### **SYLLABUS**

### for Courses affiliated to the

## **Kerala University of Health Sciences**

Thrissur 680596



**MASTER OF** 

**HOSPITAL ADMINISTRATION** (MHA)

**Course Code 287** 

(2016-17 Academic year onwards)

### 2.COURSE CONTENT

### 2.1. Title of course:

### MASTER OF HOSPITAL ADMINISTRATION (MHA)

### 2.2. Objectives of course

- To acquire knowledge in multi-disciplinary and multi-dimensional nature of health management, policies, rules regulations and scientific management approach in hospital Administration.
- To provide professional Hospital administration disciple for basic insight into the total healthcare delivery system.
- To provide knowledge in Hospital planning, human resource management, marketing and financing the hospital, managing material and quality focused health care services.
- To mould the Administrators through practical training and skill
   development programme.
- To Create the ability to identify the management issues, analyse and
   overcome the health care challenges
- To develop professional ethics and acquaint with the legislation pertaining to health care delivery system.
- To create quality committed and patient centred administrators.

### 2.3. Medium of instruction:

Medium of instruction shall be English

### 2.4. Course outline

The course of study enhances student's knowledge and skills in several major categorical areas of hospital administration. The MHA course provides advanced skills for practicing as hospital administrator. It is a two year Course professional Post Graduate Degree course comprising fourteen papers. Total course duration is 2150 hours of lecture and60 days of project work training in reputed Hospitals. There will be three internal examinations conducted by the Institutes/Colleges and one public examination at the end of each academic year.

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### 2.5. Duration

The duration of the **MASTER OF HOSPITAL ADMINISTRATION (M.H.A.)** shall be for a period of two years on full time basis.

No candidate shall join any other course of study or appear for any other examination in this university or any other university during the period of study

### 2.6. Syllabus

As given under clause "Content of each subject in each year "

The concept of health care counseling shall be in corporated in all relevant areas.

### 2.7. Total number of hours

Total course duration is 2150 hours of lectures and 60 days of project work in reputed Hospitals

### 2.8. Branches if any with definition:

As given under clause "Content of each subject in each year "

### 2.9. Teaching learning methods:

Classroom lectures using Blackboard and Power point presentations.

Teaching with Counselling heads, Case presentations, Seminar, Clerkships and projects and any other methods decided by the respective H.O.D's

### 2.10. Content of each subject in each year

### PART I

### **PAPER I - GENERAL MANAGEMENT**

### **Subject and Course Content**

### **Objectives Management**

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This module will introduce students to the field of management. It covers the historical emergence of management as a professional field and academic enterprise. Students will be confronted with the core competence areas of

management.

### **Human Resource Management**

This module enables the student to get a perspective on human resource. Further it familiarizes the students with various concepts, issues and practices in dealing with people in health sectoroganizations.

### CONTENTS:

### Management

Effectiveness

### Unit 1

History and growth of management concepts- Evaluations of management theories. Scientific management school - classical organization theory school - The behavioral school-Management science school - Systems approach - Contingency approach.

Management Levels and Skills-Management- Organizational

### Unit 2

Planning- organizational planning- steps- Environment - Environmental factors

Environmental Analysis - SWOT Analysis- objective setting – Types of plans – Forecasting

– Barriers in effective planning- Management byobjectives

### Unit 3

Decision Making – Types of decisions – steps.

Organizing – Process – Departmentalization – Delegation – Decentralization – span of control – formal and informal organization – line and staff functions – Authority – Power Unit4

Staffing – Manpower planning –recruitment– Selection – Training and Development Controlling – Organizational control – Control techniques

### Unit 5

Directing –Orders- job satisfaction – morale- Coordinating- types-techniques-difficulties

Time management

Discipline -disciplinary proceedings. Case studies—Hospital visits.

### **Human Resource Management**

### Unit 1

Concepts : definition – Scope of human resource management – Role of personnel function

 Objectives – Advisory function – Relation to other departments – Typical organization set up of a personnel department.

Unit 2

Manpower planning – Job Analysis - Job description – Placement – Source of labor supply – Methods of selection – Tests in selection – Induction.

Training and Development – Objectives – Types – Methods.

Unit 3

Management Development – Meaning – Scope – Methods. Motivation

Performance

appraisal

Counseling

Work environment – Fatigue – Safety and accident prevention – Accident records

### Unit 4

Morale – Employee attitudes- Behavior – Significance of employees productivity – Job satisfaction – Job change – Job rotation – Job enlargement – job enrichment.

Collective bargaining – Employee participation in management

Wage and salary administration – Principles and techniques of wage fixation – Job evaluation – Merit rating methods of wage payment – Incentiveschemes.

### Unit 5

Trade unions – Organization structure – Policies – Joint consultation
Grievances

Organizational disputes

Organizational exit – Planning for retirement

**Industrial safety** 

Social Security

Case

studies

### References

Harold Koontz, Heinz, weimrich: Management

James A.F., Stones, R. Edward: Management

Rustom S. Daver: Priciples of Management

Tripathi P.C and Reddy P.N.: Principles of Management

ames A Willian: Hospital Management., Mac Millan Education Ltd., New Delhi.

Rao U.S., Narayanan P.S.: Management Concepts and Thoughts

Basu C.R: Business Orgaisation & Management, Tata McGraw Hill

Ivancevich, Donnelly & Gibson: Management Principles & Functions, AITBS Publishers

Chattergee NN: Management of Personnel in India Enterprises, Allied Book Agency,

Calcutta

Dale S. Beach: Personnel., Mac Millan Publishing Co.,

Finley RT: Personnel Manager and his job., American Management Association., New

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York.

Mammoria C.B.: Personnel Management, Himalaya Publishers

Tripathi P.C.: Personnel Management and Industrial Relations., Sultan Chand & Co.,

J.B. Miner and M.G.Miner: Personnel and Industrial Relations – A managerial Approach.

5

Southwick Arthur F: Law of Hospital and Health Care Administration.

Jyothi P & Venkatesh D.N: Human Resource Management, Oxford

### UNIT 1:

**Health**: Definition and dimensions of Health, Evolution of Modern Medicine, Review of report on Health care, Bhore Committee, Mudaliar committee, Jain Committee, Chaddha Committee, Kartarsingh committee, Srivastava committee & committee on plan & projects, Bajja committee & Rao Committee. Elements and principles of Primary Health care, Organisation network of health & family welfare services the centre ,state ,district & block level, Indian Public Health Standards for PHC, Indian health care system.

### UNIT 2

**Hospital:** Definition, History of hospitals, changing concept of Hospitals, Types and classification of hospitals, Hospitals in India-today, ownership, utilization

### UNIT 3

Hospital as an Organisation: Uniqueness of Hospital Organisation, principal types of hospital organisation, general principles of hospital organisation, Hospital organisational Functions, Governing authority, organisation and functions of governing body, Hospital organisational structure- Hospital Committee, Medical staff Organisation and the objectives. Hospital as system: System approach to hospital administration, Hospital as a part of social system, system approach to hospital administration, Hospital and Community.

### **UNIT 4**

Hospital Utilisation and statistics: Indices of measurement of hospital utilization, indices relating to the Hospital, daily & monthly analysis, Census - indices relating to the population at risk, Factors influencing hospital utilization,

### **UNIT 5**

**Hospital Administration as a specialty:** Role and function of hospital administrator, hospital as an organization, profile of hospital administrator, Role of hospital administration, Skill of Hospital Administrator, Education and research in Hospital Administration.

### **UNIT 6**

Health care System in Developed and Developing countries: Developed & Developing reasons, Health Systems, Levels of health care, Health team concept, Millennium Development goal.

International health: WHO, UNICEF, UNDP, ILO, SIDA, DANIDA, International Red Cross, CARE.

### **Hospital Planning**

### UNIT7:

**Introduction**: Hospital planning, measuring community needs, Service required – services available, external internal factors.

Planning: Principles of planning – Regionalisation – Feasibility study - Hospital planning team, Hospital consultant, Hospital architect – Planning process – Size of the hospital – Securing fund

-Site selection –site survey – land requirements – size of the site- land acquisition - Master Plan- planning for growth and change, consideration based on climate, — Hospital zone, Engineers – space requirements - Working drawings and documents - water requirements, electricity, sewage disposal, traction system, fire protection – approval of plan - tender –Circulation – Architect's brief – Equipping a hospital –purchase of capital equipments - Interiors and Graphics

-taking over and Commissioning - Shake down period

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### **UNIT 8**

Planning, designing, organization and management of:

**Clinical services:** Outpatient department- Accidents and Emergency service department, Inpatient department, Operation Theater – Intensive care unit – Physical medicine and rehabilitation services.

Diagnostic and therapeutic services: laboratory services – Radiology services –

Transfusion services - Audiology and Speech pathology service – Pharmacy – Dialysis unit 
Sleep laboratory, ECG, Echo & TMT, NCV, EEG,

### Unit 9

Planning and designing of Supportive and utility services: Central sterile supply department (CSSD) – Linen and laundry services – Dietary services – hospital housekeeping – Hospital engineering services –

Hospital Transportation services – Mortuary services – Central store – Medical record department – Front office and Lobby – Administrative care Unit – Hospital Information system **UNIT 10** 

Standards for designing hospital facilities: General standards - Mechanical and Electrical standards - centralized medical gas system - disaster management - safety and security system

fire hazards – Occupational safety – Bio medical waste Management including
 radioactive & drug waste handling – Nosocomial Infections – Heating Ventilation and air
 conditioning - Lighting in Hospitals – Way finding in Hospitals

### **References:**

- 1. Convert Richard P & Mc Nulty Elizabeth: Management Engineering for Hospitals, Chicago., Deegum II & Arthur: Management by Objectives., Maryland, Aspen1977.
- 2. Desai VA: Hospital Administration Vol. 1, Madurai, 1989.
- 3. GoelSL&KumarR:HospitalAdministrationandManagementVol.2.,NewDelhi.,Deeps.Hall T.L. & Mejia A: Health Manpower planning principles, methods and issues., WHO 1978.
- 4. Huss Carol: Indian Hospitals Planned organizational changes in their structure and functioning, VHAI, NewDelhi.
- 5. Kauer Antony R & Neuhauser Ducan : Health Services Management Reading and Commentary., Michigan
- 6. Parthasarathy S.K. Hospital Services Management, KJ Hospitals, Madras.

- 7. Sainik Ashok: Role of Hospital Administrator in India ISHA, Bangalore, 1986. Sakharkar, B.M. Principles of Hospital Administration and Planning.
- 8. ConvertRichardP&McNultyEllizabeth:ManagementEngineeringforHospitals,chicago.,
- 9. Deegum II & Arthur: Management by Objectives., Maryland, Aspen1977.
- 10. Desai VA: Hospital Administration Vol. 1, Madurai, 1989.
- 11. Goel SL & Kumar R: Hospital Administration and Management Vol. 2., New Delhi., Deeps. Hall
- 12. T.L.&MejiaA:HealthManpowerplanning-principles,methodsandissues.,WHO1978.
- 13. Huss Carol: Indian Hospitals Planned organisational changes in their structure and functioning, VHAI, NewDelhi.
- 14. Kauer Antony R & Neuhauser Ducan : Health Services Management Reading and Commentary., Michigan
- 15. Parthasarathy S.K. Hospital Services Management, KJ Hospitals, Madras. Sainik Ashok : Role of Hospital Administrator in India, ISHA, Bangalore, 1986.
- 16. Kunders, G D (2004)- Facilties Planning and Arrangement in Healthcare, Prism Books
  Pvt Ltd, bangalore.
- 17. Davies Llewellyn R & Macaulay H M C (1995) Hosptal Planning and Administration, Jaypee Brothers, NewDelhi.
- 18. Sharma K R, SharmaYashpal (2003) A handbook on hospital Administration, Durga Printers, Jammu.
- 19. Sharma, Madhurai (2003) Essentials for Hospital Supportive Services, Jaypee Brothers, NewDelhi
- 20. Tabish, Syed Amin Hospital Planning, Organisation and Management.
- 21. JohnRea., Jeffer J. Frommelt: Buildingsa Hospital Aprime for administrators.
- 22. JamesLifton., Ownen B. Hardy: Site Selection for health carefacilities.

### I Year

### PAPER III – Research Methodology & Biostatistics

### Objective

### **Research Methodology**

The topic is intended to provide an adequate knowledge about research methods to help them

in research work settings wherever survey design and secondary data analysis is involved in the

health system.

### **Biostatistics**

To assess health status and needs of the community, for planning, implementation and evaluation

of health programme for hospital/health management. It also enables to analyse the performance of the hospital.

### Contents

### Research Methodology

### Unit 1

Research methods – Historical perspectives – meaning – types – objectives – nature – scope Scientific research – role of theory in research – research problem – concepts – formulation - identification - selection of research problems in management

### Unit 2

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Research design-types- explorative - descriptive experimental Unit 3

Sampling techniques: Criteria of a good sample – sampling designs – simple random sampling

stratified sampling – systematic sampling – multi phase & multi stage sampling – sample size 10

use of sampling – errors in sampling.

### Unit - 4

Methods of data collection – classification of data – construction of frequency distribution table

tabulation of data – general rules of tabulation – types of tabulation. – source- methods tools –

observation – personal interviews-interview schedule - Presentation of data – diagrammatic

graphic – types – line-bar-pie-scatter-pictogram-spot map-histogram- frequency polygon frequency curve -Ogive

### Unit - 5

Hypothesis – testing of hypothesis(theory) – bias - Content analysis - Data processing and analysis

problems-types of analysis-inferences planning evaluation - Interpretation and report writing meaning — techniques of report writing - Action research programmes — Practical: Project work

and seminars

### **Bio Statiostics**

### Unit - 1

Statistics – definition – meaning – branches – biostatistics – health statistics – vital statistics, Application and uses of biostatistics in health management and epidemiology. Presentation of data – diagrammatic – graphic – types – line-bar-pie-scatter-pictogram-spot map- histogram frequency polygon-frequency curve – Ogive

### Unit - 2

Measures of central tendency – mean (calculation for individual, discrete and continuous series)

median (Calculation for individual, discrete and continuous series – mode (for individual series).

- Empirical relation connecting mean, median and mode. Merits and demerits of each type.

### Unit -3

Measures of dispersion: Range and Mean deviation (for individual series) – Standard deviation

(Calculation for individual, discrete and continuous series.)

Unit - 4

Co-efficient of correlation – uses – different types of correlation – scatter diagram – correlation

coefficient – rank correlation coefficient. Regression – basic concepts – linear regression – lines

of regression – estimation using lines of regression.

### Unit - 5

Probability – basic concepts. Normal distribution – binomial distribution – characteristics, importance, uses, merits & demerits – Tests of significance – uses – sampling distribution standard error – null hypothesis – levels of significance – test for large sample – normal test – test for proportion – test for small sample – simple test – paired test – unpaired t test – chi square test (for a 2 x 2 table) - Estimation – basic concepts – interval estimation – population mean and proportion.

### References

Sarantakos: Social Research., Macmillan Press., Australia

Festinger and Katz: Social Research., Longman., London

Jathoda Marie et al: Research Methods in Social Relations., Free Press., New York.

Kothari C.R.: Research Methodology – Methods and Techniques., Wiley Eastern Limited.,

Delhi.

Goode and Hatt: Research Methods in Social Sciences

Krishnaswami O.R. & Ranganatham M: Methodology of Research in

Social Sciences., Himalaya Publishing House

Rao NSN: Elements of Health Statistics., Text Book Agency, Varanasi

Mahajan B.K: Methods of Biostatistics. Kothari Book Depot, AD Marg., Bombay

Potti L.R: A Textbook of Statistics, Yamuna Publications. Sreekanteswaram, Trivandrum

Lancaster H.O: Introduction to Medical Statistics, Johnwiley & Sons, New York

Leius A.E: Biostatistics in Medicine Little Brown & Co. Boston

Hill A.B. Principles of Medical Statistics, Oxford University Press., New York

Lwanga S.K & Cho-Yook-Tye: Teaching Health Statistics Twenty Lesson & Seminar Outlines.,

**CBS** Publisher

### **Objective Medical Records**

### I YEAR

### PAPER IV - MEDICAL RECORDS & MEDICALEQUIPMENTS

The main objective of this course is to provide a through knowledge and familiarity on the importance of medical record sciences, medical terminology. Various theoretical and practical issues in the context of the above areas are covered here.

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### **Medical Equipments**

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The main objective of this course is to provide a through knowledge and familiarity on the importance of equipment management and maintenance in hospital.

### **Contents Medical Records Unit - 1**

Medical Terminology - Objectives - Basic concepts - Elements of medical terms - Root/stem

Prefixes - Suffixes - Colours - Numerals - Symbols - Abbreviation - General and special practices

in medicine - Suffixes, words and phrases on operative terminology - Terms pertaining to body as

awhole

### Unit - 2

Health Information Management - Historical Development of Medical Record - Uses and values

of medical record - Medical record forms - basic and special - Flow of medical record

- Registration - Numbering - unit, serial, serial - unit -- Deficiency checking - Assembling

### Unit - 3

Coding – ICD X, ICD 9-CM, CPT – 4, ICP, ICD - 10 - Indexing – master – patient ,disease index, physician, operative - Filing – alphabetic, terminal digit, middle digit, straight numeric.

### Unit - 4

Format types – source oriented (SOMR), problem oriented (POMR) integrated - Mental health record - Analysis of medical record – Qualitative, Quantitative and statistical - Committees – executive; credential; safety; infection surveillance, prevention and control; medical record; audit

### Unit - 5

Legal importance of medical record: Consent, release of information, legal cases, medical record

as legal document - Electronic Medical Record (EMR)

### **Medical Equipments**

### Unit 1

Bio-medical equipments – requirements – function – allocation to various therapeutic and investigative departments.

Unit 2

Radiology: X-ray –fluoroscopy – CT – MRI-PET SCAN. /Biochemistry – Calorimeter – flame

Photomer – Spectrometer – Coulter counter – Blood gas analyser – Auto analyser.

Physiotherapy: Muscle stimulator – short wave diathermy – ultrasonic and microwave diathermy.

Unit 3

Urology – haemodialysis – lithotripsy./ Cardiology – ultrasound scanner and Echocardiogram–Angiogram – Tread Mill –ECG monitor and recorder. /Neurology – EEG – EMG – VEP. /ENT:

Audiometer. /Cardiac care Unit – pacemakers – defibrillator – ventilator – infusion pumps
– patient monitoring system. /Ophthalmology: Fundus camera – Nd – YAG & argon lasers – perimeter.

Unit 4

Operation Theatre – ECG monitor – anaesthesia machine – pulse oxymeter suction apparatus – endoscopes – electrosurgical unit – heart lung machine – oxygenerators – autoclave – sterilisers.

Unit 5

Maintenance – preventive – breakdown. Electrical safety of medical equipments – accident prevention – psychological effects of electrical current – diagnosis – calibration – repair of equipments – radiation safety – effects of radiation – safety precaution – protection methods – hospital safety. Trouble shooting biomedical equipments.

### References

Hogarth .P.: Glossary of Health care terminology., WHO Regional Office., Europe.

Edna Huffman: Medical records Management Record company, Illinois., USA

Park K: Park's Text Book of Preventive and Social Medicine., M/s Banaridas, Jabalpur.

Khandpur R.S. Hand Book of Biomedical instrumentation, Tata McGraw Hill Publishing

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co., Leslee Cromwell: Biomedical Instrumentation and Measurement

Park K: Park's Text Book of Preventive and Social Medicine., M/s Banaridas, Jabalpur.

### **I YEAR**

# PAPER V – ORGANIZATIONAL BEHAVIOUR & MANAGERIAL COMMUNICATION

Objective:-

OrganisationalBehavio

ur:

To familiarize the students with the behavioral patterns in various context in an organization and to develop insight into ones own self and the functioning of others.

### **Managerial Communication:**

The topic is intended to provide knowledge and skills about various communication proceedings involved in the management process and also to acquaint them the need of effective public relations.

### Contents:-

### **Organisational Behaviour:**

### Unit 1

Organizational behaviour: nature – scope – meaning – significance – importance – classification.

Organizational Goal- importance – individual goals – group goals

Unit 2

Individual behaviour: Personality – learning – attitudes- perception – motivation – job satisfaction Motivation – theories – frustration – conflict management – stress management Job satisfaction –theories – promoting job satisfaction – problems of absenteeism and turnover

### Unit 3

Group behaviors: Types – formal – informal – group process – characteristics- group culture

– group formation –social influence – group dynamics – group conflict – interpersonal –
 inter

group – sociometry – interactionanalysis.

Leadership and supervision – concepts – theories – functions – models – factors influencing

leadership role – essentials – styles – supervision – pattern of supervision.

Unit 4

Decision making – process – types – influencing factors – management techniques.

Division of labour – principles – group in organization – co-ordination – inter and intra coordination.

Team Building – need in health sector – team meeting.

Organizational dynamics and change – types – sources – change process – human elements in change.

Unit 5

Organizational development: Concept- objectives – goals – process – behavioral sciences approach to OD- power and politics – control – organizational effectiveness – organizational climate – organizational culture.

Industrial engineering – Ergonomics – Work simplification – Job enlargement – Job enrichment -

Value analysis – time study- Motion study.

Mental and Health problems in organization.

Application and cases with special reference to hospital / health administration

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Practical: OB lab experiments

### **Managerial Communication:**

### Unit - 1

Communication in management process – effectiveness – Communication opportunities – Choice of media – Formal – Informal – Types – techniques - Group communication – Methods – Problems – Solutions – Meetings – Committees – Conference responsibilities

of chairman – Reporters – Participants – Reporters role - Speeches – Structure of speech – Drafting of speech – Speeches for different occasions -

### Unit - 2

Report writing – Types of report – Structure – Methods of collecting and preparing material

- Drafting of report – Preparing a press release – Press conference - Business correspondence

Drafting of letters – Circulars – Answering letters. Office orders – Office circulars – Office notes –

Suggestions – Complaints – Office memorandums.Meeting of Board of Directors – Board report

Chairman's speech - Meeting documentation - Notice of the meeting - Agenda Chairman's

speech – Recording meetings – Writing minutes – Minute book – Writing meeting reports –

Assignment – Writing annualreport

### Unit - 3

Organizational communication-its evaluation - Research communication - Electronic Media and

communication - Public relations - Scope - Tools - Public relation as a catalyst for change - Public

relations – With individual – Group organization – Press – Government departments - Press language – News – News writing – Publicity – Media planning

### Unit - 4

Group process lab: Workshop – Seminar – Media and advertising lab Self development and assessment – Self assessment- self awareness – perception and attitudes – values and belief system – personal goal setting – career planning – self esteem – Building self confidence Planning, preparation, delivery, feedback and assessment of – group discussion and oral presentations.

### Unit - 5

Interview – Listening and observation skills – Body language - Managing time - Improving personal memory – rapid reading, notes taking – complex problem solving – creativity.

Case presentation and practical in the above areas.

### References:

Fred Luthans: Organizational Behaviour McGraw Hills., New York

Robbins S.P.: Organizational Behaviour., Eaglewood Cliffs., New Jersy, Prentice Hall Inc.

Koreman: Organisational Behaviour at Work - Organizational Behaviour., McGrew Hill

Publishing Co.,

Hilt, Miller, Colella: Organisational Behaviour ( A strategic Approach)

Prasad L.M: Organisational Behaviour, Sultan Chand & Sons

Aswathappa K: Organisational Behaviour

Stephen M. Mitchell: Health Care Management – A text book in organization theory\*

behaviours Colin Grant: Hospital Management

George F. Wieland: Improving health care management. Organizational development and

change.

**Cummings LL: Towards Organizational** 

Dwivedi: Human Relations and Organizational Behaviour., Macmillan India Ltd., Madras.

Dalmer Fisher: Communication in Organizations , Jaico Publishing Co., Bombay

Balan K.R. Prof: Corporate Public Relations, Sterling Publishers Pvt.Ltd., N. Delhi.

Krishna Mohan & Meera Banerji, Developing Business Communication., Mc Millan Education

Ltd.

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Rajendra Pai & Bhatnagar OP: Education and Communication for department

Raymond V Lesikar John., D. Pettil Jr & Lakshman C Arya: Business Communication, All India

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Traveller Book Seller., New Delhi.

Raman Meenakshi & Prakash Singh: Business Communication

Sharma R & Krishnamohan: Business Correspondance & Report Writing, Tata McGraw Hill

### **YEAR**

### PAPER VI – OPERATIONS RESEARCH

### UNIT 1

Evolution of Operations Research - Models - Formulation of Models - Using models for problem

solving -Techniques of Operations Research - Limitations of Operations Research - Latest advancement in O.R.- application of OR in the field of health care.

### **UNIT 2**

Requirements of L.P. Applications of L.P. - Graphical methods and Simplex method of solving optimization problems - Duality and Sensitivity Analysis

### UNIT 3

Transportation model - Balanced and Unbalanced problems - North-West Corner rule -Least cost

entry method - Vogels Approximation method - Stepping stone Method- MODI method

Assignment model - Hungarian model - Routingproblems.

### **UNIT 4**

Inventory costs - cost of average inventory - Optimum Number of orders per year - Optimum days supply per order - Optimum rupee value per order - assumptions - Applications of EOQ in

Production process - Reorder point - Lead Time - Safety Stock — News paperboy problem — ABC

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analysis.

### **UNIT 5**

Waiting line models-Structure of a queuing system- Definitions of waiting lines –Queue models

of(1) Single channel with infinite capacity (2)Arrival and departure following poisson distribution,

and service rate following Exponential Distribution

### **UNIT 6**

Decision Theory – Decision making under certainty - uncertainty - conditions of risk. Game theory - Two person Zero sum Games - Pure Strategy - Mixed Strategy - Dominance - Mix N Games - Graphical solution - Games and Linear Programming.

### UNIT 7

Network models- PERT-CPM – Float and slack – Analysis of CPM and PERT network Resource allocation - Float and slack - Other network models

### **UNIT 8**

Capital equipment replacement - Replacement of terms that fail completely - Individual vs.

Group replacement.

### UNIT 9

Sequencing - Problems with 'n' jobs and 2 machines problems with 'n' jobs and 3 machines -

### **UNIT 10**

Simulation – concepts and applications – Monte-carlo simulation – Simple problems in inventory and queuing.

### Reference

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Israel Brosh: Quantitative Techniques for Managerial Decision Making., Prentice Hall Co.,

Dharani Venkatakrishnan S. Operations Research., Keerthi Publishing House., Coimbatore Kenneth S. Brown Jack B. Revelle: Quantitative Methods for Managerial decisions Addisons. Srivasthava. U.K. Shenoy G. V, Sharma S.C: Quantitative Techniques for Managerial Decisions.

Handy A Taha: Operations research, Sultan Chand & Sons.

Sharma S.D: Operations Research for Management Decisions, Kedar Nath Ram Nath & Co Sharma J.K: Operations Research theory & applications Macmillan

**I YEAR** 

### PAPER VII – BASIC MEDICAL SCIENCES & EPIDEMIOLOGY

Objectives

### **Basic Medical Science**

The course enables the students to get a <u>general understanding</u> of the biological structure and basis of human biology and pathogens and to understand the spectrum of health and disease to evolve health promotion strategies in health system management. <u>The student is not expected to have a detailed study of the subjects.</u>

### **Epidemiology**

To apply the tools of epidemiology for the prevention of disease, the promotion of health and formation of national policies of social relevance. To use epidemiological research to detect association between modifiable, hereditary, social and Environmental factors and specific disease prevention.

### **Basic Medical Science**

### Unit I. General Anatomy (10hrs)

Terms and Subdivisions –Cell structure and Cell division - Epithelium and glandular tissue –

Connective tissues – Cartilage – Lymphatic tissue – Nervous tissue – Vascular tissue –

Muscular tissue – Skin and appendages – Identification of microscopic slides.

### **Unit II. Systemic Anatomy (20hrs)**

Overview of Cardio Vascular System – Respiratory – Gastro Intestinal – Lymphatic – Endocrine – Central Nervous – Autonomic Nervous – Musculoskeletel – Excretory – Reproductive – Display anatomical systems.

### Unit III – Physiology of Heamatology, CVS and Respiratory System (10 hrs)

Introduction of Haematology – RBC – WBC – Platelets – Coagulation of Blood – Blood Groups – Blood Volume - Functional Anatomy of CVS – Conducting System – Properties – Cardiac Cycle – Cardiac output – Blood pressure – ECG – Special Circulation – Shock - Functional Anatomy of Respiratory System – Mechanism of respiration – Pressure changes – Transport of Gases – Regulation of respiration – AppliedPhysiology.

### Unit IV – Physiology of GIT, Renal, Endocrine, Special Sense and CNS (15 hrs)

Functional Anatomy of GIT – Secretions – Movements – Disorders- Digestion and Absorption

- Functional Anatomy of Renal Physiology Filtration- Secretion Reabsorption Micturition Body temperature regulation and skin Functional Anatomy of CNS Synapse
- Receptor Reflex Spinal cord with tracts Motor system Higher functions and disorders -Special senses Olfaction Taste Audition Vision Functional Anatomy of Endocrine System Pituitary hormones Thyroid hormones endocrine Pancreas Adrenal hormones Cacium Metabolism and endocrine regulation Other endocrineglands.

### Unit V – Microbiology (20hrs)

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Introduction to microbiology – History – Definitions – Classification of microbes – Parasites –

Vectors – Disease causes and transmission – Common pathogenic bacteria – Viruses –

Fungi

Parasites – Protozoa – Helminthes – Entomology – Vector of malaria – Filaria –
 Plague – Rodents – Sterilization – Methods – Applications – Home – Hospital –
 Community – Bacteriology of water – Milk – Food – Pasteurization – Chlorination –

Watersanitation.

### **Epidemiology**

### Unit - 1

The scope and uses of health research, especially epidemiological research and its evolution to modern concepts and areas of application. Fundamental measures of disease frequency (prevalence, cumulative incidence, incidence density) and of risk factors – disease association (risk, relative risk, attributable risk, odds ratio) Applied measures of disease frequency.

### Unit - 2

Guidelines for the development of a well conceived research question - Overview and detailed aspects of the most relevant types of epidemiological study design: ecological design, cross sectional design, case control design, prospective and retrospective cohort design, experimental design. - Core principles of health measurement and diagnosis (validity, reliability, sensitivity to change, feasibility). - Principles and applications of screening for disease. Source of bias in the interpretation of etiological, prognostic and diagnosticresearch

### Unit - 3

Epidemiology of Communicable disease: Classification of communicable diseases – agents – vectors – disinfection – surveillance – investigation – containment – control – eradication.

Respiratory infections – chicken pox-measles – rubella – influenza – mumps – diphtheria – whooping cough – meningitis – tuberculosis

Intestinal infections – polio mellitus – viral hepatitis – cholera – acute diarrhea disease – typhoid fever – food poisoning – amoebiasis – ascariasis – hookworm – helminthic malaria – yellow fever – filaria – dracontiasis – dengue - encephalitis

### Unit - 4

Zoonosis – Rabies – Japanese Encephalitis –KFD – Brucellosis – Plague – Human Salmonellosis – Teaniasis – Hydatid Disease – Leishmaniasis – Leptospirosis – Rickettiosis – Scurb Typhus – Murine Typhus – Tick Typhus

Surface Infections: Trachoma – Tetanus – Leprosy – STD – Yaws – Scabies – Ebola – HIV/AIDS.

### Unit - 5

Epidemiology of Non communicable disease and conditions

Risk Factors – gap in natural history - Coronary heart diseases – Hypertension – stroke –

rheumatic heart disease – cancer – diabetics – obesity – Blindness – Accidents – Peptic Ulcer-

Arthritis - Nutrition - Nutrition intervention for health promotion - Lifestyle diseases -

Geriatrics - Mental

### References

Anatomy and Physiology for Nurses, - Physiolgoy: K. Madhavan Kutty

Microbiology: Ananthanarayan, - Parasitology: Chatterjee

Entomology:

Roy and Brown

Park L: Text book of preventive & Social Medicine: M/s Banarasidas. Jabalpur

Robert L. Heatal: Principles of Epidemiology – A self teaching guide. Academic Press London

Morris J.N. Uses of Epidemiology, Churchill. Livingstone London

Benean SMAS: Control of communicable disease to man American PH Association, New York

Holland W.W., Detels R, Oxford Text Book of Public Health: Method of Public Health. London

Kelsey J.L: Methods of Observational Research, Oxford University Press, London

Abeline T. Measurement in Health Promotion & Protection, WHO Regional Publications

Karis

S. Lankimen et al; Health and Disease in Developing Countries, Macmillan press. London

25

Manipal Manual of Anatomy for A.H.S courses – Dr. Sampath Madhyastha

Human anatomy – Prof.A.K.Dutta

Text Book of physiology – Vankatesh G

Manipal Manual of physiology – Dr. C N Chandrashekar

Text Book of Microbiology - Baveja

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### **II YEAR**

### PAPER I - HOSPITAL ADMINISTRATION -II

### **Hospital Planning and Management**

### Unit 1 Planning and Management of Specialty Services

- Ophthalmology
- Urology
- Psychiatry
- Pediatricservices
- Anesthesiaservices
- Obstetrics and gynecologyservices
- Plastic Surgery and burns unit, paraplegic and Malignant
- DentalServices
- Diabetology

### Unit 2: Planning and Management of Super Specialty services:

- Cardiology and Thoracicsurgery
- Neurology
- Neurosurgery
- Nephrology services, dialysis Unit, ESWL,
- Pulmonology
- TransplantationServices
- Oncology services, Nuclearmedicine

### Unit 3: Utility services

- Nursing Administration- Nursing organization- Staffing-Practices
- WardManagement
- Finance /Accountsdepartment
- Purchasedepartment

### Unit 4: Changing health care scenario

- Modern Trends in HospitalAdministration
- MedicalTourism
- ArtificialIntelligence
- Outsourcing
- Telemedicine

Unit 5

Disaster management in hospitals – Component of disaster plan – Pre hospital and hospital

– Disaster preparedness – Disaster plan formulation and implementation

Patient safety – Measures in assuring patient Safety – Factors affecting patients safety – Hospital Information System

Unit 6

HIS and decision making – Information report system and Decision support system- Role of HIS in Decision making.

Information system Development – System Analyzing and Design- Planning of information systems – Strategic, tactics and operational planning.

Unit 7

Implementing Information systems – Data base management

Controlling Information systems – Input, Process, Output, Process, Process and physical facility Control – Privacy and security of systems.- Analyzing Information systems – Hospital Information system – Functions – Clinical Decision support systems – Diagnostic Decision support systems-

Unit 8

Hospital marketing Information systems – Human Resource information system – Accounting information systems – Financial information system. - Managing information system, Resource in Hospitals.

Unit 9

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Basic concepts about computer hardware and software – Application of computer in hospitals

computer programme and operating systems – data based concepts (ER diagram) Microsoft Office – SQL, VB, Power Point - ERP system with allmodules

Unit 10

Office automation software – MS Office – MS Word – Spread Sheet software- MS Excel.

Data base management software MSAccess

Computer network and internet.

### References

- 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 (198) Principles of Hospital Administration & Planning Jaypee Publishers

  New Delhi.
- James A O'Brien Management Information Systems Galgotia Publishers.
- Bakkar A. R. & Mol. J.L.: Hospital Information System Effective Health Care Vol. 1.

  Amsterdam.
- Davis G B & H Margrethe: Management Information System (Conceptual Foundations,
  Structure & Development), Tata McGraw Hill
- Griesser G. Et al Data Protection in Health Information System Considerations and Guidelines.
- Goyal D.P: Management Inforamtion System, McGraw Hill
- Murdick G Robert, Ross E Joel Ross & Clagget R James: Information Systems for Modern Management
- Jawadekar S Waman: Management Inforamtion System managerial perspectives, Macmillan

### **Objectives**

### **Hospital Economics**

### **IYEAR**

### PAPER II – HOSPITAL ECONOMICS & FINANCE

The course is intended to provide an in-depth knowledge about the sources of funds and its effective utilization to achieve a better quality of health care services within a reasonable cost.

### Finance

The course is intended to help the students to acquaint themselves with the basic concepts of financial planning and control and its applications in the financial decision making.

### **Contents**

### **Hospital Economics**

Unit 1

Managerial economics – introduction – scope – relevance – hospital resource issues

Concept

of resource allocation – cost analysis – concepts – classification – short run – long run cost functions. Economices of size – economices and diseconomices of scale

Unit 2

Demand Analysis – demand forecasting – purpose – methods – criteria for a good forecasting method – consumer durable goods – capital goods – determinants of market demand – law of demand – demandcurve.

### Unit 3

Input output analysis – capital budgeting – principles – monitory and fiscal policies – pay back period methods – NPV – IRR –risk, uncertainty and investment decisions – risk adjusted discount

rate approach.

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Public sector – role of national economy – Government's role in different socio – economic

system. Budgets – central – state government – structure – five year plans.

Unit 4

Market structure – pricing policy – pricing under perfect competition – under pure monopoly.

Economic fluctuations and business – business cycle – business policy – inflation – deflation with reference to India – economic forecasting for business

Unit 5

International trade – rate of foreign exchange – spot and forward exchange markets – change

in exchange rates – international monetary system – IMF – SDR – Case studies.

### **Finance**

Unit 1

Financial Management – Concepts – Objectives – Scope – Functions.

Time value of money – Time preference rate – Compound value – Present value.

Forecasting of income statement – Fund flow – Cash flow statement – Interpretation and usage for future forecasts.

Unit 1

Working capital management – Concepts – Types – Factors affecting the determination of working capital – Theories of working capital.

Cash Management – Objectives – Minimum cash requirement – Different approaches for decision making – Formation of strategies.

Unit 2

Current asset management – Management of accounts receivable – Credit standards and policies – Evaluating the policy – Influence of inventory cost on current asset management – Stock valuation methods under inflation accounting and its effects.

Unit 3

Leverage – Financial – Operating – Applicability in decision making – Indifference point.

EBIT - EPS analysis for different sources of finance. Long and short term decisions on

alternatives.

Capital budgeting – Principles – Data requirement – Methods of investment analysis – Payback period – NPV –IRR- Discounted cash flow – Risk and return decisions – Profitability index.

Unit 4

Theories of capital structure – NI – NOI – MM approach – Cost of Capital – Determination of cost of individual source of finance – Procedure to find out capital structure of a firm.

Dividend: Dividend – Types of dividends – Gordon – alter – MM models – Determinants of dividend policy.

Unit 5

Cost and Analysis – Cost benefit analysis – Cost effectiveness analysis – Ratio analysis – Types –Uses.

Value and rate of return calculations – Valuation of firm and shares – Different methods of determination of value of shares – Value of firm – Registration of firm in stock exchanges – Stock exchanges working procedure.

### Reference

Even J. Douglas: Managerial Economics – Theory, Practice and Problems., Prentice Hall India.

Dufty N.F: Managerial Economics – Wesley Publishing House., New York

Stills E. Addison: Managerial Economics., Homewood, Illionois, Dersey Press Inc.

Spencer M.H: Managerial Economics, Homewood Illionois, Richard C. Irwin
Inc.

Verma J.C: Managerial Economics – Concepts and Analysis for Business Decisions in Indian Environment, Lawrence Publishing House., New Delhi.

Varshey R.L & Maheswari K.L: Managerial Economics., Sultan Chand & Sons Publishers.

Thomas P.C: Managerial Economics.

Salratore Dominick: Managerial Economics in Global Economy, Thomson

Dean Joel: Managerial Economics, Prentice – Hall India, Eastern Economy Edition

Dwivedi D.N: Managerial Economics, Vikas

Khan M.Y. & Jain PK: Financial Management, Tata Mc Grew Hill Publishing Co.,

Kuchhal S.K.: Financial Management, Cheritarry Publishing House.,

Allahabad

Maheswari S.N.: Principles of Financial Management. Sulthan Chand & Sons., New Delhi

Pandey IM: Financial Management, Vikas Publishing House Pvt.Ltd., Bombay

Prasanna Chandra: Financial Management, Tata Mc Grew Hill., New Delhi.

John Thampton: Financial Decision Making - Concepts, problems & cases., Prentice Hall

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### II YEAR

### PAPER III – MANAGEMENT ACCOUNTING & COST ACCOUNTANCY

### Objective

### **Management Accounting**

The topic helps the students to acquaint themselves with the basic concepts of cost and management accounting and the practical applications in decision making, supervision, management and control of a health system.

### **Cost Accountancy**

To familiarize the students with the concepts, principles and techniques of financial, cost and management accounting branches and their application in managerial decision making inhospitals.

### Contents

### Management Accounting

Unit 1

Book Keeping – Definition – objects – advantages –term used in Book keeping – Business transactions – theory of Double Entry –kinds and transactions – process of recording – types of accounts – preparation of journal – preparation of Ledger – Trial Balance Accounting principles: Accounting Concepts an Conventions

Unit 2 & 3

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Financial Statement – Trading Account Profit and Loss Account and Balance Sheet

Trading Account: Meaning need and preparation – Profit and Loss Account – Meaning, need and preparation balance Sheet – Meaning need and preparation use of further adjustments in the preparation of final accounts:-

- Depreciation
- Provision for DoubtfulDebts
- OutstandingExpenses
- Prepaidexpenses
- Income received inAdvance
- AccruedIncome
- ClosingStock
- Provision for discount on debtors and creditors
- Petty CashBook

Meaning – Advantages – Imprest system – Analytical petty cash book – form and preparation

Bank reconciliation statement – Meaning – Need – Preparation – Simple exercises

Depreciation - Meaning – Objects – methods (theory and problems)

Ratio Analysis.

Financial Analysis – Meaning and Significance of ratios – Gross Profit, Net Profit, ROI, Current ratio, quick ratio, debt equity, capital turnover, stock turn overratios.

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Unit 5

Unit 4

### Accounts of Non-trading Concerns

Meaning – receipts and Payments Account – Income and Expenditure Account – Balance sheet – reparation of Income and Expenditure account and balance sheet from receipts and payment account and additional information

Case studies / Practices / Assignments

### **Cost Accountancy**

### Unit 1

Cost accounting-definition of cost – costing accounting – objectives – advantages – characteristic of ideal costing system.

Elements of cost – concepts – classification of cost – direct material – direct labour – overheads.

Direct material – material control – objectives – purchasing – storing – issuing methods

Unit 2

Inventory control- Break even analysis – techniques – applications- ABC – VED analysis – EOQ – Lead time – Safety stock – Quantity control over supplies – Just in time – Inventory models – Scientific technique – FIFO –LIFO – AverageCost.

### Unit 3

Direct labour – remuneration of labour – time ratio system – piece rate system – premium bonus plans – measuring layout accounting performance – cost – idle time – overtime – holiday pay – labour turnover – calculation of gross wages and net wages .

### Unit 4 & 5

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Overhead – Classification – Allocation – Apportionment of overhead – Basis of apportionment

Cost of service department – Cost of Production department – Absorption of overhead – actual Pre-determined – Blanket rate – Multiple rate – Absorption of manufacturing

overhead – Direct material – Direct labour – Production cost – Contract costing – Process costing (normal and abnormal wastages) – Marginal costing.

Also control methods – Budgetary control (theory only) – Standard costing (simple illustration) - Case studies / practical / assignments

### References

M.C. Shukla and T.S. Grewal Advanced Accounts; S. Chand & Co. Ltd., New delhi,

R.L. Gupta: Final Accounts

Gupta R.L & Radhaswamy M: Advanced Accountancy(Theory, Method & Application), Sultan Chand & Sons

S.P. Jain & K.L. Narang: Cost Accounting – Principles & Practice, Kalayani Publishers

Bhattacharya S.K.: Accounting for Management., Vikas Publishing House Pvt. Ltd.,

Bombay

Robert J. Thierauf & Robert Ckeikanp: Decision making through operations research.

Eck. R.D. introduction to Quantitative methods for business applications.

M.C. Shukla and T.S. Grewal & M.P Gupta Cost Accounting (Test & Problems); S. Chand & Co. Ltd., Newdelhi,

Jain S.P & Narang K.L: Advanced Accountancy \_ VI Jain S.P & Narang K.L : Advanced

Accountancy II

**II YEAR** 

### PAPER IV – MATERIALS MANAGEMENT & TOTAL QUALITY MANAGEMENT

### **Objectives**

### **Materials Management**

The course is intended to provide an in-depth knowledge about the scientific methods of purchasing, storing and dispensing of materials in hospitals.

### **Total Quality Management**

The course will orient the student about the quality to be maintained in hospital services and will help them to develop and control hospital programmes.

### **Contents**

### **Materials Management**

### Unit 1

Materials Management – concepts – importance in organization – relation to other administrative functions – organization of materials management department – role and functions of materials managers.

Stores – Concepts of stores – Importance of stores in hospital settings – Types of stores in a hospital – Layout – Location – Stores routine – Supply and replacement of stock – Card system & use of bin cards – Stock verification – Control of pilferage.

### Unit 2

Inventory control – Meaning – Scope – Definition of inventory – Advantages – Discounts – Stock out cost – P & Q System.

Purchase – Right quantity – Right quality – Right price – Right time (requirement planning) – Right source – Price forecasting methods.

### Unit 3

Methods of purchasing –ABC – VED analysis in purchase controls – Purchase through rate contract – Tendering procedures – Purchase Vs leasing decision – Purchase of capital equipments and other major investments - purchase through e –commerce.

### Unit 4

Information system development for Materials Management – Database of material (Vendor and stocks) – Usage for classification – Standardization of materials – Bar codes – Trends in material control – Computers role in development of information.

### Unit 5

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International purchasing -Import tariffs – Policies – Procedures – Customs and excise exemptions – Letter of Credit formalities relating to imports.

Legal aspects relating to purchases – carriage of Goods Act – Insurance – Damages Case Studies.

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### **Total Quality Management**

### Unit 1

Quality: Concept of quality – Evolution of the concept of Quality- quality and productivity- quality in health care, structure, process, out come- quality assessment-measuring quality care- concept of quality assurance, Service quality- models, quality management philosophies- steps in quality improvement- Quality management philosophy:- Deming, Jurran, Crosly, Taguchi's principles, Fegenbaum's philosophy. Patients demand and feedback.

### Unit 2:

Quality Control-Tools and techniques- total quality Models, quality standards, ISO and implementation process, Brainstorming, Benchmarking, Statistical process control, Fish born Diagram, Six sigma Concept, Poka yoka, Statistics and quality control tools, quality circle.

Total Quality Management: TQM team work, Employee involvement, TQM tools- Quality function deployment(QFD), concurrent engineering-FMEA, P-C-D-D-A cycle, JIT, Kaizan, Zero defect programme, control chart

### Unit 3:

Evaluation of health care performance:- Evaluation through Medical audit, Nursing Audit, Equipment audit, Pharmacy Audit, Antibiotic audit, Clinical Audit,, Defining audit protocol, Audit team- duties and responsibilities of audit team, Patient safety, Patient satisfaction Survey, Clinical practice guidelines and protocol.

### Unit 4

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Performance reviews and Survey:- Mortality review, concurrent process review, retrospective process review, Death (mortality) review, births, stillbirth, premature, under weight babies, post operative complication review, post delivery complication review, post anesthesia complication review, Infection review, Surgical review, Discharge,:- Discharge status-cured, controlled, aggravated, death, Leave against medical

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advice, Agreement of Preliminary Diagnosis with final diagnosis, Investigation supplements preliminary and final diagnosis, Unusual incidents in hospital

### Unit 5

Standards and Accreditations: Hospital accreditation, Models of accreditation, patient centered stamndards, Health care organization management standards NABH, JCAHO, JCI- ISO certification, process and steps to reach accreditation, overview of standards and benefits

### Reference

Dutta A.K. Integrated Materials Management., S.Chand & Co. New Delhi 1989.

Dutta A.K. Materials Management Procedures, Text & Cases, Prentice Hall India Starr & Miller: Inventory Control – Theory & Practice, Prentice Hall India.

Gopalakrishnan, P & Sandila M.S. Stores Management and

Logistics. Gopalakrishna P: Purchase & Materials Management,

McGraw Hill

England W.B. & Leenders M.R. Purchasing & Materials Management Tarapore Vala & Sons. Lal A.B.:Inventory Models and the problems of price fluctuations, sree Publishing ook House. Peekhar H.H: Effective materials Management Taraporewala D.B & co. Bombay.

S.K. Joshi – Quality Management in Hospitals Jaypee Brothers.

James R. Evans & William M. Lindsay: The Management and Control of Quality; Jaico Publishing House, Bombay.

Kunders, G D (2002) – Designing for Total Quality in Healthcare, Prism BooksPvt Ltd, Bangalore

M. Frank, Gryna Richard C.H, Defeo A Joseph; Jurans Quality Planning & Analysis for Enterprise Qulaity

### PAPER V – MARKETING & STRATEGIC MANAGEMENT

### **Marketing Management**

The course introduces the student to the concepts of marketing and its dimensions involving services, production, promotion and its application to health care delivery systems.

### **Strategic Management**

The course enables the students to understand the different ways to utilize firm's resources within its environment to reach its objective.

### **Marketing Management**

### Unit 1

Marketing Concept – definition – Scope - Goods & Services – Marketing process – customer relationship management ( CRM)

Marketing Environment- Market analysis – consumer buyer behavior- Health care needs – factors influencing patient behaviour

Market segmentation – Chief determining variables – Targeting and product positioning 
STP for health careservices.

Market Mix – 4Ps in goods marketing & 7 Ps in Services marketing

Unit 2

Market research and information: Steps – Market information – Market information system

Market decision support systems – Demand forecasting – market research process - Public policy regulation and ethics in marketing research

Product/Service: Product line – Product mix – Product life cycle – Branding – Packaging – Product positioning – New product opportunities – Product development process – New product – Failure and success.

Unit 3

Promotion: Objectives – Promotion cost – Promotional budget – Determining promotional mix – Planning promotional campaigns. Advertising and publicity: Types – Levels of advertising – Advertising expenditure – Advertising decisions – Publicity - public relationssales promotion- Direct marketing

Pricing – Meaning – Importance – factors determining prices – Objectives – Pricing policy and structure – Pricing procedure – New product pricing – pricing in healthcare

Unit 4

Marketing channel – Physical distribution – Channel design – Retailing – Wholesaling.

Social Marketing

Hospital Administrators and Marketing Environment – Opportunities and challenges

Marketing programme for hospital services: Market mix – Product decisions – Price decisions – Location of hospital services – Planning extension services.

Unit 5

Project planning – Project development cycle- Feasibility study – Financial institutions 
Project clearance – Technology transfer – Foreign collaboration – grants – Social responsibility.

Camp organizing and planning: Community health care programmes – Medical camps – Awareness of the camps – Planning and organizing medical camps – Follow – up.

### **Strategic Management**

Unit 1

Environmental appraisal : External environmental analysis – Dynamics of internal environment – Organizational capability factors – SWOT analysis.

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Unit 2

Strategic alternatives – Grand strategies – Modernization – Diversification and integration – Merger, take over and joint ventures – Turn around, disinvestment and liquidation.

Unit 3

Strategic choice : Corporate port folio analysis – Industry competitor analysis. Strategic implementation : Issue in implementation – Resource allocation – Structural

implementation - Organizational design andchange.

Unit 4

Functional implementation – Financial, marketing, operations and personnel plans and policies.

Behavioural implementation – Leadership implementation – use of power.

Unit 5

Strategy evaluation – Strategic and operational control.

productivity in organizations, Management audit, Managerial performance Strategic management in health care: strategic planning process – Human resource

accounting- Sensitivity to patient's needs and expectation- Empowering hospital staff and improvement in involvement and participation- business process reengineering.

### Reference

Kotler Philip: Marketing Management – Analysis, Planning, Implementation and Control;

Kotler Philip & Anderson: Strategic Management for Non – profit organizations.

Wheelen L Thomas, Hunger David, Rangarajan Krish: Concepts in Strategic Management & Business Policy

Kotler Philip: Readings in Marketing Management, Tata Mc graw Hill, New delhi, 1980.

Kotler Philip: Marketing for Health Care Organizations.

Kotler Philip & Lane Kevin: Marketing Management, Pearson

Lovelock : Services Marketing – text, cases and reading.

Kotler Philip: Principles of Marketing, Prentice Hall, Eaglewood, Cliffs, NJ, 1980.

Janet Reinestein Carpman., Myrona Gromt., Planning health facilities for patients and visitors.

Chari S.N.: Modern production and operations management, Wilsey Eastern Ltd.New Delhi.

Prasanna Chandra: Projects preparation, Appraisal, Budgeting and implementation, Tata

Mac Grew HillsPublishing Co. Ltd., NewDelhi

Azhar Kasmi: Business Policy.

#### **II YEAR**

### PAPER VI – LEGAL FRAME WORK FOR HOSPITALS & MEDICAL ETHICS

### Objective

### Legal frame work for hospitals

The course will orient the students about the legal frame work to be observed in hospital services and will help them to develop and control hospital programme. It will also help to provide a thorough knowledge and familiarity on the importance medical ethics.

### Contents

### Legal frame work for hospitals

### Unit 1.

Legislation: Law, source of Law, interpretation of Law - Medico-legal problems: types - case handling procedures - police investigation - death certificates.

Medical negligence: – Ambit of negligence – Duty of care – Contractual duty – Tortious duty

- Duty under Penal law - Duty under consumer law - Contributory negligence.

### Unit 2

Consent to treatment – Types of consent – Types of common complaints – Burden of proof & 'Res Ipsa Loquitor'. Withholding of life support in the Critically III – Euthanasia – Dying declaration —Reasonable care

### Unit 3

Medical ethics – introduction – person centered ethics – ethics and ethical codes – international code of medical ethics – code of medical council of India – services of life and death – duty of preserving life.

### Unit 4

Medical experimentation in man – Drug Trial - Truth and professional secrecy.

Unit 5

Medical termination of Pregnancy Act – Birth and Death registration Act – Drugs and Cosmetics Act 1940. - Mental Health Act

Unit 6

The Transplantation of Human Organs Act 1994 – Prenatal Diagnostic Techniques (Regulation and Prevention of Misuse) Act 1994 - Consumer Protection Act 1986 – Kerala shops and Commercial Establishments Act 1969 –

Unit 7

The Indian Medical Council Act 1956 – The Indian Nursing Council Act 1947 — The Pharmacy
Act 1948 – The Environment Protection Act 1986 & Bio-medical Waste (Management and
Handling Rules 1998)

Unit 8

Bonus Act 1965 – Employees Provident Fund Act 1952 – Employees State Insurance Act 1948

Unit 9

Factories Act 1948 – Gratuity Act 1972 – Industrial Dispute Act 1947
Unit 10

Minimum Wages Act 1948 – Trade Union Act 1926 – Maternity benefit Act 1961.

### References

Kuchhal M C (2001) – Business Laws, Vikas PublishingHouse Pvt Ltd, Delhi
Goswani V G (1999) – Labour & Industrial Laws, Central Law
Agency,Allahabad. Rajkumar – Acts applicable to hospitals in India
Knight Bernard – Legal Aspects of Medical practice.

Bag R.K – Law of Medical Negligence and compensation

Cox H.W.V- Medical Jurisprudence and Toxicology , The Law Book Co.(p) Ltd

WHO: Bioethics

WHO : Genetic, Ethics and Human Values

Prabhakara G.N: Professional Medical

**Ethics** 

Siegerist Heantry: A history of Medicine – Vol. 1. Oxford University Press., London Jagg O.P. Indian System of Medicine, Atma Ram and Sons, New Delhi.

Morely avid et al: Practising Health for all, Oxford University Press., London
Abraham Samuel D: Laws on Hosapital Administration

#### II YEAR PAPER VII

### **Skill Development in Hospital Administration**

**Objective:** This course helps the students with an opportunity to observe, apply & practice the theories & techniques they will learn as part of their MHA syllabus. This will act as an internship for the students, so that, through a set of programmes, they will be able to develop the skills necessary for an administrator in a hospital setting.

### Pedagogical Approach:

In order to supplement & practice the theoretical knowledge gained through textbooks, & lectures, students will perform various tasks like "undergo practical training in various departments; organize seminars & workshosp; present papers & case studies; perform role plays, management games & extempore sessions; undergo concurrent placements & field studies; attend training programmes on Transactional Analysis and the like; etc".

Reports submitted by the students on practical training in various departments, concurrent placements & field studies etc will be evaluated by the faculty. All the programmes organized & performed by the students will be evaluated by thefaculty.

As opportunity for development & training of skills is an important factor, these programmes will be there from first year onwards. The marks of all the programmes organized as part of skill development will be taken for the evaluation of thispaper.

### Programmes to be under taken:

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A minimum of three hours visit to the following departments on rotation at the

Hospital; Personnel – Public Relations – Finance – Accounts – Ticket Room – Medical Records – Bio Medical – Radiology – CSSD – Corporate Relations – Insurance – Billing - Pharmacy – Canteen – Plumbing – Electrical – Civil – Laundry – Waste Management – ETP – Incinerator – Physiotherapy – Medical and Psychiatric Social Work – Counseling – Projects - EDP – Front Office – OPD – Library – ICUS – Wards – Security – Casualty –

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Laboratory – Microbiology – Bio Chemistry – Blood Bank – Haematology – Histopathology and Pathology.

- OrganizingSeminars
- Presentation of papers, case studiesetc
- GroupDiscussions
- Role play
- Assignments
- Managementgames
- Workshops
- Negotiations
- TransactionalAnalysis
- Fieldstudies
- ExtemporeSessions

### 2.11. No: of hours per subject

As given under clause "Content of each subject in each year "

### 2.12. Practical training

As given under clause "Content of each subject in each year" & "Teaching learning methods".

### 2.13. Records

Records should be maintained for project works done and for skill development programme duly signed by the supervising teacher, HOD & Principal and should be submitted at the time of University viva examination.

### 2.14. Dissertation:

As per KUHS norms

### 2.15. Speciality training if any

As given under clause "Content of each subject in each year " & "Teaching learning methods ".

### 2.16. Project work to be done

In the first year students shall undertake a project for 15 days duration which shall be done in established hospitals with more than 300 beds within and outside the state. The students have to select any hospital related issue as the topic of work. The report is to be prepared as per research methods.

The final year placement extends over 45 days and is done in major hospitals with more than 300 beds. The student is expected to study a particular topic or issue relating to hospital administration. Satisfactory completion of project placement and presentation in the form of a project report as per the format given in annexure is mandatory for appearing the viva voce examination in each year. Weightage in marks will be given for project reports for appropriate application of the methods and techniques of statistics and operations research.

### 2.17. Any other requirements [CME, Paper Publishing etc.]

As per KUHS norms

### 2.18. Prescribed/recommended textbooks for each subject

As given under "Content of each subject in each year".

### 2.19. Reference books

As given under "Content of each subject in each year".

### 2.20. Journals

As given under "Content of each subject in each year".

### 2.21. Logbook

To be maintained and counter signed by the concerned HOD.

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### a) Log Book

A log book has to be maintained by all students and this has to be reviewed by the HOD of the department periodically. Periodic assessment has also to be done in the department by the teachers. Marks for the skills development will be awarded internally based on the performance and participation of the student in all the programmes undertaken by the college for the two years including the forty departments the students are rotated.

### 3. EXAMINATIONS

### 3.1 Eligibility to appear for exams

A candidate is required to put in at least 80% attendance and minimum 50% marks in internal assessment in theory and practical in each subject separately from an institution approved by or affiliated to Kerala University of Health Sciences in an academic year.

### 3.2 Schedule of Regular/Supplementary exams

Every year there shall be two examinations. The first examination in a year shall be the regular examination and the second examination shall be supplementary
 examination, which will be conducted within 6 months after the declaration of the results of the Regular examination.

### 3.3 Scheme of examination showing maximum marks and minimum marks

- The viva voce examination and valuation of project report will be conducted at the
  end of each year by atleast two internal examiners and one external examiner
  appointed by the University.
- A candidate, on the event of failure in evaluation of any one or more project report and viva voce, he/she may reappear and pass the same before the finalization of concerned examinations results
- The year wise details regarding the names of subjects and marks are shown below

SL.	Name of papers	Internal	University	Minimum	Total	Contact
No.		Assessment	Examination	for pass		Hours
140.			Min Max	(Internal		
				+		
				Uni. Exam)		

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1	Paper I General	20	50	100	60	120	150
	Management						
2	Paper II Hospital	20	50	100	60	120	150
	Administration PartI						
3.	Paper III						
	Research	. + Y	0	E			
	methodology &	20	50	100	60	120	150
	Biostatistics				14.		
4.	Paper IV	0.4			<	3.	
	Medical Records &	70	P.			et.	
	Medical Equipment	20	50	100	60	120	150
5.	Paper V					5	
	Organisational					- 0	
	Behaviour &	20	50	100	60	120	150
	Managerial	•					
	Communicati <mark>on</mark>				///	- 2	
6.	Paper VI Op <mark>erations</mark>	20	50	100	60	120	150
	Research					100	
7.	Paper VII					Co.	
	BMS &						
	Epidemiology	20	50	100	60	120	150
	सर्व	भवन	7	स्रोप	वन:		
8.	Paper IX Hospital	60	75	150	105	210	15days
	Project					\.	
	Daner V maisst	_	75	150	75	150	
9.	Paper X project		75	150	75	150	

Defense & Viva Voce				
TOTAL	200	1000	1200	

# Second year

SI. No.	Name of papers	Internal Assessment	University Examination	_	Total	Contact Hours
	663		Min Max	(Internal uni. Exam)		
1	Paper I Hospital Administration Part 2	20	50 100	60	120	150
2	Paper II Hospital Economics & Finance	20	50 100	60	120	150
3.	Paper III  Management  Accounting &Cost	20	50 100	60	120	150
	Accounting	_				
4.	Paper IV  Materials  Management &	20	50 100	60	120	150

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5.	Paper V						
	Marketing for Health care Services & Strategic	20	50	100	60	120	150
6.	Paper VI Legal	+ Y	a 0				
	Framework for Hospitals	20	50	100	60	120	150
7.	Paper VII Skills	80			40	80	200
	Development in	769				-6.	
	Hospital	4	0			300	
	Administration(	1				(5)	
- 40	Internal)					- 0	
8.	Paper VIII Hospital	100	100	200	150	300	45days
- 40	Project	_			//	ITI	
9.	Paper IX project		100	200	100	200	
	Defense & VivaVoce					0	
	TOTAL	300				1300	
	IOIAL	300		00		1300	
		M	10	00			

# 3.4 Papers in each year:

As given under "Content of each subject in each year

## 3.5 Details of theory exams

As per clause 3.3

First year MHA

	Subject		STATE OF THE	4	The	eory	SELEVIE		Section 1	STOME S	Prac	ctical			To	tal
SI. No		Sub Code	Internal		University				Internal		University					
			Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	General Management	Sub1	20	7.00	100	50.00	-	-	-	-	-	-	-	-	120	60
2	Hospital Administration Part -1	Sub2	20	7.00	100	50.00	+	-	-	-	-	-	-	134	120	60
3	Research Methodology & Biostatistics	Sub3	20	7.00	100	50.00	-	-	-	-	-	-	-	-	120	60
4	Medical Records & Medical Equipment	Sub4	20	7.00	100	50.00	-	-	-	-	-	-	-	-	120	60
5	Organisational Behaviour & Managerial Communication	Sub5	20	7.00	100	50.00	-	-		-	-	-	-	-	120	60
6	Operations Research	Sub6	20	7.00	100	50.00	-	-	-	-	-	-	-		120	60
7	Basic Medical Science & Epidemiology	Sub7	20	7.00	100	50.00	-	-	- 5		-	-	-	: 7	120	60
8	Hospital Project	Sub8	60	21.00	-	-	-	-	-	-	150	75.00	-	-	210	105
9	Project Defence & Viva Voce	Sub9	-	-	-	-	150	75.00	-	-	-	-	-	-	150	75
		G	RANE	TOT	AL										1200	600

### Second year MHA

THE T					Th	eory	NEW AND ADDRESS OF THE PARTY OF			801/8	Pra	ctical			Total	
SI. No	Subject	Sub Code	Internal		University		Viva		Internal		University		Viva			
			Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
1	Hospital Administration Part - 2	Sub1	20	7.00	100	50.00	-	-		-	-	-	-		120	60
2	Hospital Economics & Finance	Sub2	20	8.00	100	50.00		-		-	-	-	-	+	120	60
3	Management Accounting & Cost Accounting	Sub3	20	8.00	100	50.00		-		-		-	-		120	60
4	Materials Management & TQM	Sub4	20	8.00	100	50.00				(-		-	-		120	60
5	Marketing for Healthcare Services & Strategic Management	Sub5	20	8.00	100	50.00	-		S 94	-		-	-		120	60
6	Legal Framework for Hospitals	Sub6	20	7.00	100	50.00		-	-	-	-	-	-	- 2	120	60
7	Skills Development in Hospital Administration	Sub7	80	40.00	-	1/2	-			-			-	-	80	40
8	Hospital Project	Sub8	100	35.00		-		- 2	-	-	200	100.00		19	300	150
9	Project Defense & Viva Voce	Sub9	-	-			200	100.00	-	-	-	-		-	200	100
		GRA	AND T	TOTAL			100								1300	650

### 3.6 Model question paper for each subject with question paper pattern

QP Code:121380

First Year MHA Degree Examinations Model Question paper PAPER I – General Management (2013 Scheme)

Time: 3 Hours

Answer all the questions

Max Marks: 100

Essay

(2x20=40)

- "Decisions permeates through functions and resources"- Explain the statement with examples from hospital. Add a note on process of decision making
- Define motivation and explain four major theories of motivation.

Short Essay (2x10=20)

- 3. Which are the essential elements of an effective control system
- 4. How does TA help in managerial development

Short Notes (8x5 =40)

- 5. Contingency approach
- 6. Management by objectives
- 7. Features of coordination
- 8. Types of discipline
- 9. Job analysis
- 10. Advantages of trade unionism
- 11. Advantages of incentive schemes
- 12. Morale

QP Code: 122380

### First Year MHA Degree Examinations Model Question paper

### PAPER II - HOSPITAL ADMINISTRATION -I

(2013 Scheme)

Time: 3 hours Max Marks: 100

- Answer all the questions
- Draw diagrams wherever necessary

Essays: (2x20=40)

- Discuss about the planning process for 300 bedded multispecialty hospitals in account to foreseeable future development.
- Explain elements and principles of primary health care. Brief the Indian public health standards for PHC.

Short Essay: (2x10=20)

- Explain the planning, design and organization of an accident and emergency department.
- 4. Define hospital. Explain the types and classification of hospital

Short notes: (8x5=40)

- 5. Hospital as a system
- 6. Hospital transportation services
- 7. Millennium development goal
- Sleep laboratory
- 9. Indices of measurement of hospital utilization
- HVAC in hospitals
- 11.Srivastava committee
- 12. Types of hospital waste

# First Year MHA Degree Examinations Model Question paper PAPER III – RESEARCH METHODOLOGY & BIOSTATISTICS (2013 Scheme)

Time: 3 Hours

Answer all the questions

Max Marks: 100

 Write Section A and B Separate answer books. Do not mix up questions from section A and Section B QP Code: 123380 SECTION A- RESEARCH METHODOLOGY 50 (20)1. Prepare a methodology including questionnaire to assess the satisfaction of employees in a hospital. Short Essay: (10)2. Describe various research methods (4X5=20)Short Notes: 3. Sampling 4. Hypothesis testing Pictogram 6. Report writing QP Code: 124380 SECTION B-BIOSTATISTICS 50 Essay: (20)1. Explain the distinction between regression and correlation. Calculate the co-efficient of correlation from the following data by the method of rank difference: Rank of X: 10 4 2 5 8 5 6 Rank of Y: 10 6 2 5 8 4 Short Essay: 1. Two groups of 100 people each were taken for testing the uses of a vaccine .15 persons contracted the disease out of the inoculated persons , while 25 contracted the disease in the other group . Test the efficacy of the vaccine using  $X^2$  value. At 5% level for one degree of freedom the value of  $X^2$  is 3.84 (4X5=20)Short Notes: Chi-square test. Probability. 4. Why standard deviation is considered to be the best measure of dispersion 5. Following are the total cholesterol values of 15 patients - 155, 196, 235, 153, 180, 152, 178, 180, 172, 202, 223, 164, 231, 196, 219. Calculate the median.

# Q.P Code: Reg. No: ..... SECOND YEAR MHA DEGREE EXAMINATIONS (Model Question) Paper I - Hospital Administration - II Time: 3hrs Max marks: 100 Answer all questions Essays: (2x20=40)1. Discuss the setting up of a medical intensive care unit in a tertiary hospital. 2. Explain in detail the implementation of Information system in hospitals. Short essays: (2x10=20)3. Discuss the planning and management of casualty and emergency services. 4. How hospital information system does help in decision making. Short notes: (8x5=40)5. Disaster management in hospitals 6. NABH accreditation. 7. Explain about the new developments in the field of hospital administration. 8. Explain the steps involved in development of information system. 9. Explain hospital marketing information system. 10. Explain office automation software. 11. Computer network. 12. Medical tourism

\*\*\*\*\*\*\*

### Reg. No: .....

### SECOND YEAR MHA DEGREE EXAMINATIONS

### (Model Question)

### Paper II – Hospital Economics & Finance

Time: 3 hrs Max marks: 100

- · Answer all questions
- Write Section A and Section B in separate answer books. Do not mix up questions from Section A and Section B

QP Code: Section A - Hospital Economics Marks:50 Essay: (20)Discuss in detail demand analysis

Short essay: (10)

2. Explain cost analysis. Illustrate your answer

Short notes: (4x5=20)

- 3. Output analysis
- 4. Business cycle
- Capital budget
- 6. Special drawing rights (S.D.R)

QP Code: Section B - Finance Marks:50

Essay: (20)

1. Define the working capital management.

(10)Short essay:

2. Explain various capital budgeting techniques.

Short notes: (4x5=20)

- Discuss different sources of funds.
- 4. Describe the concept of time value of money.
- 5. Describe leverage.
- 6. The balance sheet of X limited as at December 31, 2006 is given below:

	Amount		Amount
Creditors	1,20,000	Land and Building	6,00,000
Bills Payable	30,000	Plant and Machinery	4,00,000
Bank Overdraft	80,000	Patents	1,00,000
Outstanding Expenses	10,000	Stock	1,50,000
		Sundry Debtors	1,25,000
		Bills Receivable	20,000
		Cash Balance	60,000
		Prepaid Expenses	10,000
Total	14,65,000		14,65,000

The net sales of the company for the year amounted to Rs. 12,00,000. Calculate current ratio and quick ratio.

\*\*\*\*\*\*\*

55  $\Rightarrow$ 

Reg. No:	
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# SECOND YEAR MHA DEGREE EXAMINATIONS (Model Question)

### Paper IV - Materials Management and Total Quality Management

Time: 3 hrs Max marks: 100

- Answer all questions
- Write Section A and Section B in separate answer books. Do not mix up questions from Section A and Section B

QP Code: Section A – Materials Management Marks:50

Essay: (20)

1. Explain the various inventory control techniques.

Short essay: (10)

2. Explain the procedure of buying goods from international markets.

Short notes: (4x5=20)

- 3. Materials management information system
- 4. Types of stores
- Control of pilferage
- 6. Carriage of Goods Act

QP Code: Section B – Total Quality Management Marks:50

Essay: (20)

1. Explain the importance of ISO certification

Short essay: (10)

2. Discuss the statistical tools in total quality management

Short notes: (4x5=20)

- 3. Quality circles
- 4. Infection control programmes
- 5. Just in time
- 6. Six sigma

### 3.7 Internal assessment component

The internal marks will be awarded by the HOD on the basis of the assessment done by the faculty relating to the class tests, assignments, performance in the seminar,

class participation etc.

A candidate must obtain 50% of marks in internal assessment to be eligible to write the university examination. The average internal assessment marks of the whole class should not exceed 75% of maximum marks for regular and 80% for supplementary.

**Practical Examination:** A certified Record is compulsory for project works and Skill Development Programme that will be evaluated at the time of concerned Examination.

### 3.8 Details of practical/clinical practicum exams

As given in KUHS website

### 3.9 Number of examiners needed (Internal & External) and their qualifications

- Examiner From within this University or other Universities with 5 years Post PG teaching experience.
- There shall be three examiners for project evaluation and Viva examination-two
  internal and one external, who will jointly evaluate the performance of the candidate
  and conduct viva voce examination and award marks.

### 3.10 Details of viva:

As given under "Scheme of examination showing maximum & Minimum Marks".

### 4 Qualification and experience including that of the Head of the Dept.

Core faculty should have full time Postgraduate degree in Master of Hospital Administration/ Hospital Management / M Sc in Hospital Administration/Hospital Management / MBA in hospital Administration /Hospital Management or M Phil (HHSM from BITS Pilani with five years full time teaching experience in MHA course) from a recognized institution affiliated to University established under law or MD — Hospital Administration degree from an institution, recognized by Medical Council of India.

The core faculty only can guide the students for the project work and shall be an examiner for the viva-voce. Faculty student ratio is limited to 1:5.

### Lecturer:

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Qualification: Master of Hospital Administration/ Hospital Management or M.Sc. in Hospital Administration/Hospital Management or MBA in hospital Administration/Hospital Management from an institution affiliated to University established under law or MD – Hospital Administration degree from an institution, recognized by Medical Council of India.

### **Assistant Professor**

Qualification and experiences: The qualification required shall be as that of lecturer. The experiences required shall be 3 years full time teaching experiences as a lecturer for full time Masters Course in Hospital Management/ Hospital Administration or equivalent affiliated to a university established under law.

### **Associate Professor**

Qualification and experiences: Master of Hospital Administration/Hospital Management or M Sc in Hospital Administration/Hospital management or MBA in Hospital Administration /Hospital Management or M Phil (HHSM from BITS Pilani) or M D Hospital Administration from an institution affiliated to University established under law with 7 years full time teaching experience for full time Masters Course in Hospital Management/ hospital Administration or equivalent affiliated to a university established under law

### **Professor and HOD**

Master of Hospital Administration/Hospital Management or M Sc in Hospital Administration/Hospital management or MBA in Hospital Administration /Hospital Management or M Phil (HHSM from BITS Pilani) or M D Hospital Administration from an institution affiliated to University established under law with 10 Years full time teaching experience for full time Masters Course in Hospital Management/Administration or equivalent affiliated to a university established under law.

Or

15 years managerial experience in Hospital, after a post graduate degree of Master of Hospital Administration/ Hospital Management or M Sc in Hospital Administration/Hospital management or MBA Hospital Administration /Hospital Management or M Phil HHSM from BITS Pilani or M D Hospital Administration degree from an institution recognized by Medical Council of India or equivalent affiliated to a university established under law of which at least 7 years at senior level of Administrator of 500 bedded hospital and 8 years full time teaching experience for full time Masters Course in Hospital Administration / Hospital Management or equivalent in an institution affiliated to University established under law.

In the absence of a person with above qualifications, a candidate with full time post graduate degree in management (MBA, MHRM, MA (PM&IR), etc) with 18 years full time managerial experience in Hospital after post graduation, of which at least 7 years at senior level of Administrator of 500 bedded hospital and 8 years full time teaching experience after a post graduate degree in management for full time Masters Course in Hospital Management/ Hospital Administration or equivalent with affiliation to a university established under law will be considered.

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# Staff requirements (core faculty) of the MHA Course For an intake of 10 students:

SI No	Staff Description	Number	Qualification& Experiences
1	Professor and HOD	1	Specified as above
2	Associate professor	1	Specified as above

3	Assistant Professor	1	Specified as above
4	Lecturers	2	Specified as above

•

### For an intake of 20 students:

SI No	Staff Description	Number	Qualification& Experiences
1	Professor and HOD	1	Specified above
2	Associate professor	1	Specified above
3	Assistant Professors	2	specified above
4.	Lecturers	4	specified above

•

### For an intake of 30 students:

SI No	Staff Description	Number	Qualification & Experiences
1	Professor and HOD	1	Specified above
2	Associate Professor	1	Specified above
3	Assistant professors	3	specified above
4	Lecturers	7	specified above

Core faculty should have MD (HHM) /DNB (HHA) /M. Phil (HHSM) / MHA/M.Sc. (HA) from an institution affiliated under law. The core faculty only can guide the students for the project work and shall be an examiner for the viva-voce. Faculty student ratio is limited to 1:5 per year.

Maximum number of students (including first year and second year MHA) a faculty could guide at a time is limited to five.

# Qualifications of Staff

Teachers with the following qualifications can also handle various related theory papers.

- MBBS & MD (Hospital & HealthManagement)
- MBBS & DNB (Hospital & HealthAdministration)
- M. Phil (Hospital and Health SystemsManagement)
- Master of Hospital Administration(MHA)
- M.Sc. HospitalAdministration
- Postgraduate Degree with LL.B., orLL.M.,
- Master of Business Administration(MBA)
- Master of Human Resource Management (MHRM / MA (PM &IR))
- Master of Social Work(MSW)
- M.Com. (Master ofCommerce)

- M.Sc.(Physiology) (Microbiology)(Anatomy)
- M. Sc.(MedicalDocumentation)
- M.C.A
- M.Sc.(Anatomy)
- MPT
- MBA
- MAEconomics
- CA
- B.Tech (Biomedical)
- P.hD in Hospital Administration

### 4. INTERNSHIP

Not Applicable

### 5. ANNEXURES

**5.1** Check Lists for Monitoring: Log Book, Seminar Assessment etc. to be formulated by the curriculum committee of the concerned Institution

### FORMAT OF MHA PROJECT REPORT

**CHAPTER 1: INTRODUCTION TO THE SUBJECT CHAPTER 2:** 

**REVIEW OF LITERATURE** 

**CHAPTER 3: METHODOLOGY** 

- Problem statement/ Scope ofstudy
- Obective ofstudy
- Researchdesign
- Theorectical & operational definitions
- Research setting & Sources ofdata
- Samplingdesign60

- Pilotstudy
- Validation/standardization
- Tools &techniques
- Method of datacollection
- Proposal for processing & analysis ofdata
- Limitations ofstudy
- Timebudget

**CHAPTER 4: ANALYSIS AND INTERPRETATIONS OF DATA** 

**CHAPTER 5: FINDINGS AND SUGGESTIONS** 

**CHAPTER 6: CONCLUSION** 

**BIBLIOGRAPHY APPENDIX** 

The details of the format to be followed for the Report is as follows:

The Report shall be typed on white paper, size 210 X 297 mm, 7 Kg, bond, for the original typescript and others shall be hootocopies.

### 1. TYPING

The typing shall be in standard letter size, double spaced on one side of the paper only, using black ribbon.

### 2. MARGIN

The typed sheet shall have the margins: Left 35 mm, Right 20 mm, Bottom 20 mm.

### 3. BINDING

The report shall be rexin bound.

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### 4. LETTERING

The lettering shall be inscribed, on the bound back and the front cover.

The bound back shall contain the title and the name of the student in 3 mm size letters.

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### 5. FRONTCOVER

The front cover shall contain the following details:

- Top: The title in block capitals of 6 mm size letters, properlycentered.
- Full name of the candidate in block capitals of 3 mm size letters, properlycentered.
- Purpose of the work and University name in block letters properlycentered
- Bottom: Name of the Institution, year of submission all in block capitals of 3 mm size letters in separate lines with spacing and properly centered. (This is a standard format)

### 6. BLANKSHEET

At the beginning and the end of the report two white blank sheets of 7 kg. Bond paper shall be provided one for the purpose of binding and another to be left blank.

### 7. TITLESHEET

The title sheet shall be the first typed sheet and shall follow immediately the blank sheet.

### 8. CONTENTS

The contents shall indicate the title of Chapters, Section and sub-sections etc., using the decimal notation with corresponding page numbers against them.

### 11. LIST OFTABLES

- § The 'contents' shall be followed by a 'List of Tables' indicating the Table number, Table title and the corresponding page number. The Table number shall be in decimal notation indicating the Chapter number and the Table number in that Chapter.
- § Any reference within the text shall be given by quoting the relevant number, e.g. Table 2.2.

### 12. LIST OFFIGURES

- § The 'List of Figures' shall follow the 'List of Tables' indicating the Figure numbers, Figure titles and the corresponding page numbers. The Figure shall be in decimal notation indicating the Chapter number and the figure number in that Chapter. For e.g., 6.4 refers to Fig.4 in Chapter 6.
- § Any reference within the text shall be given by quoting the relevant number, e.g. 'Fig. 6.4.'

### 13. ABBREVATION / NOMENCLATURE

The 'Nomenclature' follows the 'List of Figures' and contains the list of symbols used. They

shall be arranged alphabetically in order of Latin letters, Greek letters, superscripts and subscripts. As far as possible generally accepted symbols shall be used. Symbols not available in typewriters shall be written in permanent black ink.

### **15. CHAPTERNUMBERING**

The Chapter shall be numbered in Arabic numerals, Section and sub-section of any chapter shall be in decimal notation. All chapters shall begin on a new page. The titles for chapters, sections, and sub-sections shall be in block capitals. The chapter number and title shall be properly centered at the top of the page and have three spaces between them.

### 16. INTRODUCTION TO THEPROJECT

The first chapter will be introductory Chapter. These chapter shall highlight the importance of the investigation and also define the topic and scope of the work envisaged.

### 17. REVIEW OFLITERATURE

It shall present a critical appraisal of the previous work done on the topic. The extend of an emphasis on this chapter shall depend on nature of Investigation.

### 18. WORKDONE

- The work carried out by the student shall be presented in one or more chapters depending on the type of work. A typical format will be a chapter each on Data Collection, Analysis of DataFormations
- Each chapter may have several sections and sub-sections with suitabletitles.
- Important and short derivations, and representative data in tables and Figures, shall be presented in these chapters. Information such as lengthy derivations, voluminous tables and large number of figures shall be presented in the Appendix.
- Figures and tables shall be on separate sheets and not inserted on the papers with running text. Depending on the size, figures and table shall be accommodated on sheets of size 210 x 297 mm or 197 x 450 or 297 x 625 mm. If there are longer tables that cannot be accommodated on these sheets, there shall be a continuation table. Very large figures shall be placed in a pouch at end of the report. All figures and table included in the Appendices shall be accordingly mentioned in the text, Lettering on figures shall be uniform either in engineering letters or typed. Each figure should be self-sufficient to provide all the

information. There must be a title for every figure andtable.

Mathematical portions of the text shall preferably by typed. Where it is not
possible, ample space shall be left, and equations and symbols shall be inserted
clearly in permanent blackink.

### CONCLUDINGCHAPTERS

### DISCUSSION AND CONCLUSION

This should include a thorough evaluation of the investigation carried out and shall bring out the contribution, if any. The discussion shall logically lead to certain conclusions and inferences. A suggested scheme of implementation should also be included.

### 20. REFERENCES

§ Bibliography shall follow the last chapter. If shall give a list of works (papers, books, etc.) referred to in the body of the text and they shall be arranged in the order they are first cited in the text.

The numbering shall be in an Arabic numeral indicated as superscript along with the author's name in the text.

For any paper in information shall contain the names of the authors the title of the journal, the volume number underscored, the page number and the year of publication in parenthesis.

In the case of references from journals and books in languages other than English the titles of the journals or books should be transliterated into latin script and not translated.

For any book the information shall contain the names of the authors, the title of the book, the name of the publisher, the edition, and year of publication in the parenthesis. For papers and books with joint authorship, the name of all the authors shall be reproduced in the same order. The author's name shall begin with the name followed by initials.

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Journal:

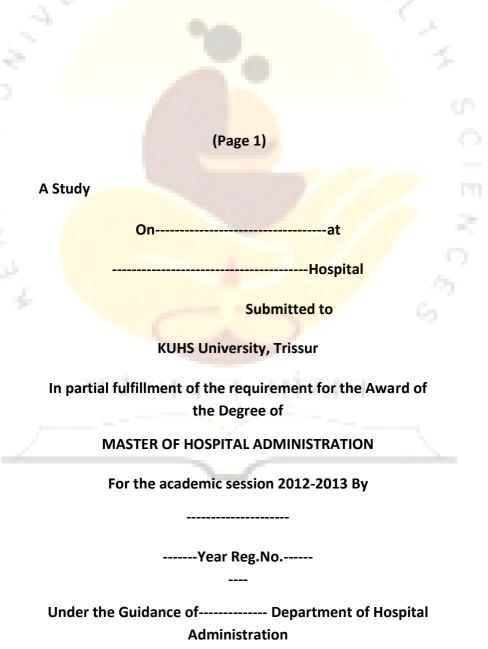
Vyas A.L., 'Fuzzy Logic' – A New Vista for Industrial Engineering, S. & Industrial Engineering News, Vol.2(2), 1995, pp. 1-15.

### Books:

Hedge, B.K. Copen, M.R., Production Management Text and Cases, Prentice Hall of India, New Delhi, 1972, pp. 101-105.

### **21. APPENDICES**

Appendices will be numbered in Roman capitals. The appendices shall normally contain detailed or lengthy derivations, sample calculations, voluminous, large figures and calculations.



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(Page 2)
A Study
Onat
Hospital
Submitted to
KUHS University, Trissur
In partial fulfill <mark>ment of the require</mark> ment for the Award of the Degree of
MASTER OF HOSPITAL ADMINISTRATION
For the academic session 2012-2013 By
Year
Reg.No
Under the Guidance of Department of Hospital
AdministrationInstitute
, Kerala, S.India

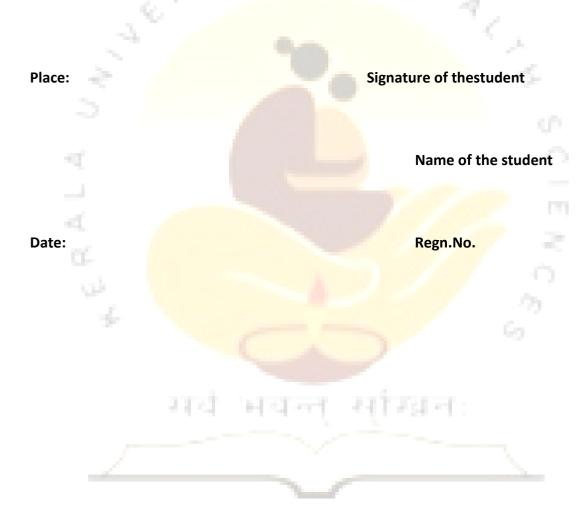
----- Institute

**Examiner Examiner I** 

(Page 3)

### **DECLARATION**

I hereby declare that the project work entitled "-------, is an authentic record of the original work done by me under the guidance of ------and further that no part of this work has been presented for any other degree or diploma earlier.



(Page 4)

### **CERTIFICATE**

This is to certify that ----- is a student of this institute. She has successfully completed the ----- Year Project Work on "------ at ------ Hospital," as partial

fulfillment of the course MASTER OF HOSPITAL ADMINISTRATION affiliated to KUHS University during the academic year ------.



(Page 5)

(Copy of the certificate of the Hospital where the student did her/his project)



I hereby declare that Kerala University of Health Sciences, Thrissur, Kerala shall have the rights to preserve, use and disseminate this project work in print or electronic format for academic/ research purpose.



### **ACKNOWLEDGEMENT**

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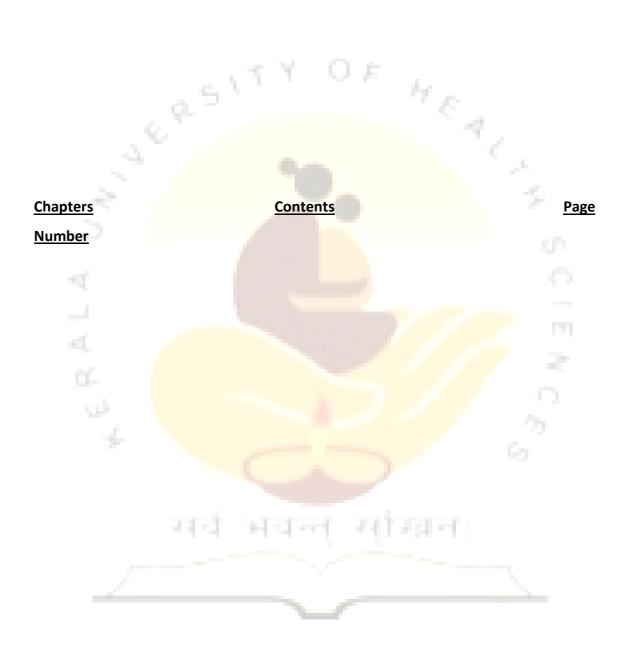
**EXECUTIVE SUMMARY** (In 2 pages)

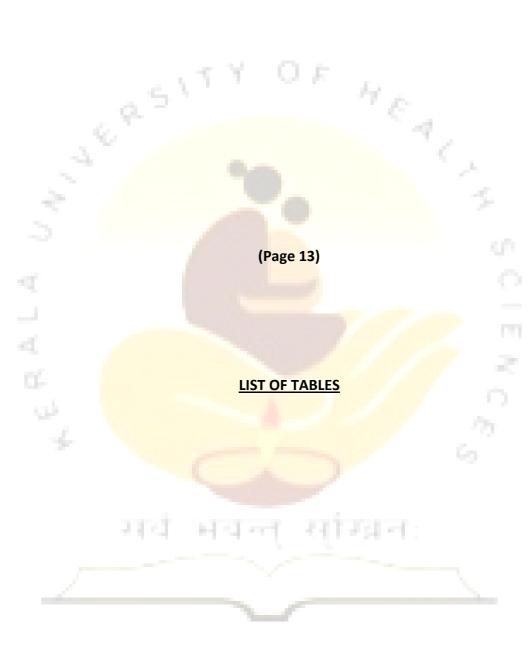
### **BACKGROUND OF THE STUDY**



(Page 12)

## **TABLE OF CONTENTS**





Sl.No. <u>Tables</u> <u>Page</u>

<u>Number</u>



## **LIST OF FIGURES**



