

Syllabus For
MASTER IN HOSPITAL ADMINISTRATION (M.H.A) Courses Under
The West Bengal University of Health Sciences

SEMESTER I (6 Subjects + Computer and IT for Hospital)

Code	Subject	SCHEME OF INSTRUCTION		SCHEME OF EXAMINATION			Total
		Lectures / week	Practical	Duration in hours	Internal marks	External marks	
101	Hospital organization and management theory	4		3	20	80	100
102	Healthcare Services and its Application	4		3	20	80	100
103	Hospital Accounting System	4		3	20	80	100
104	Bio Statistics	4		3	20	80	100
105	Legal & Medical Issues in Hospital	4		3	20	80	100
106	Principles of Marketing	4		3	20	80	100
107	Computer & IT for Hospitals	1	1		Grades	-	Grades
	TOTAL	25	1		120	480	600

SEMESTER II (6 Subjects + K.Y.H. + Internship - 1)

Code	Subject	SCHEME OF INSTRUCTION		SCHEME OF EXAMINATION			
		Lectures/ week	Practical	Duration in hours	Internal marks	External marks	Total
201	Health economics	4		3	20	80	100
202	Hospital Financial Management	4		3	20	80	100
203	Operations Research and Research Methodology in Hospitals	4		3	20	80	100
204	Strategic Management in Healthcare	4		3	20	80	100
205	Inventory Control and Purchase Management(ICPM) in Healthcare	4		3	20	80	100
206	Management of Hospital Services	4		3	20	80	100
207	Know your Hospital					Grading System	
	TOTAL	24			120	480	600

**Everyday in the afternoon the student is expected to spend two hours a day and a total of 120 to 160 hours in hospital during semester.

SEMESTER III (6 Subjects + Commencement of Dissertation)

Code	Subject	SCHEME OF INSTRUCTION		SCHEME OF EXAMINATION			Total
		Lectures/ week	practical	Duration in hours	Internal marks	External marks	
301	Patient Care Management	4		3	20	80	100
302	Total Quality Management	4		3	20	80	100
303	Human Resource Management (HRM)	4		3	20	80	100
304	Hospital Planning	4		3	20	80	100
305	Hospital Equipment Management	4		3	20	80	100
306	Hospital Information Systems	4		3	20	80	100
	TOTAL	24			120	480	600

- **Commencement of Dissertation**

Total time frame for dissertation should not be more than eight (8) weeks.

SEMESTER IV (6 subjects + Dissertation + Internship)

Code	Subject	SCHEME OF INSTRUCTION		SCHEME OF EXAMINATION			
		Lectures / week	practical	Duration in hours	Internal marks	External marks	Total
401	Biomedical Waste Management and Environmental Health	4		3	20	80	100
402	Entrepreneurship and Consultancy Management	4		3	20	80	100
403	Health Insurance and Medical Tourism	4					100
404	Special Paper	4		3	20	80	100
405	Dissertation						50
406	Internship			2 Months			100
407	GRAND VIVA						50
	TOTAL	16			60	240	600

*Student will commence dissertation work from the beginning of the 3rd semester and will appear for viva voce at the end of the 4th semester.

**Student will be posted for a period of Three months in a hospital for the completion of internship. During this period, his *or* her performance will be evaluated by the host administrator in a standard format under well defined parameters.

SPECIAL PAPERS

- 1. Marketing of Hospital Services**
- 2. Medical Records Management**
- 3. Hospitality Management**
- 4. Drug Management**
- 5. Healthcare Quality Management**
- 6. Nutrition and Dietetics**

** For any special paper there should be minimum 25 % students of the total strength.

SEMESTER-I

101: Hospital Organization & Management Theory

Objective: This subject focuses on acquainting the student with the principles and practices essential for managing a hospital organization. With an objective of imbibing a professional approach amongst students towards hospital management, the subject encompasses management principles, functions and processes, discussing their significance and role in effective and efficient management of health care organizations.

Contents:

Unit I: Definition of management; Productivity, Efficiency and Effectiveness; Managerial Skills

Evolution of management thought: Frederic W.Taylor's scientific management, Henry Fayol's principles of management, concept of bureaucracy, human relations approach, Behavioral approach, systems theory of organization, contingency theory of organization, management by objectives (MBO),

Unit II

Management functions: Nature of management process and managerial functions —

Planning

- Types(mission, purpose, objective or goals, strategies, policies, procedures, rules, programs, budgets)
- Steps in planning.
- Decision Making

Organizing

- Meaning and purpose
- Types :a)formal and informal
 - b) functional and matrix
 - c) line and staff
 - d)departmentation
- Authority & Power
- Centralization & Decentralization
- Delegation of Authority

Staffing

- **Recruitment & Selection (Basic Concepts)**

Directing

- Manager vs Leader
- Motivation (Concept)
- Leadership (Concept)

Controlling

- Basic control process
- Control as a feedback system
- Real time information and control
- Control techniques
- Concept of budgeting

Unit- III: Behavioral concepts and theories:

- **Concept of OB.**
- **Challenges and opportunity for OB**

Unit-IV: _____ _Motivational Theories

- Maslow's Need hierarchy,
- Theory X and Theory Y,
- Two factor theory
- Mc Clellands theory of needs
- Equity Theory
- Expectancy theory

UNIT-V:

Perception

- Concept and factors influencing perception
- Attribution theory
- Frequently used shortcuts in judging others.

Leadership

- Basic approaches to leadership.
- Trait theory.
- Behavioral Theory

Group

- Types.
- Formation.

References:

Syed Amin Tabish, Hospital and Health services administration ~ principles and practice, *oxford* university press, New Delhi, 2001.

Graw Hill, New Delhi, 1998

James A.F.Stoner, R.Edward Freeman and Denier R. Gilbert Jr., Management, Prentice Hall India, New Delhi, 1997.

Kountz Harold, Heinz Weihrich, Management - A global perspective, 19th edition, Mc Graw Hill International, New Delhi, 2005.

Srinivasan A.V. Japanese management - The Indian context, Tata Me Oraw Hill, New Delhi, 2000.

Koontz Harold, Heinz Weihrich, Essentials of management, Mc Oraw Hill Intenational, New Delhi, 2004.

L.M.Prasad, Principles and practice of Management, 6th edition, Sultan Chand Pilblisher, New Delhi, 2001.

102: Healthcare Services and its Application

Objective: To provide the students a basic insight into the main features of Indian health care delivery system and how it compares with the other systems of the world.

Contents:

Unit 1

Health and Disease

Concept, Definitions & Dimensions of health, Wellbeing, Determinants of health, Evolution of medicine, Public Health, Health indicators, Health service philosophies, Disease & causation, Natural history of disease, Disease control & prevention, Changing patterns of disease.

Medical sociology –Introduction Sociological perspective of health, illness and healing. Institutional perspective and Organizational perspective.

Unit 2

Public and Private Health Care Services in India

Evolution of public health systems in India (ancient, colonial & post independence), Health Planning in India (Committees, Planning commission, Five year plans, National Health Policies), Public health systems in India (Center, State, District & Village level), Rural development, Corporate philosophy, Evolution and organisation of private health systems in India and Current trends in private health care in India.

Unit 3:

WHO- Objective, functions, **UNICEF-** objective and functions. Different Model of Healthcare- The Beveridge Model, The Bismarck Model, The National Health Insurance Model, The Out-of-Pocket Model. Brief Introduction of Health System of different countries: USA, UK, Canada, Australia, Sweden, and Germany.

Unit 4

Population Health

Introduction to population studies, Issues of Indian society & culture, Nuptiality & Fertility, Reproductive health, Population and Development (policies, programs & evaluation), introduction to epidemiology (concept, terms, aims & uses), definition of epidemic, endemic, pandemic, sporadic. Prevalence and Incidence. Epidemiological methods- basic idea of Cohort study, Case Control study and RCT. Epidemiology of communicable diseases (TB, STDs, Diarrhoea & HIV/AIDS) and Epidemiology of Non communicable diseases (CHD, Cancer, Diabetes, Hypertension & Obesity).

Unit 5

Contemporary Issues in Health Services Management

National Health Policy; Reproductive, Maternal, Newborn, Child, and Adolescent Health (RMNCH+A); National Vector Borne Disease Control Programme (NVBDCP)

References:

- Park K: 2005. *Text Book of Preventive and Social Medicine*. Banarsidas Bhanot Publishers: Jabalpur. 18th Ed.
- Beaglehole R & Bonita R. 1997. *Public Health at the Crossroads: Achievements and Prospects*. Cambridge University Press: United Kingdom
- Gupta M C, Chen L C & Krishnan T N. 1996. *Health Poverty and Development in India*. Oxford University Press: Bombay
- White K. 2006. *The Sage Dictionary of Health and Society*. Sage Publications: New Delhi
- Kumar R. 1998. *Medicine and the Raj: British Medical Policy in India (1835-1911)*. Sage Publications: New Delhi
- Goel S L. 2001. *Health Care System and Management: Primary Health Care management*. Deep & Deep Publications: New Delhi. Vol 4
- Harris M G & Assoc. 2003. *Managing Health Service: Concepts & Practices*. MacLennan + Petty: Sydney
- Beaglehole R, Bonita R & Kjellstrom T. 1993. *Basic Epidemiology*. WHO: Geneva
- Gwatkin D R, Wagstaff A & Yazbeck A S. 2005. *Reaching the Poor with Health, Nutrition & Population Services: What works, What doesn't & Why*. WB: Washington DC
- Bhende A & Kanitkar T. 1992. *Principles of Population Studies*. Himalaya Publishing House: Bombay. 5th Ed.

103: Hospital Accounting System

Contents:

Unit-I: Financial Accounting

- Nature & scope
- Accounting principles
- Capital expenditure, Revenue expenditure, Capital income, Revenue income and capitalized expenditure.
- Journal, Ledger & Trial Balance
- Preparation of Final Accounts & Balance Sheet

Unit II: Cost Accounting

- Nature and Scope
- Cost classification & their concept
- Preparation of cost sheet for hospital bed charges, food charges and various medical services.
- Cost control & Cost reduction
- Operating costing for Hospital industry.

Unit-III: Management Accounting

- Nature & scope
- Cost-Volume-Profit (CVP) Analysis
- Cash Flow Analysis
- Fund Flow Analysis
- Ratio Analysis
- Budgeting & Budgetary control- preparing the budget and flexible budgeting.

References

Maheswari, S.N., An Introduction to accounting, Vikas Publications, New Delhi, 1994,
Horngren, C.T., Gary L. Sundem, Introduction to Management Accounting, Prentice Hall India,
New Delhi, 1986.

Grewal, T.S., Introduction to Accountancy , S.Chand & S. Chand & Sons, New Delhi 1994.

Jain, S.P., K.L. Narang, Advanced Accountancy, Kalyani Publishers, Ludhiana, 1995.

Rickettsdon, Jackgrey, Managerial Accounting, Houghton Mifflin Company, Boston, 1991.

Accounting For Managers by CA C.Rama Gopal (New Age International Publishers)

Cost Accounting by Jawahar Lal (McGraw Hill)

Cost & Management Accounting by Hanif & Mukherjee (McGraw Hill)

104: Biostatistics

Objective

This subject intends to familiarize the student with basic statistical tools and techniques and the use of inferential statistics in analyzing quantitative data in the Hospital System. More emphasis should be given on managerial implication instead on the computation acumen.

Content

Unit-I

Statistical Measures and Presentation of Data- Basic concepts of statistics – utility and limitations of Statistics

Measures of central tendency- Arithmetic Mean, Weighted Arithmetic Mean, Median, Mode, Quartiles; Measures of Variation, Standard Deviation (basic formula and problems)

Presentation of data- Bar Diagram, Histogram, Frequency Polygon, Frequency Distribution Curves, Ogive and their managerial implications

Unit – II

Probability

Concepts and definitions of probability, Additive and Multiplicative laws, Conditional probability.

Unit-III

Probability distributions: Discrete – Binomial and Poisson; Continuous-Normal, emphasizing on their applications to hospital environment.

Unit – IV

Simple Correlation and Simple Regression.

Time Series – components, fitting a trend line by least squares method.

References:

Gupta S.P., Stastical methods, Sultan Chand, New Delhi, 1993.

Levin, R.I. and Rubin. D.S., Statistics for management, Prentice Hall, New Delhi, 1988.

Sunder Rao, P.N.S. and Richard, J., An introduction to biostatistics: A manual for students in health sciences, Prentice Hall, New Delhi, 1996.

Milton S.J., Statistical methods in the biological and health sciences, McGrew Hill, Singapore, 1992.

Hill B.A., Medical statistics, Hodder & Stoughton, London, 1984.

John T. Mentzer, Sales Forecasting Management, Response Books, New Delhi, 1998.

Periodicals:Health Information of India, Government of India; Hospital Information Review.

105: Legal and Medical Issues in Hospitals

Objective:

To acquaint the students with various legal aspects concerning type and character of the health care organizations and its duties towards patients and its employees. To familiarize the students in matters of liability of hospital medical negligence and medical malpractice in diagnosis, administration of drugs, surgery etc.

Contents:

Unit I

Law and establishment of hospitals-private / public hospitals, legal requirements under medical council Acts. West Bengal Clinical establishment Act and rules 2017 (as amended till date).

Unit-II

Essentials of contract Act. Contractual obligations in hospital services - requisites of a valid contract - hospital as 'bailer' - sale and purchase of" goods- duties towards patients - code of ethics - violation legal consequences.

Unit-III

Legal aspects relating to organ transplantation, MTP Act, 1971, Basics of Drugs and Cosmetic Acts, anesthesia. ESI Act, PNDT Act, AERB, ICMR Guideline of Scientific Research Members, clinical trials.

Unit-IV

Legal liability of hospitals - criminal, civil and tortuous; liability for negligence, consumer protection law, absolute liability and vicarious liability, legal remedies available to patients: remedies under contract law, tort, criminal law and consumer protection' Act. Medical Jurisprudence.

Unit-V

Medical ethics – basic issues, importance, process of developing and implementing ethics and values in an institution – codes of conduct: Hippocrates oath and declaration of Geneva 2006 – NMC regulation – professional conduct, etiquette and ethics.

References:

Anoop Kaushal K, Medical negligence and legal remedies, 3rd edition, universal law Pllblshcr.5. New Delhi, 2004.

Avtar singh, company law, 13th edition, Taxmann publishers, Lucknow, 2001.

Consumer Protection Act 1986

Francis D., Government and Business, Himalaya publishing House, 1988

Gupta D and Gupta, S. Government and business, Vikas Publishing House, 1987 Varma, D.P.S, Monopolies. Trade Regulations and Consumer Protection, T-ata McGraw Hill, New Delhi, 1985.

R.K. Chaube, consumer protection and the Medical profession, Jaypee Publishing, New Delhi, 2000.

Steven, D. Edwards, Nursing Ethics, A principle Based Approach, Macmillan Press Ltd., London, 1996.

Indian Penal code, Indian Evidence Act, Criminal Procedure code

Industrial Disputes Act, Indian Companies Act

Indian Medical council act.

Goswami, Labor law.

Commercial Laws – N.D.Kapoor.

106: Principles of Marketing

Objective:

This subject will provide an exposure to the conceptual framework of marketing in general and specific to hospitals. This learning will enable the students to understand the need, relevance and necessity of marketing in today's competitive market environment, facilitates them operationalizing and implementing marketing as an integral functions in a Healthcare scenario.

Contents:

Unit I

Introduction to Marketing:

Meaning and importance of marketing, role of marketing in modern organizations, basic concepts of marketing, evolution of marketing, scanning the marketing environment, Marketing Mix

Unit II

Product and Pricing strategies:

Constituents of a product, classification of products, Product life cycle as a tool for marketing strategy, classification of new products, Objectives of pricing, Methods of pricing, Selecting a final price.

Unit III

Distribution and Communication strategies:

Distribution: concept and importance, Channel management decisions, franchisee handling
Promotion-mix, managing advertising, sales promotion, publicity and public relations, Sales force, Word of Mouth, e-commerce

Unit IV

Market Segmentation, Targeting and Positioning:

Identification of market segments, Consumer and business clientele, Segmenting consumer markets, Segmentation basis, Selecting target market, developing and communicating a positioning strategy.

Unit-V

Service Marketing

Characteristics of services and their marketing implications, Service Mix decisions, concept of Internal marketing, Managing Service Quality (SERVQUAL), Gap Model, Concepts of consumer satisfaction, zone of tolerance.

Unit VI

Marketing Implementation and control:

Marketing implementation, control of marketing performance- annual plan control, profitability control, efficiency control, strategic control.

References:

1. *Marketing Management* by Philip Kotler, Pearson publishers, 2003
2. *Marketing Management* by Rajan Saxena, TMH, 2005.
3. *Marketing-the best practices* by K.Douglar, Hoffman&Czinkota, Thomson, 2004
4. *Basic Marketing* by William D. Rerreult&Mc Carthy, TMH,2005
5. *Marketing Management* by V.S.Ramaswamy, Namakumari, Macmillan, 2006

107: Computer and IT for Hospitals

Objective:

Familiarize the student with: PC environment, software and hardware, advanced SW packages of corporate utility, IT use for presentation with focus to activities related to hospital management.

Contents:

Unit I

Introduction to computers

Definition, characters, hardware, software, generations of computers, Operating system.

Unit II

Networks and database

Importance of network, types of network, network software and hardware, database languages, Backup features, data recovery security features.

Practices

Windows and MS Office

MS Word: Templates and Wizards, formatting text, , editing, tables and graphics, spell check, printing, macro commands

MS Excel: Data entry, formatting, data handling, functions, formula, goal seek, scenario solver, filter, graphs, charts and mapping, statistical applications;

MS PowerPoint: Converting Word into PP, formatting, templates, slide show, animation, art and sound, file management, handout printing.

MS Access: Data in tables, using forms, queries, reports.

References:

Gordon B. Davis and M. H. Ols'on, Management Information System, McGraw Hill Publishing Company, New Delhi, 1998.

William S.Davis, Systems Analysis and Design-A Structured Approach, Addison Wesley Publishing Company, New Delhi, 1998.

Elias M. Awad, System Analysis and Design, Galgotia Publications, New Delhi, 1998. V. Rajaraman, Fundamentals of Computers Prentice Hall India, New Delhi 1996. Lonnie

Semester-II

201: Health Economics

Objective:

The primary aim of this subject is to provide a clear, concise introduction to micro economic concepts, health economics as applied to hospital and health care sector.

Unit-I:

Introduction: Definition of Economics, Circular flow of economic activity, Relation between Economics and Health Economics, Importance of Health Economics.

Theory of Utility: Definition and concept of Utility, Total and Marginal Utility, Laws of diminishing and equi-marginal utility, concept of consumer's surplus.

Theory of Indifference Curve: Concept, Properties, Equilibrium, Price, income and substitution effect and derivation of demand curve, Concept of PCC and ICC.

Theory of Demand: Law of demand, Nature of goods, concept of price-income-cross price elasticities.

Unit-II

Theory of Production: Concept, factors and its implications. Production function- short and Long run. Laws of diminishing marginal returns and variable proportions.

Theory of cost: Short and Long run cost function. Fixed and Variable costs- Opportunity Cost- Average and marginal cost, Shape of SAC, SMC, LAC and LMC.

Unit-III

Market Morphology:

Market- its concept in economics, Perfect competition- nature, short and long run equilibrium, concept of break even and shut down point, Impact of internality and externality on industry supply.

Monopoly- Definition, short and long run equilibrium, Price discrimination. Monopolistic competition- Short and Long Run equilibrium, Concept of product differentiation.

Oligopoly- Definition, Characteristics, Cournot and Sweezy Model.

Unit-IV

Theory of Distribution: Theory of wage, equilibrium wage determination in perfection and imperfection in both product and factor market. Concept of exploitations, Theory of Interest- Keynesian Liquidity Preference.

Macro Economics: Inflation- Demand pull and cost push, Impact and remedial measures, Fundamental concept of National Income.

Unit-V

Health Economics

Indian scenario, effect of globalization and privatization, Importance of PPP Model, Problem faced by health industry, Changing scenario of health industry, Public initiative to eradicate difficulties, Prospects. Alternative Models of Hospital Behavior-Utility Maximizing Model, Physician Control Models, The Trend towards Multi Hospital Systems.

Reference:

1. Health Economics for Hospital Management- Shuvendu Bikash Dutta- Jaypee Brothers Publication.
2. Microeconomics Theory- A. Koutsoyiannis
3. Economics- Asish Banerjee and Debasish Majumdar
4. Managerial Economics- D.N. Dwivedi
5. Macroeconomics- H.L. Ahuja
6. Health Economics- N.K. Anand and S. Goyal

202: Hospital Financial Management

Objective:

The objective of this subject is to expose the students to decision making by corporate board in the areas of finance function. It will equip the student with concepts, technical and analytical tools for optimal management of financial resources of a business enterprise.

Contents:

Unit I

Financial Management – an overview, Nature, scope, functions, goals, sources of finance-an overview

Unit II

Fundamentals of valuation concepts.

- Time value of money
- Risk & Return-trade off (Elementary idea)

Unit III

Working Capital Management including

- Cash Management
- Receivables Management
- Inventory Management

Unit IV

Investment decisions

- Capital Budgeting- NPV, IRR, PI, ARR.
- Cost of Capital-overall vs. specific cost of capital

Unit V

Dividend decisions-dividend theory, dividend policy

Unit VI

Long term financing- issue of shares, debentures, other modes of financing.

References:

Khan and Jain, Financial management, fourth edition, Tata Mc Graw Hill, New Delhi, 2004.
Pandey I.M., cases in Financial management, Tata Mc Graw Hill, second edition, New Delhi,

2003. .

William N. Zelman, Michael J. McCue, Alan R. Millikan, Alan R. Milikan, Financial Management of Health Care Organizations: An Introduction to Fundamental Tools, Concepts, and Applications, Blackwell Publishers; January 1998.

Bruce R. M.W. John, Fundamentals of financial management, Prentice Hall India New Delhi, 1995

James C. V. and M.W. John, Fundamentals of financial management, Prentice Hall India.

203: Operations Research and Research Methodology in Hospitals

Objective:

To cover the Operations and Maintenance aspects with reference to full Utilization of resources in a hospital. To provide basic understanding towards research principles and methods. To introduce important analytical tools for research data analysis. To assist in the development of research proposals/reports.

Contents:

Unit I

Introduction to Research:

Nature of Research – meaning, Purpose, Characteristics - types of research – Process of research – Selection and specification of research problem –difficulties in health care research

Unit II

Methods of Research:

Research Design, Types of Research Design and their applicability, Sources of Error, Brief idea of Clinical Trial – Phase I, Phase II, and Phase III.

Unit III

Data Collection and Presentation :

Data vs Information, kinds of data and their limitations.

Methods of collecting data – census vs sampling, Primary vs Secondary data

Methods of sampling and sampling designs.

Techniques of Primary data collection: Questionnaire, interview, Observation; Measurement and scaling techniques – rating scales – attitude scales.

Presentation of data – Editing, coding, classification, Tabulation, graphic and diagrammatic presentation of data.

Unit IV

Interpretation and Report Writing :

Interpretation – essentials for interpretation – Precautions in interpretation – conclusions and generalization – statistical fallacies – objectivity in interpretation

Report Writing : Meaning and types of reports – stages in preparation of report – characteristics of a good report – structure of a report – documentation – foot notes – bibliography – style and literary presentation

Unit V

Hypothesis Testing: Hypothesis, Null vs alternative, level of significance, Type I type II error

Z test- basic formula and problems

T test- basic formula and problems

Chi square- basic formula and problems

ANOVA- theoretical concept

Unit-VI

Linear Programming Problem

Various types of LPP and its application in hospital environment.

Unit VII

Network Analysis

PERT, CPM, shortest route algorithm

Unit- VIII

Game Theory- simple two-person zero-sum games.

Queuing Theory- Essential features and characteristics, M/M/I queue model, application in hospital sector (description only).

References:

Research Methodology:

Hair J F, Bush R P & Ortina D J. Marketing Research: with a change of information environment. 3rd Ed. Tata McGraw Hill, New Delhi: 2006.

Cooper D & Schinder P. Business Research Methods. 8th Ed. Tata McGraw-Hill Publishing Company Ltd. New Delhi: 2003

Newman W L. Social Research Methods: Qualitative and Quantitative Approaches. 5th edition. Allyn and Bacon. Boston; London: 2006

Trochim W M K. Research Methods. 2nd Ed. Biztantra. New Delhi; 2003

Paul G E, Tull D S & Albaum G. Research for Marketing Decisions Prentice Hall. New Delhi: 1996

David L J & Wales H G. Market Research. Prentice Hall of India. New Delhi: 1999

Beri G C. Marketing Research. 3rd Ed. Tata McGraw Hill Publishing Company Ltd. New Delhi: 2000

Das.lal Practise of Social Research. Rawat Publication, Jaipur:2000

Das,Lal Designs of Social Research, Rawat Publication, Jaipur 2005

Kothari C R. Research Methodology Methods & Techniques. New Age International Private Ltd., New Delhi:2000

204: Strategic Management in Healthcare

Objective:

This subject will integrate all management concepts to look at the organisation from futuristic – both long and short term point of view. The emphasis will be on organizational analysis, planning and formulation of strategies

Contents:

Unit I

Introduction to strategic management

Organizational mission: Philosophy, policy, Strategic Intent, vision, mission, values.

Defining Strategy, Strategic management process, Strategic objectives, Porter's value chain: concept and applications

Unit II

SWOT analysis

Industry characteristics analysis: PEST analysis, Porter's five force

Organizational analysis: Capability factors: Financial, Marketing, Operational, Personnel, General Management

Unit III

Level of strategy

Corporate Level Strategy: Grand Strategy, Portfolio analysis: BCG Matrix,

Business level Strategy: Generic Business Strategy

Functional strategy analysis: Plans and policies: Financial, Marketing, Operational, Personnel, Information Technology and Integration

Unit IV

Implementation: Corporate culture, structure, human resource, rewards.

Strategic Evaluation: Brief concept of Bench marking and Balance Score card.

Control of strategies: strategic diagnosis, operational diagnosis.

CSR: Management and society, culture and management, management ethics, social objectives and responsibilities of management, corporate social responsibility- hospitals and social responsibility.

References:

- Oster Sharon M. Strategic Management for non profit organizations, Oxford publishers, New Delhi.
- Lawrence R. Jauch and WF Glueck, Business Policy and strategic management, 6th edition, Frank brothers, New Delhi, 2003.
- Srivastava; Management Policy and Strategic Management; Himalaya Publications, Mumbai. .
- Allio, Robert J; The practical Strategist - Business and corporate strategy for 1990s, Indus publications, 1994.
- Kazhmi, Business Policy and strategic management, Tata Mc Graw Hill, New Delhi, 2002.

205: Inventory Control and Purchase Management in Healthcare

Contents:

Unit – I **Materials Management**

Overview, the modern concept, scope and objective, special features of materials management applied to hospitals, Documents used in the material function.

Unit II **Purchase Management**

- Purchasing function- objectives and scope of purchasing in service organizations, responsibilities of purchase department, centralized and decentralized purchasing activities.
- Purchasing cycle, concept of '5Rs'.
- Negotiation in purchasing: Purpose and objectives
- Letter of Credit, confirmed and unconfirmed L/C
- Types of hospital imports, import and export procedures, government policy, Documentation, Legal aspects of purchasing

Unit III **Hospital Inventory Management**

- Definition of inventory- Need of control, objectives of inventory control, impact on profitability of the organization, different types of hospital inventories, categories of materials in hospital as un-expendable and expendable, classification of un-expandable items, hospital maintenance items, spare parts stocking policies for capital items.

Unit – IV **Inventory Control**

- Selective inventory controls- concept of selective inventory control, basis and use of different types of selective controls-ABC, VED, FSN, SDE, composite methods. Brief introduction on HML, GOLF, XYZ system. Current system in Hospitals- brief concept.
- Costs associated with inventories – Ordering cost, carrying cost, over-stocking cost, under-stocking cost, Relevance of service level.

- Derivation of EOQ formula, reasons to modify EOQ to suit to real life situations, effect of quantity and price discounts on EOQ.
- Just in time
- Lead-time analysis, elements of lead-time
- Inventory models: safety stocks, fixation of re-order level and desired inventory level, designing of Q and P models of inventory control.
- Supply Chain Management (SCM): Concept of SCM, components, hospital supply chain management, global competitive scenario.

Unit – V **Hospital Stores Management**

- Hospital Stores Organization: Objective, function, relevance and importance of store keeping, functions and responsibilities of stores, elements of good stores organization, stores organization in hospitals: centralized and decentralized stores.
- Stores layout, principles for building designs for stores, factors influencing stores layout, storage facility, bin location,
- Stock accounting and stock recording different methods of stock verification, investigation of discrepancies, reconciliation, stock adjustment, write off and stock valuation.
- Stock valuation methods -LIFO, FIFO, Brief Introduction of Simple and weighted average method.
- Standardization and codification.

Unit – VI

Hospital Material Handling

- Principles of good material handling, Major equipments of material handling in hospital

Condemn Board- basic concept.

References:

Shakti Gupta, Sunilkanth – Hospital Stores Management, Jaypee Brothers
 Srinivasan A.V. (ed), Managing a modern hospital, Chapters 6, 7, 8, 9, Response Books, New Delhi, 2000.
 Gopalakrishna, P., Materials Management, Prentice Hall, New Delhi, 1997.
 Gopalakrishna, P., Purchasing and Materials Management, Tata MC.Graw Hill, New Delhi, 1995

206: Management of Hospital Services

Objective:

To enable the students gain insights into various aspects like importance, functions, policies and procedures, equipping, controlling, co-ordination, communication, staffing, reporting and documentation of both clinical and non clinical services in a hospital.

Unit- I

Overview

Hospital operations management, role and decisions, Difference of hospital operations from other service and manufacturing organizations.

Unit – II

Out Patient Services

Overview of the department, day care, accident and emergency services, physical medicine and rehabilitation, occupational therapy unit, physiotherapy department

Unit – III

In Patient Services

Nursing service and ward management, critical care services – ICU, CCU, NICU, , medical services, surgical services – operation theater, nuclear medicine, burn unit, nursing services and administration.

Unit – IV

Speciality Services

Paediatrics, OBG & GYN,ENT, Ophthalmology, Orthopedic, Psychiatry, Anaesthesia, Dental

Unit – V

Super-speciality Services

Cardiology, Thoracic Surgery, Neurology,Neurosurgery, Nephrology- Dialysis Unit, Transplantation Services.

Unit – VI

Support Services

Diagnostic-Radiology & Imaging Services, Hospital Laboratory etc, Blood Bank & Transfusion Services, Ambulance Services, Pharmacy ,CSSD, Oxygen Manifold/ Concentrator, Dietary Service, Hospital Laundry and Linen, Medical Social Worker, Marketing and Public Relations, Finance and Administrative Departments, Outsourcing.

Unit – VII

Utility Services

Housekeeping, Hospital Engineering and Maintenance, Biomedical Department, Central Stores and Purchase Department, Medical Records-confidentiality of records, reception, enquiry, registration and admission, central billing and accounts, Cafeteria/canteen, Mortuary.

Unit-VIII

Miscellaneous

Hospital Acquired Infection (HAI)- Committee formation and reporting, Fire safety in a hospital-classification of fire, procedure for evacuation. Telemedicine- introduction, importance, practice guidelines-protocols & Standards as per NMCN.

References:

- Joshi, DC; Joshi, Mamta (2009), Hospital Administration, Jaypee Brothers Medical Publishers (P) Ltd.
- Kunders, G.D.(2004)-Facilities Planning and Arrangement in Healthcare, Prism Books Pvt Ltd. Bangalore.
- Davies Llewellyn R & macaulay H M C(1995)- Hospital Planning and Administration, Jaypee Brothers, New Delhi.
- Sakharkar, B M (1998)-Principles of Hospital Administration & Planning-jaypee Publishers New Delhi.
- Goel, S L (2001 Vol 1-4)-Healthcare Systems and Management, Deep and Deep Publications, New Delhi
- Srinivasan A V (2002)- Managing a modern hospital, Response Books, New Delhi
- Sharma K R, Sharma Yashpal(2003)- A handbook on Hospital Administration, Durga Printers, Jammu
- Sharma, Madhuri(2003)-Essentials for Hospital Supportive Services, Jaypee Brothers, New Delhi
- Tabish, Syed Amin-Hospital Planning, Organization and Management

207: Know your Hospital

Objective

Since the entry qualification for this masters degree program is graduation in any discipline exposure to and understanding of the internal working of a hospital is essential for every student to appreciate and assimilate the learning in the Masters programme. The subject is designed to facilitate this learning-objective and is based on the principle of “learning by observation”. This subject will also help to learn “working in teams”.

Pedagogy

All departments, administrative and clinical, will be divided into “Activity Clusters”, numbering about 18 in a typical large hospital. Every student, in the team, will be exposed to every Activity Cluster in rotation. A schedule covering the post-lunch periods in the II Semester allocating all teams over all activity Clusters will be prepared. The student-team will visit the Cluster on the allotted days and study the activities as per the guideline provided by the faculty. The student-team will also be required to do night duty, at least on three occasions.

The students are encouraged to make Power Point Presentations.

Evaluation

Total marks of 100 will be distributed as:

- 50 for the content of reports
- 30 for the presentation on the assigned department
- 20 for attendance and submission of night duty report.

The evaluation will be done by a panel of three members including head of the concerned department of the hospital.

Contents

The program will start right from the beginning of the second semester. A brief introduction of the hospital, formation, of teams, and announcement of schedules will precede this.

KYH schedule is for two days in each Activity Cluster. The structure of learning will be:

UNIT-I

- ❖ Objectives of the Activity Cluster

UNIT - II

- ❖ Hierarchy and structure of the Activity Cluster

UNIT – III

- ❖ Identifying major and critical activities of the Activity Cluster
- ❖ Studying the processes of the Activity Cluster from systems point of view: input-process-output

UNIT – IV

- ❖ Identification of areas in need improvement.
- ❖ Each team will be assigned one major process of the department and they will be asked to present the details of the particular process through systems framework.

UNIT-V

- ❖ The students will be detailed for night duties along with the night duty executive which is intended to acclimatize students to the night environment of the hospital, so that they would appreciate special demands and understand various protocols, etc.

Semester III

301: Patient Care Management

Objectives:

To understand the processes and details related to effective patient care and to further increase the satisfaction levels of patients

Contents:

Unit I

Patient centric management

Concept of patient care, Patient-centric management, Organization of hospital departments, Roles of departments/managers in enhancing care, Patient counseling & Practical examples of patient centric management in hospitals.

Unit- II

Patient safety and patient risk management, Basic Life Support, Patient Satisfaction, feedback and grievances.

Unit III

Patient classification systems and the role of casemix

Why do we need to classify patients, Types of patient classification systems, ICD 10 (CM, PM), Casemix classification systems, DRG, HBG, ARDRG, Casemix innovations and Patient empowering classification systems.

Unit IV

Medical ethics & auditory procedures

Ethical principles, Civic rights, Autopsy, Vicarious liability, Use of investigational drugs, Introduction/need & procedures for medical audit, Audit administration & Regulating committees.

Confidentiality and professional secrecy, ethics of trust and ethics of rights – autonomy and informed consent, under trading of patient rights – universal accessibility – equity and social justice, human dignity.

Unit V

Disaster preparedness

Policies & procedures for general safety, disaster plan and crisis management. Basics of disaster management and Mass casualties, Components of disaster plan : pre-hospital and hospital, Disaster alertness in Hospital, Disaster management planning and implementation, Severity of illness amongst disaster victims and risk assess, Triage, different colour coding related to disaster.

Unit VI

Patient Medical Records

Policies & procedures for maintaining medical records. e-records, legal aspects of medical records, its safety, preservation and storage.

References:

- Goel S L & Kumar R. 2004. Hospital Core Services: Hospital Administration of the 21st Century. Deep Deep Publications Pvt Ltd: New Delhi
- Gupta S & Kant S. 1998. Hospital & Health Care Administration: Appraisal and Referral Treatise. Jaypee: New Delhi
- Harris M G & Assoc. 2003. *Managing Health Service: Concepts & Practices*. MacLennan + Petty: Sydney
- Kelly D L. 2006. Encyclopaedia of Quality Management in Hospitals & Health Care Administration. Vol 1-6. Pentagon Press: Chicago
- Kilpatrick A O & Johnson J A. 1999. Handbook of Health Administration & Policy. Marcel Dekkes Inc: New York
- Kumar A. 2000. Encyclopaedia of Hospital Administration & Development: Volume I. Anmol Publications Ltd: New Delhi.
- Ransom S B. Joshi M S & Nash D B. 2006. The Health Care Quality Book: Vision, Strategy & Tools. Standard Publishers Distributors: Delhi
- Reddy N K S. 2000. Medical Jurisprudence & Toxicology. ALT Publications: Hyderabad
- Rao M S. 1992. Health & Hospital Administration in India. Deep & Deep Publications: New Delhi

302: Total Quality Management

Contents:

Unit I

Quality

Definition, Value concept of Quality, Dimensions of Quality

Unit II

Quality Management concepts

Definition, Objectives of Quality Management

Quality Gurus and their contribution – Juran, Deming, Ishikawa, Taguchi, Crosby

Quality management – Quality Planning, Quality Control, Quality Improvement

Unit III

Statistical Quality Control

What is SQC, Difference with 100% Inspection

Statistical process Control – Control chart for variable (Xbar, R chart), Control chart for

Attributes (p & c Chart)

Process Capability, Six Sigma

Acceptance Sampling – Simple and Double sampling

Unit IV

Total Quality management

Definition, Principles of TQM, Quality Council

Concept of Internal supplier & Internal Customer

Kaizen, Quality Circle, Quality Improvement Teams,

Seven basic QC Tools - check sheet, Histogram, Scatter diagram, Process Mapping, Cause and

Effect diagram, Pareto analysis, control charts,

Cost of Quality

Bench Marking

Unit V

Quality management System

Quality Manual

Introduction to National quality control guideline 2013 by NRHM

NABH, NABL, JCI

Quality Audit

Unit VI

Current trends in TQM

Quality in healthcare

References:

Bester field H.Dale, Total Quality Management, Pearson New Delhi, 2005.

Sridhar Bhat, Total Quality Management, Himalaya House publications, Mumbai, 2002

Sundara Raju, S.M., Total Quality Management: A Primer, Tata McGraw Hill, 1995.

303: Human Resource Management (HRM)

Objective:

In today's competitive world, organizations can only thrive on human resources as their cutting edge. Good people management helps the organizations to leverage their strengths and attain a sustainable growth. Any HR intervention taken up, as such should be in line with the long term and short term goals and strategies of the organization.

This subject acquaints the students with major functions of HRM aligned with the business strategy, as HR is the function that can link people and strategy to achieve organizational performance.

Contents:

Unit I

Introduction to HRM

HRM Meaning, roles in an organization, difference with personnel management, HR planning, concepts and methods.

Unit II

Human Resource Planning (HRP)

Definition, Importance, Demand Forecasting (Delphi Technique, Ratio-trend analysis), Supply Forecasting (Skill inventories, Replacement Charts), Human Resource Information System (HRIS), Job description-job specification-job analysis and job design.

Unit III

Human Resource Development (HRD)

Recruitment, Selection, Placement, sources of recruitment, methods of selection, promotion and transfer, implementation of selection methods in Hospital.

Unit IV

Training and Development

Training concepts, differences, importance, organizing training programmes and evaluation, systems of training and development in Hospitals, methods of training.

Unit V

Performance Appraisal and Wages and Salary

Meaning, objectives, different theories of PA, techniques of PA, wages and salary administration, concepts, principles in determining enrolment techniques.

Unit VI

Disputes and Grievance handling

Framework for employer-employee relations, grievance procedure, principles and guidelines for grievance handling.

Impact of trade unions on industrial relations.

Discipline in organization, Red Hot Stove Rule.

Causes of industrial disputes, remedial measures- collective bargaining- industrial disputes and settlement machinery.

Unit VII

Morale Work Environment

Meaning and importance, factors influencing morale, impact of morale on employees, safety in an organization, fatigue.

References:

- S.Sadri, SJayashree, M.Ajgaonkar, Geometry of HR, Himalaya Publishing house, Mumbai, Anthony P.William Strategic Human Resource Management, Dryden publishers, 1993
- Robbins, P.Stephen, David A.Decenzo, Personnel/Human Resource Management, Prentice hall, New Delhi, 1996.
- Subba Rao, P., Essentials of Human Resource Management and Industrial Relations, Himalaya Publishing House, 1997.
- Dessler Gary, Human Resource Management, Prentice Hall, New Delhi, 2000.
- Debi S.Saini, Human Resources Management perspectives for the New era, Response books, New Delhi, 2000.
- Bohlander, shell, Sherman, managing Human resources, Thomson -south western publishing
- Syed Amin Tabish, Hospital and Health Services administration- principles and practice, Oxford University press, New Delhi, 2001

304: Hospital Planning

Objective:

To expose the students to planning and operation of hospitals in a detailed manner which will include all facets of hospital planning activities covering every department that is involved both in clinical care as well as supportive services. A chapter on research in Hospital Services and Resources is also added to give impetus for research in this field.

Contents:

Unit 1

Introduction to hospital planning

Conception of idea, formation of hospital planning team, market survey , feasibility study, selection of location, Financial planning of hospitals,

Macro level planning, Conception to commissioning-site development, equipment planning, facility planning (NABH), bed distribution, space allocation , interior designing and construction of building-commissioning, shake down period, documents required to established a hospital and authorities.

Unit 2

Planning for the outpatient services, accident and emergency services, and day care services

Planning for patient care units –Inpatient services and intensive care units

Planning for surgical suites.

Planning for labour and delivery suites-LDRP suites

Unit 3

Planning for laboratory service and blood banking

Planning for imageological services-x-rays, ultra sonography, MRI, CT-scan PET scan and other advances in imageological services

Unit-4

Planning for advanced facilities

Cardiac catheterization laboratory, various endoscopy units, Extra corporeal shock wave lithotripsy, radiotherapy unit, IVF unit, Dialysis unit

Unit-5

Planning for supportive services-medical gases, HVAC , housekeeping ,CSSD, Food and beverages,

References:

Shakti gupta sunil kant,chandra sekhar and sidharth satpathy, Modern trends in planning and design of hospitals,Jaypee brothers New delhi

Hospital Planning, WHO, Geneva, 1984

Kunders G.D., Gopinath S., and Katakama a., Hospital Planning, Design and Management, Tata Mc.Graw Hill, New Delhi, 1999.

Arun Kumar, (ed) Encyclopedia of Hospital Administration and Development, Anmol Publications, New Delhi, 2000.

Srinivasan A. V. (ed), Managing a modern hospital, Chapter 2, Response Books New Delhi, 2000

Padmanand V. and P.C. Jain, Doing Business in India, Response Books, New Delhi, 2000

305: Hospital Equipment Management

Objective: Subject is intended to cover the Operations and Maintenance aspects with reference to minimum Utilization of resources in a hospital.

Unit-I

List of common medical equipments- 1. Image- Digital X-ray, MRI, CT Scan, USG, PET Scan, 3D, Echo.
2. Laboratory- Semi+ Full auto-analyzer, ABG.
3. Ventilator, Multi channel Monitor, Syringe pump.
4. Bronchoscope, Endoscope, Laparoscope
5. Robotics and IoT.

Justification of purchase proposal, hospital need assessment (Capex)

Equipment selection guideline, estimation of cost and planning, purchase, installation, commissioning.

Replacement and Buy back policy.

International and Indigenous standards.

Unit II

Maintenance Management

Objectives, types of maintenance systems, equipment maintenance, quality and reliability, maintenance planning, maintenance information system, maintenance and monitoring of biomedical equipments, predictive maintenance, equipment availability, spares management, replacement policy, depreciation and loss of value, economic life, costing, cost of stand by, maintenance in hospital.

Unit III

Bio-Medical Technology, application in hospital environment, calibration tests, maintenance features, hazards.

Unit IV

Medico-legal issues related to hospital equipment.

References:

Medical Technology, application in hospital environment, calibration tests, maintenance of hazards Srinivasan A.V. (ed), Managing a modern hospital, Chapters 12, Response Books, New Delhi, Barry, Jay Hazier, Principles of Operations Management, Prentice Hall, New Jersey, Roger G., Operations Management - Decision Making in Operations Function, rawHill., New Delhi.

l, Elwood S. and Sarin, Rakesh K., Modern Production/Operations Management, John Wiley illS, Singapore, 1987.

Lee J. and Larry p. Ritzman, Operations Management - Strategy and Analysis, 'ton - Wesley Publications.

International Journal of Operations and Quantitative Management, (IJOQM) released by Nirma Institute of Management – Ahmedabad.

306: Hospital Information System

Objective

This subject will provide models of HIS and help the student develop a subsystem for healthcare management.

Contents:

Unit I

Information System

Overview, structure of MIS specific to hospital; information and data; information for control, decision, statutory needs, feedback; hierarchy of management activity; decision making process; document preparation, data capture, POS method.

Unit II

Project Life Cycle

Physical systems design, physical data base design; Programme development, procedure development; input-output design, online dialogue; design of files, data communication; Project life cycle, installation and operation, conversion, operation, documentation, training, maintenance, post audit system evaluation.

Unit III

Approaches to HIS

Patient based, functional organization based, user department based, clinician based HIS, Medical records, nursing information system; appointments scheduling, dissemination of tests and diagnostic information, general administration, productivity. Concept of DSS and ESS.

Unit IV

Application of HIS in Hospitals

Back office & Front Office- IPD & OPD- Patient Registration, Appointment Scheduling, Admission Discharge Transfer (ADT)- Wards Management Module, Computerised Physician Order Entry (CPOE), Nursing Workbench- Clinic Specialities- Roster Management- Laboratory Information System, Radiology Information System- CSSD, Pharmacy, Blood Bank, Operation Theatre, Dietary, Pharmacy- Medical Records- Patient Billing, Insurance, and Contract Management.

References:

Davis,G.B. and M.H.Oslon,Management Information Systems-Conceptual Foundations,Structure and Development,TMH,1998

Mudford,Eric,Effective systems design and requirements analysis,Mc GrawHill,1995

A. V. Srinivasan, Managing a Modern Hospital, Chapters 10 and II, Response Books, New Delhi, 200C
Hospital Information Systems by S.A Kelkar, PHI

Management Information System by Ashok Arora & Akshaya Bhatia, Excel Book.

Semester IV

401: Biomedical Waste Management and Environmental Health

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

Contents:

Unit-I

- Definition of Biomedical Waste
- BMW – Segregation, collection, transportation, disposal
- Liquid BMW, Radioactive waste, Metals / Chemicals / Drug waste
- BMW Management & methods of disinfection
- Modern technology for handling BMW
- Monitoring & controlling of cross infection (Protective devices)- Dosimeter, HIV Protective measure.
- BMW from Administrative point (Budget, Health check-up, Insurance)
- Hand washing

Unit-II

BMW- 2002

CPCSEA Guidelines.

Suggested Reading

1. Principles of Hospital Management - S. A. Tabish
2. Hospital Management - S. L. Goel
3. Hospital Administration - Francis
4. Bio-Medical Waste Act & Rules Govt. of India
5. Current Issues In BMW Waste Handling-ISHA, Bangalore
6. UGC Guidelines for Environmental Health.

402: Entrepreneurship & Consultancy Management

Objective

To create interest to start a venture, learn the intricacies of starting an enterprise, the joy and fulfillment of being economically independent, identifying opportunities, inculcate enterprising values with orientation towards setting up own enterprises, learn to write project report to obtain funding and satisfying regulating agencies, and equip the student to take consultancy work in various facets of hospital management.

Contents:

Unit I:

Overview: Definition and meaning of entrepreneurship, Characteristics of entrepreneur, Importance and Limitations of entrepreneurship; Entrepreneurial Laboratory; Entrepreneurship Games; Ventures and Startups

Idea generation: Brain storming in teams for project ideas, Nominal Group Technique; Creativity, Lateral Thinking; Research & Development, Reverse engineering, IPR, Patenting; Environment scanning, Opportunities in health care; NGO collaboration.

Unit II:

Feasibility study: Operational feasibility, technical feasibility, market feasibility, financial feasibility, economic forecasting, project report writing. Support systems for new enterprise creation, new enterprise identification and selection, enterprise establishment and management.

Unit III:

Sources of Finance: Commercial Banks, Development agencies, Indian and International funding organizations, Capital market, venture and Startup capital, Basics of Public Health Management System by NRHM.

Unit IV:

Overview: Consulting Industry_with specific reference to Hospital and Health care consulting perspective. Professionalism & Ethics in consulting, Consultant, Client Relationship, Behavioral roles of consultants.

Unit V:

The Consulting Process:

Entry: Initial contracts – preliminary problem diagnosis – terms and references – assignment strategy and plan – proposal to the client – consulting contract.

Diagnosis: Conceptual frame work of diagnosis – diagnosing purposes and problem – defining necessary facts - sources and ways of obtaining facts – data analysis – feed back

Action Planning: Possible solutions - evaluating alternatives – presentation of action.

Implementation & Termination: Consulting in various areas of Hospital Management

Brief concept of Green field, Brown field, Gantt chart, Gap Analysis.

References

J.B.Patel and D.G.Allampally, A Manual on How to Prepare a Project Report, Entrepreneurship Development Institute, Ahmedabad.

J.B. Patel and S.S. Modi, A Manual on Business Opportunity Identification & Selection, Entrepreneurship Development Institute, Ahmedabad.

Edward Bono, Lateral Thinking, Penguin Books, London 1990.

Holt H. David, Entrepreneurship, Prentice Hall India Publishers, New Delhi 2001

Anil Kumar S., Entrepreneurship Development, New Age Publications, New Delhi, 2003

The Journal of Entrepreneurship, Entrepreneurship Development Institute, Ahmedabad.

Management consulting: Milan Kubr (A guide to the profession (3rd revised edition) published by ILO.

403: Health Insurance and Medical Tourism

Objective:

The primary aim of this subject is to acquaint students to the concept of health insurance, product development, and various health insurance products-both at individual and group level, the economic services of health insurance, underwriting of health insurance policies, marketing of insurance policies, claims management, third-party administration etc.,

Content:

Unit I

Introduction:

History of Health Insurance, Principles of Health Insurance, Health Insurance Products, Group Insurance Products, Product design, Development and Evaluation, current trends in Health Insurance - International and Indian scenario. Concepts of insurance, life and nonlife, Government Health Insurance Scheme (State & Central Level).

Unit II

Operations in Health Insurance: Introduction to Claims management, significance of claims settlement, nature of claims from various classes of insurance, role of Third Party Administrators.

Unit III

Economic and financial management of Health Insurance
Risk assessment, underwriting and premium setting, tax planning.

Unit IV

Marketing and servicing of Health Insurance,
Different elements of insurance marketing, uniqueness of insurance markets, distribution
Channels for selling insurance: role of regulatory authority in supervising promotional activities

Unit V

IT Applications and Legal framework in Health Insurance, Information Technology and Insurance, legal framework and documentation, ethical issues.

Unit VI

Medical Tourism- concept, need, competitive advantage, Indian Challenges, Global Scenario and trends, Role of marketing in medical tourism.

References:

Kenneth Black,Jr. Harold D.Skipper,Jr, Life and Health Insurance, thirteenth edition, Pearson Education Pte. Ltd., Delhi, 2003.

Board of editors, Group and Health Insurance vol. I -III, the ICFAI University Press, Hyderabad, 2004.

U.Jawaharlal (editor), Insurance Industry, the current scenario, the ICFAI University Press, Hyderabad, 2005.

Journals:

Insurance Chronicle, ICFAI Publications, Hyderabad.

The Insurance Times, Kolkata, India, Website: www.prgindia.com.

Insurance Management - Dave

National Insurance - Monographs on Insurance Management

IRDA Guidelines on Health Insurance - Govt. of India

SPECIAL PAPERS

1. **404 A** :Marketing of Hospital Services
2. **404 B** :Medical Records Management
3. **404 C** :Hospitality Management –
4. **404 D** :Drug Management
5. **404 E** :Healthcare Quality Management
6. **404 F** :Nutrition and Dietetics

Marketing of Hospital Services (404 A)

Objective:

This subject will give the insight into the application of marketing principles in various situations in a Hospital environment

Contents:

Unit I

Understanding Services Marketing: Introduction, services in modern economy, classification of services, differences in goods versus services, reasons for growth in services sector, services triangle.

Unit II

Consumer behavior in services: Customers interact with service operations, purchase process, customers' needs and expectations, difficulty in evaluation of services, service business system, the search for customer loyalty, understanding CRM, CRM systems.

Unit III

Service product and revenue management: Planning and creating services, identifying and classifying supplementary services, branding service products, new service development, objectives and foundations for setting prices, methods of service pricing, revenue management.

Unit IV

Communication-mix and Distribution of Services: Challenges and opportunities in communicating services, objectives for marketing communications, branding and communications, Distribution in a service context, options for service delivery, decisions about place and time, service delivery in cyberspace.

Unit V

Managing service delivery process and service quality : Blue printing services, service process redesign, the customer as co-producer, fluctuations in demand for services, integrating service quality and productivity strategies, measuring and improving service quality.

Suggested Reading

1. *Services Marketing-People, technology and strategy* by Christopher Lovelock, Jochen Wirtz and Jayanta Chatterjee, Pearson education 2006.
 2. *Services Marketing* by K.Rama Mohana Rao, Pearson education 2005
 3. *Services Marketing-Integrating customer focus across the firm* by Valarie A Zeithaml & Mary J Bitner, 2005
 4. *Services Marketing* by S.M. Jha, Himalaya publishers, 2006.
- Essentials of Healthcare Marketing* by Eric N. Berkowitz, Jones & Barrett publishers, 2006

Medical Records Management (404 B)

Objective:

To have a special training on medical records, its management, its storage and maintenance.
To visualize social importance and impact

Contents:

1. Definition and Types of medical record, Importance of medical record, Flow chart of function, Types of Medical Record- IMR, SOMR, POMR.
2. Statutory requirements of maintenance, coding, indexing and filing, Computerization of record, Electronic Medical Records.
3. Report and returns by the record department, Statistical information and ICD.
4. Utility & functions of Medical Records in Health care delivery System.
5. Organizations & management of Medical Records Department.
6. Role of Hospital managers & MRD personnel in Medical record keeping.
7. Reports & returns in Medical Record System.
8. Basic knowledge of legal aspects of Medical Records including Factories Act, Workmen
9. Compensation Act & Consumer Protection Act.
10. Procedures of Medical Auditing & its importance.
11. Government Regulations & requirements.

References

1. Hospital Administration — Tabish (O.U.P.).
2. Principles of Hospital Administration & Planning — B.M.Sakharkar, Jaypee Brothers
3. Hospital Administration & Management — C.M. Francis & D'Souza.
5. Management of Hospitals — Goel & Kumar. (Deep & Deep).
6. Medical Records , G.D. Mogli, Jaypee Brothers

Hospitality Management (404 C)

Objective:

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

Content:

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

References: Hospital Administration - S. L. Goel

Drug Management (404 D)

Objective

To understand different aspects of drug management and quality control

Contents:

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

Suggested Reading

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

Healthcare Quality Management (404 E)

Objective:

To provide basic knowledge on the concepts of Healthcare Quality Management towards continuous improvement of quality patient care.

Contents:

1. Concept of Quality Care and Quality Management
2. Organization of quality Management System – Approaches to measurement of Quality.
3. Techniques of Quality Management: Improving Hospital Performance – Patient Participation – Quality Health Care through Patience Satisfaction – Conceptual model of potential Contribution in quality in the health care system.
4. Organization wide Quality Improvement in Health Care: Introduction – organizing for Organization wide Quality Improvement fundamentals – A Quality Improvement model of daily Patient Care – Quality Assurance and Quality improvement.

5. Assessing Quality Health Care: Some attributes of Quality in Health Care – Some attributes of a Good Patient Practitioners Relationship – The measurement of Quality – Procedure for formulating explicit Criteria and standards – Determinates of Quality – Structure – Process -Outcome.
 6. The implementation of Total Quality: Planning Quality – organizing Quality – Evaluating
 7. Outcome Management and Total Quality: Background of Quality outcome – What is quality outcome and what is outcome – Management?
 8. Accreditation: NABH, NABL, JCI, Australian System, QCI,
9. Current trends in Healthcare Quality - Accreditation -with special emphasis on JCI Accreditation and NABH Accreditation, Quality Awards (special Emphasis on Malcolm Baldrige Quality Award)

10. Healthcare Quality Organization worldwide:

- a. Quality Council of India
- b. Quality Assurance Project
- c. Institute of Medicine (with special reference to the report - Crossing the Quality Chasm)
- d. Joint Commission Resources
- e. Health grades
- f. Leap Frog
- g. International Society for Quality in healthcare.
- h. American Society for Quality (ASQ)
- i. Institute-of Quality Improvement (IHI).
- j. National Association for Health /care equality (NAHQ)
- k. National Committee, for Quality Assurance (NSQA)
- l. Leap Frog Group
- m. Health care commission UK. MCB journal of Quality Management.

Suggested Reading

1. Reference Books: 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

Nutrition & Dietetics (404 F)

Objective

To understand about human nutrition and good dietary practices

Contents:

1. Food & Nutrition. Role of Antioxidants
2. Overview of Metabolism & Balance Diet for patients
3. Diet for Patient – Selection of food, Cooking methods, Tasty Food, Food to be avoid / Added in diet, Need of complementary food.
4. Steps to prevent food adulteration and Food Adulteration Act.
5. Overview of Clinical Dietetics. Quality control of Food
6. Hygiene and special precautions in Hospital Kitchen
7. Management of Hospital diet / Catering service
8. Role of dietitian in hospital diet service

Suggested Reading

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

405: Dissertation

Objective

To impart the practical knowledge through research methods, help formulate a rigorous research problem related to hospital on the basis of their observation from hospital Practicals, help do an independent study, and encourage working in a team

Pedagogy

Identifying several situations amenable to dissertation work , writing a proposal and making a presentation to the Dissertation faculty advisory committee. Reporting to the committee on the progress of research work periodically. Making use of a variety of research methods. Defending the inference before the Examining Committee.

Contents

Every student will do a detailed study on the topic selected for the dissertation , and is expected to prepare a two or three proposals which he intends to take up for the Dissertation. Faculty will examine this and decide on the topic of dissertation .

The Process involves:

1. Formulation of objectives and hypothesis
2. Review of literature
3. Designing the tool for data collection
4. Data collection
5. Coding, classifying and analysis of data
6. Inferences, conclusions and recommendations
7. Preparing a bibliography
8. Writing the dissertation and submission

The process will commence in semester-III and continue in semester-IV.

EVALUATION PHASE

A three member panel consisting of an expert from Healthcare industry, one from other Hospital Management Institute approved by WBUHS and the other from the mother Institute will conduct the viva voce examination. The allocation of marks is
25 marks for the content and approach to the dissertation
25 marks for defending the dissertation in the Viva Voce examination

406: Internship

Objective

To provide on the job experience, as an understudy in a hospital, to help the student Under stand systems and procedures and learn to make decisions considering the Hospital as an integral unit.

Pedagogy

Internship is of three-month duration and the students are placed in some select hospitals Any where in the country / abroad as interns.

Evaluation

Evaluation will be done at the end of two months from the commencement of the internship. The student will have to submit an internship diary which will be evaluated by way of viva – voce examination. Format for evaluation will be provided to the host administrator. He will be requested to send the performance evaluation scores of the internee, confidentially, to the institute, which in turn will compute the average of the evaluations to arrive at the final marks. The evaluation of the host administrator is limited to 80 marks and the institute for regular submission of monthly reports and activities undertaken in the hospital will constitute 20 marks.

Contents

Introduction to the hospital

During this period the student will be assigned to administrator the hospital functions and services under the guidance of hospital administrator.

The student is expected to work in minimum two select departments of the hospital, preferably from their area of interest, i.e based on their area of specialization.

The students will work on a selected area of their choice or, alternately, or as indicated by the host administrator and prepare a detailed report on various activities on the selected area. A copy of the reports submitted to the host administrator will have to be invariably submitted to the institute.

Finally a consolidated report on the projects of the hospitals has to be prepared and presented to the panel of experts.

407: Grand Viva

Objective

To evaluate the overall performance of students in all subjects of MHM course.

Evaluation

Grand Viva will be in all subjects of all semesters and will be taken by a team consisting of one member from mother institute, one expert from healthcare industry and other from outside institute with approval from WBUHS. Total marks in Grand Viva are 50.

PRACTICAL

Objective

To have a practical exposure of various departments of a hospital. It is included in the syllabus to make the students aware of the functioning of different departments of hospital.

Pedagogy

It will consist of different departments in own hospital during the course of 'Know your Hospital' in Second Semester and 'Internship' during Fourth Semester.

Evaluation

Evaluation of First and Second Semester Practical session will be made during 'Know your Hospital' at the end of Second Semester and Third and Fourth Semester Practical session during 'Internship' at the end of Fourth Semester

PRACTICAL TRAINING

First Semester

1. E D P / I T Department
2. Reception
3. Registration
4. Admission
5. Billing & Discharge
6. OPD Services
7. Public Relation Office
8. Pharmacy Services
9. Stores
10. House Keeping

Second Semester

1. Laboratory Services
2. Imaging Services
3. Personnel / H R Dept.
4. Laundry & Linen Services
5. Kitchen & Dietary Services
6. Marketing
7. Computerized Medical Record
8. Security Services
9. Transportation Services
10. Wards

Third and Fourth Semesters

1. Central Sterile Supply Dept.
2. Library in Hospital
3. Emergency
4. Critical Care Unit
5. Medical Record
6. Operation Theatre
7. Maintenance Department
8. Bio-Medical Department
9. Diagnostic Imaging
10. Dental Service
11. Dialysis Unit
12. Burn Units
13. Blood Bank
14. Mortuary
15. Telemedicine
16. Medical transcription

First Semester

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

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

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

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

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

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.

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

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

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

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

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

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.

Personnel / H. R. Department

Observation of:-

1. Present employee status
2. Selection and recruitment procedure
3. Employee appraisal system
4. Employee training and development system
5. Retirement and retirement benefit system
6. H. R. Audit
7. Wage Administration

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

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 calculating 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

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

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.

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

Transportation Services

Observation of:

- 1) Different internal and external transport
- 2) Different ambulances
- 3) Ambulances earmarked for communicable disease
- 4) Facilities given in the emergency ambulance
- 5) Maintenance of ambulance
- 6) Maintenance of internal transportation

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 paramedical staff

Third & Fourth Semester

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

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

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

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 Venus 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

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

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

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

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

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

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

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

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

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

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

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

Medical Transcription

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