraw Hill

Management - Peter Drucker

Organization Behavior – S. P. Robbins – Prentice Hall

Organizational Behavior – Fred Luthans – McGraw Hill

Organizational Behavior – M. L. Prasad – S. Chand

PAPER – 6: Quantitative Management - Code MHA 106

- Basic concepts: Definition of Statistics, Characteristics, Functions, Importance, Limitations and Types of Statistics, The role of statistics in the estimation of burden of disease and the methods applicable to calculate the same.
- Basic Mathematics
Collection: Primary and secondary data; Questionnaire Design and issues; Interviews
Presentation of Data: Diagrammatic and Graphic Representation- Line, Bar, Rectangle and Pie Diagram,
- Graphs- Histograms, Advantages and Limitations of Diagrams and Graph, Tabulation- Types of tables.
Probability and Frequency of distribution, Estimation and testing of hypothesis, Index Number
Time series Analysis: Introduction, Objectives of time Series, Identification of Trend, Variation in Time Series
- Measurements of central tendency: Average- Concept, Types, Mathematical Averages- Arithmetic, Geometric, and Harmonic mean Position and Location Averages, Median, Mode.
- Measures of Dispersion: Range, Quartile Deviation- Mean and Standard Deviation, Variance- Coefficient of Variance-
- Sampling: sampling design: Sampling procedure, types of sampling, sample size determination and Sampling error
- Testing of hypothesis, Test of significance
- Correlation- Scatter Diagram, Karl Pearson's Coefficient of Correlation, Spearman's Coefficient of Rank Correlation; Regression- Method of Least Squares, Method of Regression Coefficient, Properties of Regression Coefficient.

Suggested Reading:

Statistics for management – R. I. Levin and D. Rubin – Prentice Hall

Basic Statistics – Goon, Gupta and Dasgupta – World Press

Business Statistics – S. P. Gupta - S. Chand

PAPER – 7: Healthcare Services - Code MHA 107

Demography & Vital Statistics

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

Health scenario of India

- Health scenario of India- past, present and future National Health Policy & Population policy
- National Health Policy & Inter-sectoral Co-ordination
- National Population Policy
- National Five year plans

National Health Programme

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

Healthcare of the Community

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

Suggested reading:

Textbook of Preventive & Social Medicine- Dr. K. Park

Textbook of community medicine: V. K. Mahajan

Population studies – Asha Bhendre

Second Semester

PAPER – 1: Hospital Support Services - Code MHA 201

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

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

Suggested Reading

Principles of Hospital Administration - S. A. Tabish

Hospital Administration - S. L. Goel

Hospital Administration - Francis

Hospital Administration - McGibony

PAPER – 2: Material Management-Code MHA 202

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

Including maintenance

- Importance of material management
- Principles of material management, material forecasting
- Inventory management and analysis
- Import formalities relating to Medical Equipments
- Letter of credit, service contracts.
- Purchase style, need assessment
- Tender system
- Condemnation and disposal
- Economic order quantity, safety stock, lead time

Suggested Reading

Materials Management - Gopalakrishnan

Materials Management - Sundaram

Inventory Control - A. C. Dutta

PAPER – 3: Personnel Management & Industrial Relations -Code MHA 203

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

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

Industrial Relations

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

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

- Wage fixation and collective bargaining
- Definition, scope and importance of industrial relations

- Industrial Disputes Act
- Trade Unions
- Industrial relations in health services industries

Suggested Reading

Human Resources Management - L. M. Prasad

Personnel Management - P. C. Tripathy

Personnel Management-Mamoria

Human Resources Management and Industrial Relations - P. C. Tripathy

Managing Manpower in Industry - Sahani

Personnel Management- Mamoria

PAPER – 4: Bio Medical waste Management -Code MHA 204

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

- Definition of Biomedical Waste (BMW – Management & Handling Rule 1998)
- Classification of Biomedical Waste
- Categories of Biomedical Waste
- BMW – Segregation, collection, transportation, disposal
- Deep Burial Standards
- BMW Management & methods of disinfection
- Modern technology for handling BMW
- Monitoring & controlling of cross infection (Protective devices)
- Waste reduction activities for hospital
- Biomedical Waste Awareness and education

Suggested Reading

Principles of Hospital Management - S. A. Tabish

Hospital Management - S. L. Goel

Hospital Administration - Francis

Bio-Medical Waste Act & Rules Govt. of India

Current Issues In BMW Waste Handling-ISHA, Bangalore

PAPER – 5: Financial Management -Code MHA 205

To understand the issues and scope of financial management

- Cash flow and fund flow
- Basics of financial management
- Issues and scope of financial management
- Recording Business transactions
- Financial Statement & its analysis
- Fund allocation & department performance reports
- Concept of business plan, project plan
- Elements of cost and costing methods
- Cost control and cost reduction
- Productivity
- Resource mobilization
- Cost containment
- Money Market and Capital Market, Merger and acquisition.
- Reporting to management

Suggested Reading

Financial Management - T. K. Maheshwari

Business Finance - Dey & Dutta

Principles of Accounting - Sandip Sharma
Financial Management - Prakashan
Basic Financial Management - Khan
Economics – Lipsey

PAPER – 6: Marketing Management -Code MHA 206

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

- Basic concept of Marketing Management – Consumer Behaviour
- Marketing research & information
- Pricing of various services
- Marketing strategy, evaluation and control
- Promotion of Business in Hospital
- Service Marketing – Patient care and communication
- Advertisement and Branding
- Marketing promotional activities
- Corporate marketing
- Marketing for TPA and Cash Patients
- Marketing and medical ethics
- Social aspect of marketing

Suggested Reading

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

PAPER – 7: Health Management Information System- Code MHA 207

To study the need of management and information together forming a system integration of different aspects of MIS and Preparation of information system manual

- The meaning and use MIS systems view of business, process of MIS, development of MIS within the organization, common management process, information needs, systems approach in planning organizing and controlling MIS
- Planning Implementation and controlling of MIS
- Fundamentals of data processing computer operations of manual information system, components of computer system, flow chart, conversions of manual to computer based system, computer systems application software, telecommunication model.
- Management decision making , characteristics and components of decision support system
- Systems design - system design ,input output design forms, design file organization and data base, system design consideration, data management, file design control and security.

Suggested Reading

Management Information System - Srivastava
HIMS - NIHFWS Monograph, Govt. of India

Third Semester

PAPER – 1: Health Economics & Legal aspects of Health- Code MHA 301

HEALTH ECONOMICS

To study the economics and its relation to health status

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

LEGAL ASPECTS OF HEALTH

Rules and regulations of international health policy.

- Medico- Legal Problems in relation to health administration
- Law of Contracts, Specific Performance
- Law applicable to Hospital employees
- Medical jurisprudence and functioning of hospitals
- Consumer Protection Act and Hospitals
- I. D. Act, W.C. Act
- West Bengal Clinical Establishment Act and Rules
- ESI Act, Trade Union Act
- Organ transplantation Act
- PNDT - Act
- International health organization / NGOs
- Medical Ethics

Suggested Reading

Economics - Samuelson

Economics - Lipsey

Managerial Economics - S. Mukherjee

Law of Consumer - Universal Publications

Law and Medical Profession - Eastern Law Book Co.

Related Acts - Kamal Law Book House

PAPER – 2: Management Accounting -Code MHA 302

To understand the managerial accounting and its proper application

- Managerial Accounting – an overview
- Nature, Scope & Purpose of management accounting
- Some tools & techniques of management accounting
- Profitability analysis
- Budgeting
- Working Capital Management
- Decision Making
- Managerial cost and break even analysis

Suggested Reading

Principles of Accounting - Sharma

Accounting for Managers – Dutta

PAPER – 3: Principles of Hospital Management -Code MHA 303

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

- Concept of Health Care Industry & its ever-changing character
- Understanding functioning of Corporate multi-specialty hospital

- Managerial activities for effective hospital functioning
- Duties and responsibilities of Hospital Managers
- Qualities of effective Managers
- Effective inter and intra departmental co-ordination

Suggested Reading

Hospital Administration - Tabish

Hospital Administration - S. L. Goel

Hospital Administration Sakaharkar

PAPER – 4: Health Information and Biostatistics-Code MHA 304

To understand the various indicators of health, population dynamics, importance of health statistics in future planning for

health care services and understand health information system in India

- Health Information
- Components of Health Information
- Uses Of Health Information
- Sources of Health Information
- Incidence and prevalence rates. Morbidity statistics
- Mortality statistics
- Statistical Methods
 1. Simple Tables
 2. Frequency distribution Tables
- Charts and Diagrams
- Statistical Averages
- Measures of Dispersion
- Sampling

- **Suggested Reading**

Population Studies - Asha Bhendre

Elementary Statistics - Goon, Gupta, Dasgupta

Bio Statistics - Mahajan

Research Methodology in Social Sciences - P. C. Tripathy

Preventive & Social Medicine – Rabhaka Rao

PAPER – 5: Strategic Management & Operational Research -Code MHA 305

STRATEGIC MANAGEMENT

To understand strategic management in a hospital set up

- **Introduction**

Meaning, Scope and Importance of Strategic Management

Nature of Strategic Management, Characteristics, Strategic Management Process, Strategic Management Model. Dimension and Levels of Strategy. Role of strategists in business Policy, Situational analysis in health sector

- Strategy formulation and strategy implementation

Strategy Formulation: Corporate Planning, Concept of Planning, Planning Process, Types of Planning, Strategic Planning, Types of strategies - Guidelines for crafting successful business strategies.

Strategy Implementation: Structure, Systems and People, issues in implementation, **Model of Strategic Implementation**, Project implementation, Procedural implementation, Resource Allocation, Budgets,
- Forecasting methods, stakeholder analysis
- Monitoring techniques, evaluation procedures and tools

OPERATIONAL RESEARCH

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

- OR techniques and in applications in hospital, Linear Programming-Basic Concepts,Formulation, Graphical and Simplex Methods, Duality, Decision tree Analysis,Queuing theory, PERT, CPM, Assignment Model,Management by objective, Management by result

Suggested Reading

Principles of Management - L. M. Prasad
Essential Management in Global Perspective - Koontz
Operational Research - L. M. Prasad
Operational Research - P. C. Tripathy
Management by objectives- Drucker

PAPER – 6: Human Resource Development in Healthcare -Code MHA 306

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

- Concept of HRD
- Personnel vs HRD
- Need and significance of HRD, and Principles of HRD
- Rules & Regulation as applicable to Hospital employees
- Selection & Recruitment procedure
- Wage & Salary. – objectives and principle, factors affecting wages
- Training Need Assessment & Methods of Training
- Performance Appraisal concept, Methods and techniques of appraisal

Suggested Reading

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

PAPER – 7: Nutrition, Dietetics & Drug Management -Code MHA 307

NUTRITION & DIETETICS

- To understand about human nutrition and good dietary practices
- Food & Nutrition. Role of Antioxidants
- Overview of Metabolism & Balance Diet for patients
- Diet for Patient – Selection of food, Cooking methods, Tasty Food, Food to be avoid / Added in diet, Need of
- Complementary food.
- Steps to prevent food adulteration and Food Adulteration Act.
- Overview of Clinical Dietetics. Quality control of Food
- Hygiene and special precautions in Hospital Kitchen
- Management of Hospital diet / Catering service
- Role of dietitian in hospital diet service

DRUG MANAGEMENT

To understand different aspects of drug management and quality control

- Drug Management ; Present scenario

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

Suggested Reading

Text Book of Social and Preventive Medicine – K Park

Preventive and Social Medicine – Prabhakar Rao

Materials Management - Gopalakrishnan

Materials Management - A. C. Dutta

FOURTH SEMESTER

PAPER – 1: System Management & Medical Transcription -Code MHA 401

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

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

Suggested Reading

Medical Records - Geeta Sahay

Principles of Management - L. M. Prasad

Laws related to Medical Profession - Kamal Book House

Ethical issue related to Medical Profession - NIHFW, Monograph, Govt. of

PAPER – 2: OT & Ward Management/Floor Management -Code MHA 402

To understand management of wards and OT

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

Suggested Reading

Hospital Management - Tabish

Hospital Management - Goel

Hospital Management McGibony

PAPER – 3: Medical Equipments & Bio Medical Engineering -Code MHA 403

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

To learn to establish equipment management procedure for a hospital

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

Suggested Reading

• Materials Management - Gopalakrishnan

• NIHFW Monograph - Govt. of India

PAPER – 4: Patient Care Services & Hospitality Management -Code MHA 404

PATIENT CARE SERVICES

To consider various operational aspects of important services

- Patient Admission / Discharge
- All patients related services and assistance. Good communication.
- Nursing care with full devotion / commitment
- Diagnostics Services
- Blood transfusion services

- Housekeeping services
- Cafeteria and Dietary services
- Proper and respectful disposal of deceased person.

Hospitality Management

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

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

Suggested Reading

Hospital Administration - Tabish

Hospital Administration - Goel

Hospital Administration McGibony Hospital Administration - S. L. Goel

PAPER – 5: Hospital Planning & Health Insurance -Code MHA 405

Hospital Planning

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

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

Health Insurance

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

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

Suggested Reading

Principles of Hospital Administration - Tabish

Principles of Hospital Administration - M C Gibony

NIHFW Monographs – Govt. of India, New Delhi

Insurance Management - Dave

National Insurance - Monographs on Insurance Management

IRDA Guidelines on Health Insurance - Govt. of India

PAPER – 6: Disaster Management -Code MHA 406

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

- Components of disaster plan
- Disaster alertness in Hospital
- Disaster management planning and implementation
- Disaster Management Act
- Mock exercise on disaster management in Hospital

Suggested Reading

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

PAPER – 7: Nursing Administration & Quality Management -Code MHA 407 **NURSING ADMINISTRATION**

To study the role of nursing administration in health care delivery

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

Quality Management

To understand the concept of quality and its relation to health care scenario, its importance as regards patient satisfaction and Marketing of services provided

- Deming’s Principles, Juran Trilogy, Kaizen, Philip Crosby’s Principles
- Quality Assurance through record review and Medical Audit
 1. Professional review /Clinical Audit
 2. Comprehensive Quality Assurance System
 3. TQM in Healthcare
 4. Critical pathway
- Organization of Quality Management System (QMS) in Hospitals
- ISO 9000
- Hospital Accreditation, JCAHO, JCI, NABL, NABH
- Quality Council Of India

Suggested Reading

Hospital Administration ,DC Joshi
 Principles Of Hospital Administration and Planning ., BM Sakharkar

PRACTICAL TRAINING

First Semester

- 11.1 E D P / I T Department
- 11.2 Reception
- 11.3 Registration
- 11.4 Admission
- 11.5 Billing & Discharge
- 11.6 OPD Services
- 11.7 Public Relation Office
- 11.8 Pharmacy Services
- 11.9 Stores
- 11.10 House Keeping

Third Semester

- 33.1 Central Sterile Supply Dept.
- 33.2 Library in Hospital
- 33.3 Emergency
- 33.4 Critical Care Unit
- 33.5 Medical Record
- 33.6 Operation Theatre

Second Semester

- 22.1 Laboratory Services
- 22.2 Imaging Services
- 22.3 Personnel / H R Dept.
- 22.4 Laundry & Linen Services
- 22.5 Kitchen & Dietary Services
- 22.6 Marketi
- 22.7 Computerized Medical Record
- 22.8 Security Services
- 22.9 Transportation Services
- 22.10 Wards

Fourth Semester

- 44.1 Maintenance Department
- 44.2 Bio-Medical Department
- 44.3 Diagnostic Imaging
- 44.4 Dental Service
- 44.5 Dialysis Unit
- 44.6 Burn Units
- 44.7 Blood Bank
- 44.8 Mortuary
- 44.9 Telemedicine
- 44.10 Medical transcription

First Semester

11.1 EDP / IT Department

Participation in the process of:-

- 1) Lay out of EDP / IT Department
 - a) Server Room
 - b) EDP Lab.
 - c) Manager's Office
 - d) Hardware Engineer
 - e) Software Engineer / Programmer
 - f) Data Entry Operator
- 2) Different sections for data entry
- 3) Data collection
- 4) Data analysis
- 5) Dissemination of information
- 6) Storing and preservation of information / record
- 7) Optimum utilization of LAN / WAN / MAN system
- 8) Different modules used in EDP through ERP system like;
 - Registration, OPD, Admission, Discharge, Billing, Emergency, Laboratory, Nursing Station, Operation Theatre, Stores, Pharmacy, Pay-roll, different modules of Oracle and Envision system, Management Information System.
- 9) Maintenance of Computer including its accessories
- 10) Updating of modules on need based
- 11) Application of antivirus system

11.2 Reception

Participation in the process of:-

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

11.3 Registration

Participation in the process of:-

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

11.3 Admission

Involvement in the process of:-

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

11.4 Billing & Discharge

Involvement in the process of:-

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

11.6 OPD Services

Involvement in :-

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

11.7 Public Relations Office

(a) General

Helping patients regarding the followings:

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

(b) Corporate

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

11.8 Pharmacy Services

Involvement in:-

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

11.9 Stores

Observation and participation in:-

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

- 1) Space requirement
- 2) Lay out (as per category of store)
- 3) Storage facility, proper set up for particular type of medical and non-medical items
- 4) Issuance policy
- 5) Safety measure
- 6) Practical application of E O Q
- 7) Minimum stock level
- 8) Deployment of staff like;
 - a) In-charge
 - b) Store keeper
 - c) Record maintenance clerk
 - d) Attendant / Delivery person
 - e) Security etc.
- 9) Proper storage procedures
- 10) Indents
- 11) Issue of item as per indent
- 12) Record keeping of issued materials as well as balance stock
- 13) Delivery system
- 14) Physical verification of stored items periodically

11.10 House Keeping

Observation of:-

- 1) All departments, wards and adjacent areas within the hospital premises

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

Second Semester

22.1 Laboratory Services

Observation of:-

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

g) Attendant

22.2 Imaging Services

Observation of:-

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

22.3 Personnel / H. R.Department

Observation of:-

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

22.4 Laundry & Linen Services

Observation of

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

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

22.5 Kitchen & Dietary Services

- 1) Overview of kitchen lay out and its adjacent areas
- 2) Physical facilities
 - a) Receiving area
 - b) Washing area
 - c) Preparation area
 - d) Cooking area
 - e) Storing area
 - f) Food Distribution area
 - g) Garbage disposal area
 - h) Office of Kitchen Manager
 - i) Office Kitchen Staff
- 3) Work Flow
- 4) Patient visit and observation of the diet chart preparation
- 5) Observation and process of :-
 - i) Coordination with Dietitian before preparing process of food for patient
 - ii) Receiving and storage of perishable and non-perishable food
 - iii) Process of calculation the quantity of perishable & non-perishable items to be cooked
 - iv) Washing, cutting, preparation and cooking process
 - v) Storage of cooked food and precaution to be taken
 - vi) Delivery process of hot food (Hot Trolley) to patient according to diet chart
 - vii) Process of distribution of food in the cafeteria and dining hall
 - viii) Maintenance of hygiene by kitchen staff
 - ix) Safety measure
 - x) Receiving of soiled utensils and left over food
 - xi) Collection of utensils and washing process
 - xii) Garbage disposal system
 - xiii) Maintenance of Accounts
 - xiv) Pest control system
 - xv) Process of supervision and leadership style
 - xvi) Educational programme, research, dietary counseling etc.
 - xvii) Periodical audit
- 6. Organization
 - i) Qualified Kitchen Manager
 - ii) Dietitian

iii) Head Cook, Cook, Stuart, Masalchi, Helping Staff

22.6 Marketing

Observation / involvement in:-

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

22.7 Computerization of Medical Record

Observation / involvement in all elements of physical records maintenance plus.

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

22.8 Security Services

Observation of:-

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

22.9 Transportation Services

Observation of:

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

22.10 Wards

Observation of:-

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

Third Semester

33.1 Central Sterile Supply Department (CSSD)

Observation of

- 1) Location
- 2) Name and function of equipments
- 3) Items processed by Central Sterile Supply Department
- 4) Sterilization technique
 - a) Heat
 - b) Gas
 - c) Liquid
 - d) Ionizing radiation
 - e) Others
- 5) Work flow
- 6) Clean zone, dirty zone
- 7) Pooling of materials, equipments
- 8) Function of different equipments used for sterilization
- 9) Process of receiving and distribution of materials
- 10) Technique of Gauge folding
- 11) Cleaning, drying and packing of sterilized materials
- 12) Segregation of Dirty zone and clean zone
- 13) Process of receiving and distribution of materials
- 14) Quality control checking of sterilization in collaboration with Micro-biology Lab.
- 15) Organization
 - a) CSSD Supervisor
 - b) Technologist
 - c) Technical Assistant
 - d) Para medical staff
 - e) Attendant
- 16) CSSD Committee

33.2 Library in Hospital

Observation the functioning of :-

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

33.3 Emergency

Observation of:-

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

33.4 Critical Care Unit

Observation / involvement in:-

Physical structure and facilities

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

Maintenance of sterility and general cleanliness

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

Administration of CCU

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

- 3) Deployment of qualified paramedical staff as per WHO ratio)

Workflow

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

Equipment maintained in CCU

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

Equipment maintained in specialized CCU

- 1) Intra Aortic Balloon Pump
- 2) Photo Therapy Machine

Maintenance of uninterrupted gas and power supply system and their utilization

- 1) Continuous wall flow oxygen
- 2) Compressed air
- 3) Suction Apparatus (Vacuum Pump)
- 4) Uninterrupted Power Supply (UPS) line

33.5 Medical Records

Observation / involvement in:-

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

33.6 Operation Theatre

Observation / involvement in:-

- 1) Location
- 2) Zoning of Operation Theatre
- 3) Infrastructural facilities
- 4) Centralized and decentralized Operation Theatres
- 5) Equipment requirement
- 6) Procurement and maintenance including annual maintenance contract
- 7) Functions and policies of Operation Theatres
- 8) Manpower requirement
 - a) Medical Superintendent
 - b) In-charge
 - c) Anaesthetist
 - c) Nursing personnel
 - d) Technician
 - e) Ward Boy
- 9) Duties and responsibilities including standard operation procedures
- 10) Safety procedures
- 11) Methods of checking operating rooms for readiness to receive patient
- 12) Periodical sterilization / fumigation
- 13) Sterile supply
- 14) Equipments procurement and maintenance

Fourth Semester

44.1 Maintenance Department

Observation of

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

44.2 Bio-Medical Department

- 1) Bio Medical equipment and their function
- 2) Observation of Bio-Medical Equipments
- 3) Knowing the name of the Bio-Medical Equipments

- 4) Importance and fundamental functions of Bio-Medical Equipments
- 5) Maintenance procedures of Bio-Medical Equipments
- 6) Need assessment and procurement procedure
- 7) Periodical audit of Bio Medical Equipment
- 8) AMC of Bio Medical Equipments

44.3 Diagnostic Imaging

Observation / involvement in:-

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

44.4 Dental Services

Observation / involvement in :-

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

44.5 Dialysis Unit

Observation / involvement in:-

1. Location
2. Infrastructural facility
 - a) Infrastructure for day care dialysis or out patient dialysis
 - b) Infrastructure for inpatient dialysis
3. Various types of dialysis units
4. Special arrangement for maintaining sterility
5. Ambulatory dialysis system
6. Procurement, installation and maintenance of various types of dialysis machines
7. Arrangement for stand-by unit

44.6 Burn Unit

Observation / involvement in :-

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

44.7 Blood Bank

Observation / involvement in :-

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

44.8 Mortuary

Observation / involvement in :-

- 1) Location
- 2) Physical facilities
- 3) Body refrigerator
- 4) Walk in refrigerator
- 5) Capacity decision of Mortuary

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

44.9 Telemedicine

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

44.10 Medical Transcription

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