management helps you to achieve two goals in life, namely: a good pay package and service to mankind.

Moreover, there is manifold increase in the complexity and processes that take place in the successful management of a modern day hospital. This in turn has lead to a tremendous demand for efficient professionals who can handle the day-to-day chores of hospital management and administration. Highly trained professionals are needed for the smooth operating of a hospital. To be a successful professional in this field you should have a service-oriented bent of mind and the capacity to work for long hours. Furthermore, you must have a high emotional quotient to survive the highly charged atmosphere of a hospital. Such attitudes and habit cannot be built in a day. they have to be

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*GEN - 201	Soft Skills and Personality Development	Generic Component	Theory	20	80			6
HAM-108	Accounting for Decision Making	Generic Component	Theory	20	80			6
HAM-109	Patient Care Planning & Management 1 <b>Phatiy</b> al &	Skill Component 0 40	Theory & Practical 10	10 40	40 6	10	40	6

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*GEN 501	Critical Thinking And Elementary Statistics	Generic Component	Theory	20	80			6
HAM 302	Medical Ethics & Legal Issues in Hospital	Generic Component	Theory	20	80			6
HAM 303	Hospital Waste Management	Skill Component	Theory & Practical	10	40	10	40	6
HAM 304	Hospital Safety System and Health Care Standards	Skill Component	Theory & Practical	10	40	10	40	6
HAM 305	Hospital Material Management	Skill Component	Theory & Practical	10	40	10	40	6
HAM 306	Hospital Training & Viva-Voce							Non Credit

# Unit IV

1. Hospital Security - Staff, Patients, New born babies, Female staff/Patients, Stores.

## HAM-104-SUPPORTIVE SERVICES AND FACILITIES MANAGEMENT

## Objective:

The objective of the course is to equip the learners with decision making skills in planning, scheduling and control of production and operation functions in hospitals.

#### Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
- The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
- All questions carry equal marks.

#### Job Roles:-

Office Assistant, Receptionist, Data Entry Operator, Ward Assistant, Supportive Services, Assistant, Assistant Quality Manager.

## UNIT –I

**Front office** – Admission – Billing – Medical Records – Ambulatory Care – Death in Hospital – Brought-in Dead. Maintenance and Repairs Bio Medical Equipment. Clinical Services – Clinical Departments – Out patient Department (OPD) – Introduction – Location – Types of patients of OPD – Facilities – Flow Pattern of patients – Training and Coordination;

#### Unit II

Radiology – Location – Layout – X-ray Rooms – Types of X-ray machines – Staff – USG – CT – MRI – ECG, PET Scan

Supporting Services – House Keeping – Linen and Laundry – Food Services – Central Sterile Supply Department (CSSD), Maintenance

#### UNIT –III

**To consider various operational aspects of important services -** Front office and medical record services- Patient Admission / Discharge -All patients related services and assistance. Good communication.-Nursing care with full devotion / commitment-Diagnostic Services - Radiologist, Pathologists and Lab Technicians-Sterilization Services -Blood transfusion services-Proper and respectful disposal of deceased person

#### Unit IV

Nutrition and Dietary services - Pharmacy services - Medical records services-Laundry Services - House keeping services - CSSD energy conservation methods – AMC-Ambulance Services - Mortuary services - Hospital security services-Disaster Management - Fire Hazards - Engineering Hazards - Radiological Hazards - Outsourcing of Support services - few case studies.

## References:

- Maduri Sarma, Essentials for Hospital Support Services and Physical Infrastructure, Jaypee Brothers Publications.
- Prabhu KM, Sood SK, Hospital Laboratory Services Organization and Management, Journal of Academy of Hospital Administration.
- Srinivasan, A.V. (ed.), Managing a Modern Hospital, Chapter 12, Response Books, New Delhi.
- Schoedev, Roger G., Operations Management Decision Making in Operations Function, McGraw Hill, New Delhi.

## HAM-105-HOSPITAL AND HEALTH CARE SYSTEM

## Objective:

To make the student to understand health care sector and hospital set up in a larger perspective with an emphasis on the systems.

## Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer ty

## **References:**

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# SEMESTER II

## HAM-109-Patient Care Planning and Management

#### Course Objectives:

The overall purpose of this course is to enhance the knowledge, skills and attitude in managing clinical services in hospitals. To fulfill this, the objectives of the course are: To understand the role of administrator in patient care planning and management To develop the skills of planning are location, design and layout of clinical services from staff / customer point of view. To develop the skills to optimally utilize the available resources (staff, space, equipment, facilities, supplies, etc.) To understand the need and importance of equipment and physical facilities To understand as well as develop the skills of developing Policy and Procedures for Clinical Services.

#### Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
- The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
- All questions carry equal marks.

### Job Roles:-

Office Assistant, Receptionist, Data Entry Operator, Ward Assistant, Supportive Services, Assistant, Assistant Quality Manager.

#### Unit I

**Hospital Planning -** Concept of Planning, Guiding Principles in Planning Hospital Facilities and Services,

Regional Planning and Factors to be emphasized, Steps in Hospital Planning; Planning Team and Stages of Project, Estimation, Architect Brief and Master Plan, Selection of Site and Decision on Land, Space and Utilities

#### UNIT II

**Outpatient Services -** Objectives, Functions, Location, Design and Layout, Policy and Procedures, Organization, Staffing, Equipment and Facilities, Key Result Areas and Performance / Quality Indicators

Daily Planning and Scheduling of Work, Managing Time: Waiting Time and Total Time, Specialty, Sub-specialty and Super Specialty Clinics, Diagnosis, Physiotherapy and Occupational Therapy, Emerging Concepts: Day Care, Reservation, Appointment by Phone, Medico-social Works / Patient Counseling

Other Facilities: Pharmacy, Gifts Shop, Prayer / Meditation Room

#### Unit III

**Trauma Care: Emergency and Casualty Services -** Objectives, Functions, Location, Design and Layout Policy and Procedures, Organization, Staffing, Equipment and Facilities, Key Result Areas and Performance / Quality Indicators, Disaster Management: Principles and Classification, Life Saving Drugs, Ambulance and Paramedic Services, Medico-legal Procedures, Forms and Registers to be maintained, Communication System

**Operation Theatre** Objectives Functions Location, Design and Layout Policy and Procedures Organization Staffing Equipment and Facilities Key Result Areas Daily Planning and Scheduling Determinants of number of Operating Rooms Zoning and Aseptic / Sterile Techniques Clinical Protocols Sub-stores, CSSD, Immediate Postoperative Recovery Rooms Safety Issues

#### **UNIT IV**

**Inpatient Services** - Inpatient Care, Objectives, Functions, Locations, Design and Layout, Policy and Procedures, Organization, Staffing, Equipment and Facilities, Key Result Areas and Performance / Quality Indicators, Admission, Transfer, Billing and Discharge Procedures, Managing Deaths, Intensive Care Units, Objectives, Functions, Location, Design and Layout, Policy and Procedures, Organization Staffing, Equipment and Facilities, Keya Result Areas and Performance / Quality Indicators, Types of ICUs

#### References:

- NHS, Guide to Good Practices in Hospital Administration (Department of Health and Social Security: National Health Services, London)
- R. Liewelyn Davies and HMC Macaulay, Hospital Planning and Administration (Jaypee Brothers Medical Publishers P. Ltd., New Delhi)
- Syed Amin Tabish, Hospital and Health Services Administration Principles and Practice (Oxford University Press, New Delhi)
- B.M. Sakharkar, Principles of Hospital Administration and Planning (Jaypee Brothers Medical Publishers Pvt. Ltd., New Delhi)

# HAM-110-CLINICAL, DIAGNOSTIC & THERAPEUTIC SERVICES

## Objective:

The Objective of the Course is to expose the learner to the basic concepts of clinical, diagnostic and Therapeutic services for an efficient and effective Administration of Hospitals.

## HAM-111-MANAGING QUALITY IN HEALTHCARE

## Objective:

This course intends to familiarize and develop understanding of the students of the basic principles and practices of quality in health care for efficient administration of hospital and delivery of healthcare services.

### Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of NINE questions comprising Two questions from each unit,

## UNIT-IV

**Organization and Roles in Quality -** Quality Policy: Commitment to Patients and Staff-Code of Conduct for Health Professionals- Job Description of Quality Manager- Quality Steering Committee-Quality Council- Quality Teams: Task Force, Quality Circle-Obstacles to Practice Quality.

Recent Trends - ISO Certification- Accreditation: NABH and JCI- Quality Awards Scheme.

## References:

- Wilson CRM, Hospital Wide Quality Assurance (Saunders, Ontario)
- Hugh C. H. Kogh, Total Quality Management in Health Care (Longman Publication) ISBN 0582 04696
- Roger Ellis and Dorothy Whittington, Quality Assurance in Health Care A Hand Book (Edward Ainoid, London) ISBN 0-340-55273-5
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Paper - HAM 112

Hospital Training and Viva Voce

Continuous wall flow oxygen 2) Compressed air 3) Suction Apparatus (Vacuum Pump) 4)

HAM-202-Human Resource Management And Drug Management

Objective:

- Materials Management Gopalakrishnan
- Matgerials Management A. C. Dutta
- CDA Rules Navi Publications
- Law of Employment and Services in India Kamal Law Book House
- Fundamental Rules-Navi Publications
- Supplementary Rules- Navi publications

# HAM-204-PATIENT CARE AND BEHAVIOUR

- S.G. Kabra, Medical Audit
- Arun Kumar (ed) Encyclopedia of Hospital Administration and Development, Anmol Publications, New Delhi.
- Srinivasan, A.V. (ed), Managing a Modern Hospitals, Response Books, New Delhi.
- Environment Management Systems, ISO 14000 Documents.89126(1)1.85 n41(u)-10.2651(m)-22.-252(0)1.78252(0)

## HAM-205-MANAGEMENT OF INFORMATION SYSTEM IN HOSPITALS

## Objective:

To make the learner to understand MIS as a managerial decision making tool and to know the sources and compiling of MIS.

### Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
- The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
- All questions carry equal marks.

## Job Roles:-

Purchase Assistant, Nursing Administrator, Patient Care Coordinator, Data Analogist, Marketing Assistant, Equipments Technician, Floor Manager.

#### UNIT-I

**Introduction to Management Information Systems:** Decision Making Process Techniques – Major Trends in Technology in Decision Making – Computerized data processing – Decision Support Systems – Expert System – Executive Information System – Health Management Information System.

## UNIT-II

Health Records: The World of Informatics The Future of healthcare technology - Functions of the health record – Changing functions of the patients record – privacy and confidentiality and Law – Advantages of the paper record – Disadvantages of the paper record – Optically scanned records – The Electronic health record – Automating the paper record – Advantages of the HER – Disadvantages of the HER – Bedside or point-or-care systems – Human factors and the HER – Roadblocks and challenges to HER implementation.

#### UNIT-III

**Telemedicine:** Telehealth – Historical perspectives – Types of Technology – Clinical initiatives – Administrative initiatives – Advantages and Barriers of telehealth – Future trends – Summary – The Future of informatics; Globalization of Information. Technology – Electronic communication – Knowledge management – Genomics – Advances in public health – Speech recognition – Wireless computing – Security – Telehealth – Informatics Education – Barriers to Information Technology implementation.

#### UNIT-IV

Software Applications in Health Care: Awareness on the application of computer software packages in various functions of hospital – Internet and Intranet and their application in healthcare. Practicals of Software Applications: One way ANOVA using Statistical Software.

## **References:**

.

- Green. E. Paul. Danald S. Tull, Gerald Albaum, Research for Marketing Decisions, Prentice Hall, New Delhi.
- Ghosal, A., Elements of Operations Research, Hindustan Publishing Corporation, New Delhi.

#### Paper - HAM 206

## Hospital Training and Viva Voce

At the end of the semester, students should compulsorily undergo two week Hospital training (HAM 206) and the relevant certificate and project report has to be submitted.

Practical training includes the following:

#### Job Roles:-

Purchase Assistant, Nursing Administrator, Patient Care Coordinator, Data Analogist, Marketing Assistant, Equipments Technician, Floor Manager.

**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 9) Proper storage of drugs 10) Sales policy 11) Record maintenance 12) Preparation of Accounts 13) Pharmacy Audit

Stores -

# **Semester IV**

# HAM-208-Public Relations

Objective:

## HAM-209-MANAGEMENT OF OUT-PATIENT DEPARTMENT (OPD)

## Objective:

The objective of the course is to equip the learner with the different organizational steps involved in management of the Out-Patient Department.

## Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
- The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
- All questions carry equal marks.

## Job Roles:-

Purchase Assistant, Nursing Administrator, Patient Care Coordinator, Data Analogist, Marketing Assistant, Equipments Technician, Floor Manager.

#### UNIT-I

**Evolution of Out Patient Department** – Planning of Out Patient Department – Objectives – Functions of Out Patient Department – Organization Structures

#### Unit - II

Day Care Centres – Community Health Care Centres – Physical Medicine & Rehabilitation Centre – Performance Evalution of Out Patient Departments – Conclusion – Unit Review Questions – Reference Books.

Unit - III

Emergency Services - Managerial Issues in Emergency Depar

#### HAM-210-Healthcare Marketing

## **Objectives:**

The aim of this course is to enable the participants to understand the concept of marketing and public relations, and applying them in the Healthcare organizations. At the end of the course the participants would be able to Accept marketing as a managerial process Apply marketing function in health care organizations without conflicting the professional ethics of the clinical professions and ultimately

**Unit - IV** Marketing Strategies, Service Portfolio Strategy, Market Expansion Strategy, Target Market Strategy,

## HAM-211-Medical Equipment and Floor Management

# **Objective:**

To make aware the equipment management process to the students about various biomedical equipments used in healthcare industries & its solution.

## Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
- The students are required to attempt one question fr

**Wards Observation of:-** 1) Ward Composition - Beds Patient Ratio 1) Layout 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) Met

## Semester V

### HAM-302-MEDICAL ETHICS AND LEGAL ISSUES IN HOSPITAL

### Objective:

To familiarize the students about legal issues involved in hospital management.

### Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
- The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
- All questions carry equal marks.

## Job Roles:-

Hospital Planner, Hospital Consultant, Hospital Administrator, Health Service Manager, Legal Assistant, Materials Coordinator, Business Operational Specialist, Health Service Project, Administrator.

## UNIT I

**MEDICAL ETHICS** - Introduction to Legal aspects in health care: health as a fundamental right; Hospital services and law: Medical ethics including Hippocratic Oath, declaration of Geneva and international code of medical ethics and violation of these ethics; informed consent

#### Unit II

**RIGHTS AND RESPONSIBILITIES OF PATIENTS -** Rights and responsibilities of patients: confidentiality issues with respect to contractual obligations towards the patients, electronic medical records and Health. Liability and accountability towards patients and third parties and employees (vicarious liability)

#### UNIT III

**MEDICAL NEGLIGENCE** - Medical negligence -definition, The Bolam test, Civil and criminal negligence, relevant sections of Indian Penal code, defense against medical negligence; The Consumer Protection Act- Ethics Introduction – its scope, various levels of consumer courts (District forum, State Commission, National Consumer Dispute Redressal Forum) and procedure followed in each; Professional Indemnity; Legal Implications in Medical Emergencies; Euthanasia- its types and the international & national Perspective; the concept of Living Will-Medical ethics.

#### UNIT IV

**HEALTH CARE LAWS** - A brief account of various laws related to healthcare: -Human Organs Transplantation Act, Inquest and its proceedings, The Drugs and Magic Remedies Act, Registration of Birth and Death Act, PNDT act (1994) and MTP Act (1971). Regulatory framework of hospitals – The Indian Medical Council act; Regulatory requirements to set up a Blood Bank; Legal aspects of Assisted Reproductive techniques **RISK CONSENT -**

- K .Park, 'Park's text book of Preventive and Social Medicine', 16th. Ed. Jabalpur, India: M/s Banarasidas Bhanot, 259-67, 2002.
- Madhuri Sharma, 'Essential of Hospital Support Services & Physical Infrastructure', Jaypee Brothers, New Delhi.
- G.P. Mogli, 'Medical Records Organization & Management', Jaypee Brothers, New Delhi.
  Branson, Joan Cameron, and Margaret Lennox. 'Hotel, hostel and hospital housekeeping', Edward Arnold.

# HAM-305-Hospital Material Management

# Objectives:

The purpose of this course is to learn the specific methods of materials planning, purchasing, processing, stocking and dispensing including equipment pu

• P. Gopalakrishnan and M. Sundaresan, Materials Management : An Integrated Approach (Prentice – Hall of India Pvt. Ltd., New Delhi) ISBN 81-203-0027-0

information about the services, Health Insurance Providers – Government and Private – Microinsurance, The role and responsibilities of provider – insurer-patient and the regulatory agencies.

# References:

- Gupta P.K, Insurance and Risk Management, Himalaya Publishing House.
- My Collection of HI Material and Books.
- Insurance Exam Material
- American Books Managed Care On History of Health Insurance Origin –Development & Growth.
- Insurance Compendium Given by Venugopal.

**INFECTION CONTROL** - Importance of infection control-hand hygiene-aseptic techniques-isolation precautions-disinfection and sterilization-clinical laboratory standards to infection control health care workers safety.

# References:

- G D Kunders, 'Biomechanics: Hospitals, facilities planning and management', Tata Mcgraw Hill.
- B M Sakharkar, 'Principles of hospital administration and planning', Jaypee Brothers Medical Publishers Pvt Limited, 2nd edition.
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## HAM-310-COMPUTERS IN MEDICINE

# Objective:

To familiarize the student with use of computers in medicine

## Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of **NINE** questions comprising Two questions from each unit, including Question No. 1 (compulsory) of short answer type covering the whole syllabus.
- The students are required to attempt one question from each unit and the entire Compulsory Question No. 1.
- All questions carry equal marks.

# Job Roles:-

Hospital Planner, Hospital Consultant, Hospital Administrator, Health Service Manager, Legal Assistant, Materials Coordinator, Business Operational Specialist, Health Service Project, Administrator.

## UNIT I

**INTRODUCTION -** Computer hardware and software - programming languages - use in medical field - need of computing hospitals - cost effectiveness - help of computerization to physicians.

# Unit II

**PATIENT DATA BASE MANAGEMENT -** Computerized medical records - security. Computer in clinical laboratory –database approach - automated clinical laboratory and analysis - computerized specimen analysis- analysis of ECG, EEG and EMG. Chromosome analysis by computer - computerized cytology and histogram - automated scanning for cervical cancer.

# UNIT III

**MEDICAL IMAGING** - Basics of computer assisted medical imaging: Nuclear medicine - digital subtraction radiography – computerized ultra sonography – X-ray, CT, Nuclear magnetic resonance. Basics of compu

# References:

• R.D. Lele, 'Computers in medicine', Tata McGraw-Hill Publishing Company Limited, 2nd reprint.

## HAM-311-RESEARCH METHODOLOGY

## **Objectives:**

At the end of this course, the students will be able to Design research methods, collect and analyze data, Prepare research report and independently conduct research in their field of study / area of work.

#### Instructions:

- The syllabus of this paper has been divided into FOUR units.
- Examiner will set a total of

- CR Kothari, Research Methodology Methods and Techniques (Wiley Eastern Ltd., New Delhi)
- PSS Sundar Rao and J Richard, An Introduction to Biostatistics A Manual for students in Health Sciences (Prentice – Hall of India Pvt. Ltd., New Delhi)
- Stephen Polgar and Shane S Thomas, Introduction to Research in the Health Sciences (Churchill Livingstone Publications)
- BK Mahajan, Methods in Biostatistics (Jaypee Brothers Medical Publishers P. Ltd., New Delhi) SP Gupta and MP Gupta, Business Statistics (Sultan Chand & Sons, New Delhi)

# HAM-312- HOSPITAL TRAINING

# **Objective:-**

• Allow students to explore the prevalent commercial/industrial practices in order to reinforce theoretical knowledge with practical experience.

#### Job Roles:-

Hospital Planner, Hospital Consultant, Hospital Administrator, Health Service Manager, Legal Assistant, Materials Coordinator, Business Operational Specialist, Health Service Project, Administrator.

At the end of the semester, students should compulsory undergo two week Hospital training (HAM 312) and relevant certificate and report has to be submitted.