



BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI – 620 024.
B.Sc. HOSPITAL ADMINISTRATION – Course Structure under CBCS
(For the candidates admitted from the academic year 2010-2011 onwards)

Semester	Part	Course	Title	Instru Hours/Week	Credit	Exam Hours	Marks		Total	
							Int.	Extn.		
I	I	Language Course – I (LC) – Tamil*/Other Languages ** #		6	3	3	25	75	100	
	II	English Language Course - I (ELC)		6	3	3	25	75	100	
	III		Core Course – I (CC)	Introduction to Hospital Services	6	5	3	25	75	100
			Core Course – II (CC)	Principles of Hospital Administration - I	5	4	3	25	75	100
			First Allied Course –I (AC)	Basic Biological Science – I	5	4	3	25	75	100
		First Allied Course – II (AC)	Basic Biological Science – II	2	-	** *	-	-	-	
				30	19				500	
II	I	Language Course – II (LC) - Tamil*/Other Languages ** #		6	3	3	25	75	100	
	II	English Language Course – II (ELC)		6	3	3	25	75	100	
	III		Core Course – III (CC)	Principles of Hospital Administration - II	6	5	3	25	75	100
			First Allied Course – II (AC)	Basic Biological Science – II	3	3	3	25	75	100
			First Allied Course – III (AC)	Principles of Economics and its application to Hospital services	5	3	3	25	75	100
	IV	Environmental Studies		2	2	3	25	75	100	
IV	Value Education		2	2	3	25	75	100		
				30	21				700	
III	I	Language Course – III (LC) – Tamil*/Other Languages ** #		6	3	3	25	75	100	
	II	English Language Course - III (ELC)		6	3	3	25	75	100	
	III		Core Course – IV (CC)	Financial Management	6	5	3	25	75	100
			Second Allied Course – I (AC)	Hospital Information System	6	3	3	25	75	100
			Second Allied Course– II (AC)	EPIDEMIOLOGY AND COMMUNITY HEALTH	4	-	** *	-	-	-
		Non Major Elective I - for those who studied Tamil under Part I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	Personal Hygiene	2	2	3	25	75	100	

				30	16				500	
IV	I	Language Course –IV (LC) - Tamil*/Other Languages ** #		6	3	3	25	75	100	
	II	English Language Course – IV (ELC)		6	3	3	25	75	100	
	III	Core Course – V (CC)	Operation Research for Hospital Administration		4	4	3	25	75	100
		Core Course – VI (CC)	Material Management		4	4	3	25	75	100
		Second Allied Course - II	EPIDEMIOLOGY AND COMMUNITY HEALTH		2	3	3	25	75	100
		Second Allied Course – III	Health Economics		4	4	3	25	75	100
	IV	Non Major Elective II - for those who studied Tamil under Part I I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	Role of Hospital Services		2	2	3	25	75	100
		Skill Based Elective I			2	4	3	25	75	100
					30	27				800
	V	III	Core Course – VII (CC)	Ward Administration		5	4	3		100
Core Course – VIII (CC)			Quality Assurance		5	4	3		100	
Core Course – IX (CC)			Hospital Organization & Research Methodology		6	5	3		100	
Core Course – X (CC)			Communication in Public Relations		5	5	3		100	
Major based Elective – I			Hospital Record Management - I		5	5	3		100	
IV		Skill based Elective –II			2	4	3	25	75	100
		Skill based Elective – III			2	4	3	25	75	100
				30	31				700	
VI	III	Core Course – XI (CC)	Human Resource Management		6	5	3		100	
		Core Course – XII (CC)	Biostatistics		6	5	3		100	
		Core Course – XIII (CC)	Legal Aspects in Hospital Management		6	5	3		100	
		Major based Elective II	Hospital Dietary Services Management		6	5	3		100	
		Major based Elective III	Hospital Infection Control Management		5	4	3		100	
	IV	Extension activities			-	1	-	-	-	-
		Gender Studies		1	1	3	25	75	100	
		Total		30	26				600	
				180	140				3800	

Note:

Internal Marks External Marks

1. Theory 25 75
2. Practical 40 60
3. Separate passing minimum is prescribed for Internal and External marks

The passing minimum for CIA shall be 40% out of 25 marks [i.e. 10 marks]

The passing minimum for University Examinations shall be 40% out of 75 marks [i.e. 30 marks]

- * for those who studied Tamil upto +2 (Regular Stream)
 - ** Syllabus for other Languages should be on par with Tamil at Degree level
 - # those who studied Tamil upto 10th or +2, but opt for other languages in degree level under Part I should study special Tamil in Part IV
 - *** Examination at the end of the next semester.
- Extension activities shall be out side the instruction hours.

CORE COURSE I – INTRODUCTION TO HOSPITAL SERVICES

Unit I

- Concepts of Hospital
- Changing concepts of Hospital
- Philosophies of Hospital

Unit II

- Definition
- Types of Hospital
- Role perception of Hospital
- Hospital as a system

Unit III

- Role of Hospital
- Levels of care
- Health care, delivery system and Hospital
- Changing roles of Hospital

Unit IV

- Factors Influencing Hospital utilization
- Hospital Environment
- Hospital Physical facilities
- Hospital Design
- Types of services

Unit V

Health team and role of

- Doctors
- Nurses
- Pharmacists
- Ancillary Health personnels

Reference:

- 1) Francis cm et al, (2004), “Hospital administration 3rd edition, Jayper Publishers (p) Ltd., New Delhi
- 2) Sakharkar B.M. (1998), “ Principles of Hospital Administration and Planning’ Jayper Publication (P) Ltd., New Delhi

CORE COURSE II - PRINCIPLES OF HOSPITAL ADMINISTRATION - I

Objective: To give a proper understanding of the management concepts and techniques as a first step towards developing executives.

- Unit - I Definition of Management – Functions of Management - Schools of Management thought – Principle of Management - contribution of F.W. Taylor, Henry Fayol, Elton Mayo, Mc Gregor and Peter F. Drucker - Function of Manager – Delegation.
- Unit – II Planning:- Objectives – Strategies – Programmes – Policies, Long range and short range plans – strategic considerations in planning.
- Unit – III Need for organizational hierarchy in large organizations – Principles of sound organization – organization structure - span of control – organization chart.
- Unit – IV Authority – Power – Responsibility – Line and staff authority – Principles of Directing Authority CVSDV of authority - committees. Meaning of communication – Types of communication formal and informal channels – barriers to effective communication. Motivation – importance and characteristics - Positive and negative Motivation theories of motivation.
- Unit – V Controlling - functions – Steps - Budgeting - Personal observation – The concept of MBO as a Means of control

BOOK FOR PRINCIPLE OF MANAGEMENT I & II

Reference Books:

	AUTHOR	TITLE	PUBLICATION
1.	L.M. Prasad	Principle of Management	-
2.	Dinkar and Tagore	Business Management	-
3.	Koontz Z and 'O' Donnel	Essentials of Management	
4.	Tripathi & Reddy	Principles of Management	
5.	L.M. Prasad	Organisation Behaviour	
6.	Stephen Robbins	Organisation Behaviour	
7.	Fred Luthans	Organisation Behaviour	

FIRST ALLIED COURSE - I

BASIC BIOLOGICAL SCIENCE – I

Objective : To Provide basic knowledge about the human body, its functions and its physiological activities.

Unit – I Anatomy: Structures constituting human body; Main sub-divisions of human body, Some commonly used descriptive terms in Anatomy.

Muscles: Types, structure, functions and its distribution in various parts of the body (Head, neck, thorax, abdomen, lower and upper extremity)

Bones & Joints : Types, structure, functions & its distribution in various parts of the body (Head, neck, thorax and abdomen, lower & upper extremity)

Surface making of some structure and clinical correlations of upper, limb lower limb, thorax, abdomen, Head & neck.

Unit – II

Physiology: Blood: Functions and composition of blood cells – Red blood cells, white blood cells, platelets, Haemoglobin, clotting of blood. Thrombosis, Immunity – Natural and acquired, Immune response - Primary, secondary response, Antigen – Antibody Reaction, Blood Group and transfusion of blood, ABO system, Rh factor.

Circulation: Structure and function of Heart; Types of blood vessels and blood flow, Heart Beat, Blood pressure – measuring B.P. systolic and diastolic pressure. Circulation of blood through artery, veins and capillaries.

Respiration: Breathing and respiration, respiratory organs, gaseous exchange and transport, factor influencing breathing rate, control of breathing – nervous and chemical control.

Excretion : Structure of kidney, mechanism of urine formation, Glomerular filtration urine formation, tubular function, composition of urine; principle of dialysis and haemodialysis, skin – its structure of function.

Digestion: Digestion in mouth, Digestion in stomach, enzymes – functions of enzymes in digestions. Digestion and absorption. Nervous system – Introduction to nervous system, Neuron, Nerve fiber function and properties, central nervous system Autonomic nervous system. Spinal cord cranial nerves, Receptors and sensations.

Unit – III

Bio Chemistry : Structure and properties of Molecules. Electronic configuration of an atom, association of atoms into molecules; physical properties of molecules.

Protein Metabolism with brief description of immunoglobulins and their diagnostic significance in modern medicine. Amino acid, metabolism – mechanism; biosynthesis and detection of basic errors in laboratory.

Fat metabolism with special emphasis on the role of lipids in heart diseases – diagnostic methodologies. Carbohydrate metabolism in brief – explaining the mechanisms of glycogens, Neoglucogenesis and glycogenolysis with special reference to diabetes mellitus and its laboratory investigations.

Importance enzymes and co-enzymes – their supportive role in brief - their diagnostic values in health and disease. Vitamins and Hormones – source, utilization, excretion, diseases associated with their abnormal levels in the human body – diagnostic methods.

Blood chemistry; brief description of various blood forming elements; their normal and abnormal levels – Laboratory investigations. Some recent Laboratory techniques - chromatography; calorimetry and spectrophotometry; Electrophoresis; Immuno Electrophoresis; Radiation techniques; Radio immunoassay:

Unit – IV - MICROBIOLOGY

Microbiology: General Introduction. Brief Historical Reviews; value of knowledge of Microbiology. Micro – organism: Classification, General Characteristics – Size, Structure methods and rate of reproduction, nutrition and respiration, factors influencing growth, pathogenic and non – pathogenic organisms; common diseases caused by different types of organisms – Bacteria, Virus, Moulds and protozoa. Microbiology of food borne diseases; food poisoning principles and food preservation.

Unit – V

Parasitology: Introduction to parasitology. Introduction to protozoan parasites. Common prevailing parasites - identifications and treatment of – Amoebiasis. Nematodes – identification and treatment of : Helminthiasis, Filariasis, Hookworms, Ascariasis and trichuriasis, Trichomoniasis, Enterobius Vermicularis & Dracunculiasis.

FIRST ALLIED COURSE - II

BASIC BIOLOGICAL SCIENCE – II

Objective : To provide elementary knowledge of the various systems of the human body and the diseases affecting them.

Unit – I Disease of Heart : Cardiac arrest, Heart Block, pericarditis, Valvular diseases – Congestive heart failure, hypertension congestive heart diseases, Angina Pectoris – Myocardial infarction - Pectoralis : major & minor.

Blood Diseases : Anaemia – Leukaemia; Agranulosis; Haemophilia.

Vascular Disease : Arteriosclerosis, Thrombophlebitis, Embolism; Vericose Veins, Aneurysm.
Blood Transfusion : Indicators - grouping & matching RH Factor, Plasma – Precautions in blood transfusion– Blood banks.

Unit – II

Gastro -Intestinal System : Diseases of the mouth and Oesophagus - stomatitis, gingivitis, parotids; dental care.

Disease of stomach and intestinal tract: Gastritis, peptic ulcer. Appendicitis, Hernia and fissure, fistula and haemorrhoids.

Urinary And Reproductive System : Diseases of kidney ureter, bladder & urethra, cystitis, phlebitis, Nephritis, tumour, uraemia, injury.

Disease and disorders of female reproductive system and mammary glands - Infections, cysts, fibroids, abortion and ectopic pregnancy; vaginal fistula; mastitis.

Unit – III

Musculo Skeletal System : Disorders and diseases of bones and joints, sprains - Dislocation and fracture – Arthritis, osteomyelitis and osteoporosis.

Nervous System : Migraine Headache, Coma, Epilepsy-seizures, neuritis, Sciatica, Paralysis, cerebral embolism, thrombosis, meningitis, abscess and tumours, spinal cord injury, sun stroke, heat exhaustion.

Unit – IV

Disease of the Ear and Eye : Ears : Wax formation, foreign bodies, Otitismedia, mastoiditis; Eyes : Conjunctivitis, hypermetropia, hypermyopia, nightblindness, cataract, glaucoma.,

Disease Of the Nose And Throat : Sinusitis, Tonsillitis , Laryngitis.

Unit V

Endocrine System : Metabolic disorders – Deficiency diseases. Diseases of thyroid, parathyroid – hyper and hypo secretions - metabolic disorders - Diabetes mellitus, obesity.

Disease of the Skin : Burns, Radiation induced burns and scars, plastic surgery, allergy conditions, urticaria, psoriasis, Eczema.

BOOKS FOR BASIC BIOLOGICAL SCIENCE I & II

A. Text Books:

	AUTHOR	TITLE	PUBLICATION
1.	T.S. Rangnathan	A Text book of Human Anatomy	S. Chand
2.	Sarada Subramanian	Text book of Human Physiology	S.Chand
3.	Ganaa	Physiology	Mc. Graw Hill
4.	Harper	Bio-Chemistry	Mc. Graw Hill
5.	Chaterjee	Bio – Chemistry	Jaypee
6.	Panikar	Micro- Biology	OLM

Reference Books

1.	I.B. Singh	Essentials of Anatomy	Jaypee
2.	I.B. Singh	Text book of Anatomy	Jaypee Volume 1,2,3
3.	Basmajian	Grants Method of Anatomy	B.I. Waverly
4.	Vasudevan	Bio – Chemistry	Jaypee
5.	Sathya Narayana	Bio – Chemistry	Central
6.	Grays	Grays Anatomy	CL
7.	Burton	Micro Biology for Health science	LIPWW
8.	Brooks	Medical Micro Biology	MC Graw Hill
9.	Green Wood	Medical Micro Biological 15 th Edition	CLISIC
10.	Ross & Wilson	Anatomy and Physiology in Health and Illness	-
11.	Panikar	Text book of Medical Parasitology	Jaypee
12.	Zeivia	Clinical Parasitology	W.B.S.
13.	Ramik Suid	Colour Atlas of Pathology	Jaypee
14.	Braunslie	Outlines And Review Pathology	Jaypee
15.	Seth	Pharmacology	Bill

FIRST ALLIED COURSE – III

PRINCIPLES OF ECONOMICS AND ITS APPLICATION TO HOSPITAL SERVICES

Objective : To understand the basic economic theories and thoughts, nature and significance of fundamental macro-economics, and micro - economic principles and its application to health care.

Unit – I

Analysis of Demand and Supply; Diminishing Marginal Utility; Equi-marginal Utility; Indifference Curve; Elasticity of Demand; Marginal Principle in Economic Action; Cost; Increasing Returns; Elasticity of Supply; Forces Governing the supply of Factors of Production – Land, Labour, Capital and Enterprise.

Unit – II

Theory of the Firm; Price Fixation; Role of Supply and Demand. The time element in economic theory; Concept of normal profit; Market -Perfect Competition; Imperfect Competition; Monopoly; Duopoly; Oligopoly; Monopolistic Competition, Economics of bulk purchase.

Unit – III

National Income; Circular Flow, Measurement; Difficulties in measurement; Uses.

Unit – IV

Theory of Distribution, Principle of substitution, Marginal Productivity, Wages; Rent, Interest Profit.

Unit – V

Business economics and Health Economics.

Text Books :

S.No	AUTHOR	TITLE	PUBLICATION
\1.	D.N. Dwivedi	Principles of Economics	-
2.	Paul A. Samuelson	Principles of Economics	-
3.	Ronathan S. Rakich	Management Health care organization	-
4.	S.L. Goel	Health care administration	-
5.	Srinivasan	Management process in Health care.	-

CORE COURSE – III - PRINCIPLES OF HOSPITAL ADMINISTRATION - II

Objective : To provide fundamentals of organizational Behaviour, Communication and provide an idea about Group behaviour.

Unit – I

Interpersonal relations; group dynamics and group behaviour, formal & informal groups and Organizational climate; Motivation – Motivation theories by Herzburg. Mc Gregor and Maslows need Hierarchy – the different types of leadership models and styles of the managerial grid.

Unit – II

Importance of effective communication in organization - Congruity ; authenticity, clarity; role of perception; Importance of two way communication; Principles of effective listening - telex, fascimail (fax), tele conferencing. Intercom apparatus – Modern means of communication – Internet, E–mail. communication network.

Unit – III

The individual : Foundation of individual Behavior, Biographical characteristics, Ability learning.

Value, Values attitudes and job satisfaction.

Personality and Emotions.

Unit - IV

The Group: Foundations of Group behaviour - defining and classifying groups, stages of group development toward external conditions imposed on the group, Group member resources, Group structures, Group processes Groups tasks, Group decision making - Understanding work teams. Popularity of teams; teams versus groups – differences; Types of teams; creating effective teams; turning individuals into team players contemporary issues in managing teams.

Unit V

Basic approaches to leadership, What is leadership? Trait theories, Behavioural theories, contingency theories, summary and implications for managers.

Contemporary Issues in Leadership - Trust ; The foundation of Leadership, Leaders as shapers meaning, emotional intelligence and leadership effectiveness, contemporary leadership roles, moral leadership.

S.No	AUTHOR	TITLE	PUBLICATION
1.	Ronathan S. Rakich	Management Health care organization	-
2.	S.L. Goel	Health care administration	-
3.	Srinivasan	Management process in Health care.	-

CORE COURSE – IV - FINANCIAL MANAGEMENT

- Unit - I** Nature of financial management - meaning and scope of finance function - financial management and its functions - goals of financial management profit. Maximization - wealth maximization – importance of financial management – Organization of financial department.
- Unit - II** Cost of capital - concept - importance and types of cost of capital - measurement of cost of capital - weighted average cost of capital - operating and financial leverages.
- Unit – III** Principles of costing - standard costing - marginal costing diagnostic related groups and cost centers in Hospital Allocating over head expenses to cost centers.
- Unit – IV** Allocating expense to various DRG. Finding cost per unit in DRG - Comparing of cost - Analysis of Variance – price etc. Purchase of Capital equipments - norms, payback period return on investment, Net Present Value Method.
- Unit – V** Financial planning and forecasting : Concept – characteristics and factors affecting financial planning – necessity and limitations – cash forecasting.

Text Book:

Sino	AUTHOR	TITLE	PUBLICATION
1.	Kuchal	Financial Management	Chatyana Publishing Hou
2	M.Y. Khan, P.K. Jain	Financial Management	TMH

Reference Books:

1.	Chandra	Financial Management theory and Practice,	Tata Mc Graw Hill
2.	Van Horne	Financial Management and Policy	Prentice Hall of India
3.	Brealey, Myers,	Principles of Corporate finance	Tata Mc Graw Hill
4.	M.Y. Khan, P.K. Jain	Financial Management	Tata Mc Graw Hill
5.	Pondy	Financial Management	Vani Educational Books
6.	Kuchal	Financial Management	Chatyana Publishing House.

SECOND ALLIED COURSE I - HOSPITAL INFORMATION SYSTEMS

This course introduces the student to information systems terminology, structures, specific applications, and their relationships to management functions in health services organizations. Health provides and health systems are continuing to make multi million dollar investments in information systems in order to meet new market and regulatory requirements. All health services managers will play a role in the analysis, design, acquisition, installation, operation and ultimate success of information systems necessary to meet organizational goals and objectives. This course exposes students to the IS/IT applications used to support management functions. Further applications and management issues unique to industry segments (e.g., long – term care, home care, hospital administration, physician practice management) will also be explored.

The goal of the course is to ensure that students are schooled in the terminology, conceptual models, applications and opportunities and limitations of information systems in health services.

Syllabus covers the following topics:

Unit I : Introduction to Management Information Systems

What is an Information System, Information technologies, what is a system. Feedback and Control, Components of Information System, Information System Resources, Overview of Hardware and software, Relationship of Hospital Information systems to managerial functions such as communications, coordination, control strategic and process planning and decision making.

Unit II : Overview and basic concepts of Hospital Information Systems.

Need for Hospital Information Systems, Understanding of the basic structures of information systems in health administration.

Unit III : Data Resource Management

Foundation data concepts, Types of databases, Database maintenance and Application development, implementing data resource management.

Unit IV : Decision Support

Information, decisions and management, Information quality, Decision structure, DSS components, Using DSS.

Unit V : Security and Ethical Challenges

Introduction, Technology ethics, guidelines, Computer crime, Privacy issues, computer monitoring, challenges in working conditions, Ergonomics.

Suggested text books

1. Management Information systems – Managing Information technology in the Business enterprises – James A.O’ Brien Tata Mc. Graw Hill 6th Edition (2004).
2. Management Information System – Organisation and Technology – Kenneth C. Landon, Jane P. London PH1 4th Edition (1998).

NON – MAJOR ELECTIVE – I – PERSONAL HYGIENE

Objective : To create an awareness about health care and the various health programmes

Unit - I

Health Education:

Definition – Importance - Principles of Health education – content of health education.

Health education – planning – methods of teaching - recognition of opportunity for teaching – preparation of low cost aids for teaching -audiovisual aids.

Unit – II

Personal health – Factors contributing to relationship between health and disease – healthy habits, Oral Hygiene

Unit – III

Physical health – Care of skin, ear, eyes, teeth, hands and feet, recreation and posture, menstrual hygiene, care of the sick and disabled, care of old people (geriatrics)

Unit – IV

Mental health – Definition –Causes and Types - Characteristics of a mentally healthy person – Factors contributing to mental health.

Unit – V

Environmental health – Relation of environment to health - health hazards – purification of water - efficient disposal (different methods like bore - hole latrine) - Solid waste disposal and control - food and milk sanitation – pest and rodent control

Reference Books:

AUTHORS	TITLE	PUBLICATION
1 J.H. Helberg	Community Health	
2 David morley and others	Practicing health for all	
3 Gill Watt	Health Policy	
4 W.B. Saunders	Epidemiology, Biostatistics and Preventive medicine, 1996	
5 J.E.Park & K. Park	Preventive And Social Medicine	Brown And Io.1978

SECOND ALLIED COURSE - II

EPIDEMIOLOGY AND COMMUNITY HEALTH

Objective : Various aspects of Epidemiology and Community Health.

Unit - I Epidemiology :

History; definition; Epidemiological approach. Investigation of an epidemic outbreak of disease. Basic measures in epidemiology; measurement of mortality, morbidity, disability, natality; characteristics of diseases and Health care facilities of an epidemic outbreak

Unit – II Society And Health :

Community and Health, Concept of health, definition & concepts, Determinants of health, Sociology of health Health in developing countries, Health transition & Health seeking Behaviour, Health information & Communication, Health and environment: Sanitation and Pollution, Health economics “ways of measuring health”;

Unit III : Health Care Delivery System:

At National and State levels; comprehensive health care models of community health; Mental hygiene movement; Assessing community Health needs; Health Delivery system, Primary Health Care

Unit - IV

Structure Of Health Service :Evolution of health care system – five year plans - recommendation of committees (Bhore, Mudaliar, Chadah, Mukerjee, Kartar Singh, Tungalwala Committee) – development of rural health service in India – Administration of health care service In India – Administration of health care service at central, state and municipal level – decentralized block level institutes - Primary health centers – Changing concepts and phases in health care.

Unit – V

National Health Programmes: Organisation and function of various National Health Programmes like.

- National Malaria Eradication Programme.
- National Leprosy Eradication Programme
- National TB control Programme
- National filariasis control programme
- National Diarrhoea disease control programme
- National STD control Programme
- Small pox, Chicken pox and Measles control programme
- Expanded Immunisation Programme
- National Family Welfare programme
- National mental health programme.

Health planning in India : Introduction – Development planning in India - National Health Services - UK - a model study.

Health Care Expenditure in India : Why we need to invest in Health, five year plans in health, Health financing, Health expenditure.

Health policies: Introduction – Health policies in India - a comparative study of china, srilanka, Africa; Indian Health policy – an overview.

Assessment of Indian MCH related programmes, CSSM, RCH nutrition. Health Insurance – An introduction Public and private mix. Managed care, Health intervention – Some case studies for India & developing countries.

Text Books :

S.N	AUTHOR	TITLE	PUBLICATION
1.	Lilien Field	Foundation Of Epidemiology	New Yard Oxford. University Press 1980
2.	Hennekena Buring	Epidemology In Medicine	Little Brown And Company Bos Toronto 1987

Reference Books:

1.	J.E.Park	Preventive And Social Medicine	Brown And Io.1978
2.	Brian Macmahon Thomas F.Pugh	Epidemiology Principles And Method ,Boston	Brown And Io.1978
3.	W.B.Saunders	Epidemiology ,Biostatistics And Preventive Medicine 1996	
4.	Sathe & Sathe	Popular Books Epidemiology And Management For Health Care For All (1997)	
5.	Stephen E Gray	Community Health	
6.	Gill Watt	Health Policy	
7.	J.E.Park & K.Park	Textbook Of Preventive And Social Medical	
8.	J.H.Helberg	Community Health	
9.	Mahjan B.K.	Health service in India	Jam nagar, Aruna R. Mahajan 19
10	Naick J.P.	An alternative system of health care services in India – Some proposals,	Allaied Pub 1982
11	Rao K.N.	Health services, public health in Encyclopaedia peadio of social work India	Vol. Pub Division, 1968
12	Bartlell, Harriet M	Social work practice in health field	New York National asson of so workers 1961

CORE COURSE - V

OPERATION RESEARCH FOR HOSPITAL ADMINISTRATION

Objective : To provide knowledge on the different methods involved in operation research of Hospitals.

Unit - I

Operation Research - An introduction - Mathematical formulation of L.P.P.

Unit – II

Simplex method – Big M Method, Two phase method – Duality problem

Unit – III

Assignment models – Queueing models – Single channel and multi channel model (M/M/I & M / M/C) models.

Unit IV

Simulation – Event type simulation, Transportation model

Unit V

Gantt chart, PERT/ Time and PERT / Cost CPM Techniques

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	Hamdy A.Taha	Operation Research – An Introduction	McMillan Publishing Co.Inc. S.Chand
2.	Kanti Swarup & Gupta	Operation Research	

Reference Books:

1	Shiv K.Gupta And John M.Cozzolino	Fundamentals Of Operations Research For Management	Holden Day Inc.
2	Kanti Swarup P.K.Gupta & M: Mohan	Operation Research	Chand & Sons
3	Hamdy A.Taha	Operation Research	Prentice Hall Of India Pvt.Lt
4	S.K.Mittal Pvagati Prakashan	Operation Research	Pragati Prakasan
5	Frank S. Budnick Dennis Mcleavy Richard Mojena	Principles Of Operation Rese For Management	All India Traveller Book Sell

SECOND ALLIED COURSE – III - HEALTH ECONOMICS

Objective: To create understanding and ability to analyse demand for health services, importance of externalities, problem of financing of health, various aspects of risk and uncertainty, market analysis, cost benefit and cost effectiveness studies, problems of performance and output measurement and inequality of hospital and health care.

Unit - I

Understanding of welfare economics – Economic development and human welfare measures, indexes of development, NY, PQC & HDI. Expenditure on health as investment: health policies, health market, value for money in health, public private finance of clinical services.

Unit – II

Advanced micro economics; consumer and producer theory. Principles of Equilibrium : uncertainty, rational, expectation competitive equilibrium, Nations and their efficiency properties.

Unit – III

Applied Microeconomics: Microeconomics analysis relevant to a wide range of decision making and policy formation problems in the public and private sector.

Unit – IV

Macroeconomic theory and policy: Keynesian, Monetary, Neoclassical, reappraisal of Keynesian economics and post Keynesian macroeconomics, behaviour of major indicator of macroeconomic performance such as unemployment, inflation, productivity and economic growth.

Unit – V

Cost Benefit analysis: Welfare foundation of CBA Measurement of cost and benefit, risk and discounting.

Text Books :

S.No	AUTHOR	TITLE	PUBLICATION
1.	Leuis E. Weeks,	Economics in health care	
2.	John G. Collis	Economics of health	
3.	Abel Smity	An introduction to health	

CORE COURSE – VI - MATERIAL MANAGEMENT

Objective : Explaining various, purchase procedures, methods of inventory control and other inventory systems. So that the inventories in a hospital can be managed effectively.

Unit - I

Introduction to material management – materials requirement, planning, classification of materials – Need for integrate – concept, definition and scope - Advantages of integrated material management concept.

Unit – II

Organisation - Based on commodities - based on function. Inter- departmental Relationships - Material planning and Budgeting. ABC Analysis – codification and standardization – source selection – vendor rating – make or buy decision - Lease against buying.

Unit – III

Purchase Management – Negotiations - Purchase systems material requisition. Purchase order – limited tender - open tenders - comparative statement - follow up, purchase orders, purchase of capital items - pay back period approach – Return on Investment– Internal rate of return - discounted cash flow method.

Unit IV

Import procedures – letter of credit -bill of lading import substitution – public buying – Rate and running contracts, Buyer seller Relations and ethics. Import procedure - Letter of credit - bill of lading - import substitution - public buying - Rate and running contracts. Buyer seller relation and ethics.

Unit V

Stores Management – functions of stores – Location and layout - Definition of inventory - need for inventory – store systems & procedure -goods received note. Store Receipt voucher, Bincard - stores issue voucher discrepancy. Stores Accounting and stock verification – LIFO – FIFO Average price method - obsolescence, surplus and scrap management – EOQ – Practical inventory systems - safety stock P system and Q system & IT . computers in Material Management Application of Material Management An Integrated Approach.

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	Gopalakrishnan Sundaresan	Material Management And Integrated Approach	Prentice Hall, India.
2.	A.K.Dutta	Integretd Materials Management	Prentice Hall, India.

3. Shakia Gupta Hospital Stores Management
(An Integrated Approach) MC Graw Hill.

Reference Books:

1. Starr & Mill Inventory Control Theory
And Practice Prentice Hall, India.
2. P.Gopalakrishnan And
M.S.Sandilya Stores Management And
Logistics Prentice Hall ,India.

NON MAJOR ELECTIVE II – ROLE OF HOSPITAL SERVICES

Unit I

Hospital – Definition – Hospital as teaching centre – General Hospital in National Health programmes and Public Health services: Types of Services

Unit II

General Medical Services

- Outpatient Services
- Inpatient Services
- Facilities for Research

Unit III

Special Medical Services

- Accident & Emergency Services
- * Hand injuries, Features, Burns, poisoning Tetanus
- Pediatric Services – Functions
- Antenatal Clinics – Location & Facilities
- Physiotherapy & Occupational Therapy

Unit IV

Technical Medical Services

- Radiodiagnosis
- Radiotherapy
- Laboratory
- Role of RMP

Unit V

Non-Medical Services & Facilities

- Stores
- Catering
- Records Room
- Maintenance Services: Laundry, Mortuary

Reference:

1. Hospital Management – Nalini V. Dave, Deep & Deep Publications, New Delhi 1997
2. Hospital Organization & Administration – M. Sankara Rao D&D Publications, New Delhi 1995
3. Hospital Planning & Administration
 - R. L. Lewellyn Davies and HMC Macaulay
 - WHO – Jaypee Brothers – 1995

CORE COURSE – VII

WARD ADMINISTRATION

Objective : To highlight the various aspects of Ward Management

Unit - I

Introduction: – Definition, History, Need for ward management – Principles of Ward management, factors involved in good ward management.

Unit II

Human Resource Management Of Wards : Hierarchical structure in wards, Role of medical and para medical, Administrative and Nursing personnel's, their power and authority, job functions, job description & responsibilities; Role of ward secretary as a key person in ward management, supervisory role of hospital personnel development's activities.

Unit III

Location, types, design, physical facilities & equipment required for emergency & casualty ward, Intensive care units, Post operative ward, Neonatal intensive Care and inpatient ward

Speciality Wards: Maternity ward, orthopedic ward, physiotherapy, Cardiac, Nephrology, Neurology, Isolation, general medical & surgical wards; autopsies and mortuary location & functions. Care & use of equipments; Relationship with other departments.

Supportive services : Dietary, Lab, Radiology, Nursing, General Store, Pharmacy, physiotherapy etc. Auxiliary Service. House keeping, Linen & Laundry, CSSD

Unit – IV

Ward environment, Ventilation, heating, lighting, elimination of noise, drinking water facilities, safe drinking water - Safety measures.

Fire lighting equipments, Prevention of cross infection, Emergency drug stock, and maintenance – waste disposal (sterilization) House keeping – Linen & laundry.

Unit – V

Daily ward routines, ward procedure, admission and discharge and transfers, care of critically ill patients, record maintenance – preparation of Reports and presentation of reports (Hospital statistics), Inventory maintenance, Risk management in ward, ward level intending, Billing procedure.

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	Janet Reienstein Carpman Myron A – Gromt	Planning Health Facilities For Patients And Visitors	Tata MC Graw Hill.

2. John Rea,
Jaffrey J.Eromeit And Malcom
D.Maccoun Building a Hospital a Prime l Tata MC Graw Hill.
Administrators

Reference Books:

1. John S.Brason Hospital And Hospital Hous ----
Keeping
2. John Blackman Hospital Waste Management Tata MC Graw Hill
3. Charles B.Miller How to Organize And Maint Tata MC Graw Hill
An Efficient Hospital Depart
4. James Lifton And Owen B.Hardy Site Selection For Health Ca Tata MC Graw Hill
Facilities

CORE COURSE - VIII - QUALITY ASSURANCE

Objective : Various aspects of Medical audit of quality assurance

Unit - I

Medical audit – need for medical Audit – Medical Audit for better patient care – aims - objectives of medical audit. Medical Care – objectives and subjective examinations.

Unit- II

Objective elements required qualitative judgment through clinical evaluation. Continuous evaluation to improve clinical services, professional education, Hospital administration and better patient care.

Unit – III

Medical audit committee – constitution, functions and limitation . Service by service discussion in Medical Audit.

Unit – IV

Administrative Aspects : Community Relationship , Personnel Funds, Physical facilities

Role of Hospital Administrator in Medical Audit: Organizing, Review
Problems Solving

Unit – V Quality Assurance :

Quality as a concept – why we need quality – why we need to evaluate quality – determinants of quality in medical care - Norms for Medical staff.

Quality assurance in hospitals – major functions of quality assurance patient care evaluation – utilization review – continuous monitor – Continuing medical education – How to integrate the above function of the Medical staff.

Tools of evaluating quality in medical care – aspects of medical care that need evaluation - Barriers in QA – Quality and customer orientation – TQM Concept.

ISO 9000 Series - its implication on hospitals – Implementation of quality system.

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	Tito Coti	Building Total Quality A Guide For Management	Chagmane Hall.
2.	P.L.Jain	Quality Control And Total Quality Management	Tata MC Graw Hill

Reference Books

1. Edby Dennip Lock Hand book Of Quality Management Jaico Publication
2. Albeto Salgano Company Wide Quality Management Productivity Press.
3. Suresh Dabla And Sau ISO 9000 a Manual For Total S.Chand
Management
4. Bertrand L.Hansen An Quality Control And Application Tata MC Graw Hill
Prabhar M.Charge
5. Pena Jesus Hospital Quality Assurance
6. Hugh C.H.Koch Total Quality Management In Health
7. Ali Azzam Concept Of Total Quality Managemen Health Care
8. Charles Shaw Medical Audit –A Hospital Hand Bo
Standards Of Care And Practice Aud
Nursing
9. Charles Biker Quality Measurement
Quality Assurance

CORE COURSE - IX

HOSPITAL ORGANISATION AND RESEARCH METHODOLOGY

Objective : To provide knowledge about the uniqueness of hospital organization. To have an idea about Research Methodology.

Unit - I

To learn the elements of Hospital as an organization,

Code of ethics , Broad Classification, Duties of Administrator – Role- Definition, Challenges of Hospital Management, Highlight of entire aspects of Hospital Administration, Role of Hospital Administrator in Health Care Management at various levels of Health services, Policy, issues and Trends.

Unit - II

Application Of Management Techniques In Hospital System:

Hospital Planning And Management : Principles for planning Hospital – definition, facilities and services identified.

Short introduction to functional Area management strategic and operational planning. “A model of strategic planning” factors influencing strategies planning – role of administrator in planning and controlling as “Two managed functions”.

Application of “Linear programming” its decision making with a model problem in Hospitals with reference to Baligh and Langhunn’ s study.

(Summary of planning for services, Basic principles of functions, Hospital organization).

Unit – III

Organizational Services : What are the different types of organizational services? Their expected role?

Planning functional programme & Design stage.

Bed distribution defined; space requirement for Non- Teaching general Hospitals defined; queuing theory – its application in the Estimation of Bed needs; Simulation based occupancy systems – Comparison with “Hill; Burton programme” and “ position assumption”.

Unit – IV

Health system Engineering - Major functions, Tasks and resources

The art of programming, Budgeting and control in Health care Organisation; Management of control process – Programming phase, Budgeting phase and controlling phase.

Unit - V

Research Methodology : Scientific method and research process, Research methodology – an overview, Research design, Interview techniques and questionnaire design sampling, Qualitative and Quantitative research, Communication research, Collecting data Techniques of documentation, Data analysis interpretation, Dissemination of Data.

Reference Books:

S.No	AUTHOR	TITLE	PUBLICATION
1.	Sankar Rao	Hospital Organization And Administrat	
2.	Kurt Darr	Hospital Organization And Managemen	
3.	Henny Minizberg	Structuring Of Organization	
4.	W.J.Durkan	Strategic Management Of Healthcare Organization	
5.	Addison C.Berett(AHA	Improving Management Performance In Healthcare Organization	
6.	C.R.Kothari	Research Methodology Methods And Techniques	Vishwa Prakashan
7.	Judith Bell	How To Complete Your Research Proje Successfully	
8.	Mike Luck	Research In Healthcare	
9.	Norma G.Reid	Research Methodology And Statistics In Healthcare	
10.	Dr.S.Shajahan	Research Methods For Management	Jaico
11.	B.S.Bhatia And G.S.Ba	Business Management Research	Deep & Deep

CORE COURSE - X

COMMUNICATION IN PUBLIC RELATIONS

Objective : To provide understanding on basic principles of public relations & Communication.

Unit - I - Public Relations :

Definitions, Nature, Scope, objectives, History and development, public in PR, PR in management organization of PR Department, Theory and practice in PR processors – fact finding, planning, communicating, evaluation. Staff & budget making of the PR man, code of ethics, PR association.

Unit – II Tools and Media of Public Relations:

Press in India, readership, impact of press. appeal of radio and press writing for radio, preparing news and features, for radio, SITE programmes features & documentary on TV – features films slider, campaigns, lobbying, company literature, annual report, manuals, brochure, information bulletins.

Unit – III Corporate Public Relations:

Internal public, employee orientation, employee communication, employee survey. Suggestion programmes, employee newspapers. liaison with the newspapers –participating in Government programmes – Civic amenities, customer relations - complaints of customers, PR in Marketing Sales.

Unit – IV Marketing :

Functions – modern consumer oriented marketing concept, social marketing concepts, Defining and analysis of service markets, Analysis market opportunity, consumer markets and buyer behaviour, Market forecasting, promotion & post pricing techniques.

Unit - V Advertising :

Advertising as a medium of PR advertising for marketing institutional advertising media – marketing characteristics a functions of media - papers radio, television of media – films, posters, hoarding, kiosk, neon signs, city transport, & effectiveness of different media, selection of media planning.

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	Urmila Rai	Business Communication	
2.	M.Balasubramanyam	Business Communication	

Reference Books:

1. P.Little
Communication In Business
2. Ron Indlow
Essence Of Effective
Communication
3. D.S.Mehta
Hand Book Of Public Relation
4. James E.Gowing
Managing Public Relations
5. Rogen Leywood
All About P.R

MAJOR BASED ELECTIVE I – HOSPITAL RECORD MANAGEMENT – I

Unit - I

Medical Records : Definition – Importance with reference to patient doctor, hospital & research.

Brief mention about ownership rights & privileges, policies governed, procedures with reference to numbering system, unit system, International Classification of disease & & barcoding and its applications in Hospital.

Unit - II

Steps In Initiating Records : Register book, patient index, disease index, doctor index, Active/ inactive records storage, listing of various IP / OP Records. Maintenance of medical records.

Unit III

Organisation & staffing – Role of hospital administration - role of Medical records Dept. in Medical Audit and Legal systems.. Records processing application of data analysis & computer technologies. Legal potentialities of Medical research in our city.

Unit IV

International classification of diseases, Bar coding & its application in medicine & Hospital Services

Unit V

Role of Medical record department in Medical Audit & legal system (consumer protection Act) Medico legal cases

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	D.N.Eihance / Veena Eihance, B.M.Agarwal	Fundamentals Of Statistics	Kitab Mahal
2.	Richard I.Levin David S.Rubin	Statistics For Management	T.M.Publication

Reference Books:

1. Mendel Hall.W Introduction To Probability / Statistics (7th Ed) T.M.Publication
2. P.S.S.Sundar Rao G.Jesudian & J.Richards An Introduction To Biostatis ----

CORE COURSE - XI

HUMAN RESOURCE MANAGEMENT

Objective : To provide knowledge about the tools and techniques in the management of Human Resource.

Unit - I

Concepts of HRM, HRD and HRM in health care services, Manpower planning, Job analysis, Job specification

Unit – II

Recruitment and selection, placement, Job enrichment, job rotation

Unit – III

Training and Development Methods of training - Training need, Training programme designing . Evaluation of training, Performance appraisal.

Unit – IV

Wage and salary administration, Motivation of hospital employees, employees welfare occupational safety. Collective bargaining, counseling, participative management, Medical insurance.

Unit V

Discipline and Disciplinary Action.

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	H.L.Kumar	Labour Problems And Remedies	Universal Law
2.	H.Kumar	What Everbody Should Know About Labot Laws	Universal Law Publishing Co. Pvt. Ltd

Reference Books

1.	Frank Ruchill	Management Human Resource Managemer	
2.	R.C.Goyal	Human Resource Management In Hospitals(3 rd Ed)	Prentice Hall Of India Private Limited
3.	Edwin B.Flippo	Personnel Management	Tata MC Graw
4.	G.D.Kunders, S.Gopinath A.Kata	Hospitals – Planning Design And Managen	Tata MC Graw Hill Publishing Co Ltd.
5.	H.L.Kumar	Practical Guide To Labour Management	3 rd Edition Universal Publication Unive Law
6.	H.L.Kumar	Law Relating To Dismissel Discharge And Retrenchment Under Labour Laws	Universal Publishing Co.Pvt.Ltd

CORE COURSE XII – BIOSTATISTICS

Objective : To equip the students with the relevant aspects of Bio -Statistics

Unit - I - Statistics:

Mean, Median, Mode, Standard Deviation, Normal Distribution.

Unit - II Bio Statistics :

Definition & scope – Birth & Death Registration – Functions & uses - record keeping
Methodologies; efficiency, barriers – essential health data with special reference to demography
of population dynamic

Unit III Fertility related statistics

Birth rate, General fertility rate, general material fertility rate, age specific fertility rate, age
specific material fertility rate, child - women ratio – marriage rate, pregnancy rate, abortion rate.

Unit IV

Measurement of mortality rate, Death rate, crude death rate, specific death rates, case fatality
rate, proportional mortality rate, standardized mortality rate, infant mortality rates, maternal mortality
rate, foetal death. Measurement of morbidity Incidence rates, prevalence rates.

Unit V Hospital Statistics:

Outpatient statistics - daily average outpatient attendance, average out patient attendance etc.

Inpatient statistics – Bed occupancy rate, bed turn over rate.

Hospital morbidity mortality - gross & net death rate, Institutional death rate, anesthesia death rate,
post operative death rate, MMR, IMR

Text Books :-

S.No	AUTHOR	TITLE	PUBLICATION
1.	D.N.Eihance / Veena Eihance, B.M.Agarwal	Fundamentals Of Statistics	Kitab Mahal
2.	Richard I.Levin David S.Rubin	Statistics For Management	T.M.Publication

Reference Books:

1. Mendel Hall.W Introduction To Probability & Statistics (7th Ed) T.M.Publication
2. P.S.S.Sundar Rao G.Jesudian & J.Richards An Introduction To Biostatis ----

CORE COURSE XIII - LEGAL ASPECTS IN HOSPITAL MANAGEMENT

Objective: To create knowledge about legal obligation and responsibility in hospital management.

Unit I

Labour laws. Industrial disputes Act, Trade union Act, factories Act, shops and Establishment act, Minimum wages act, ESI Act Provident fund act. consumer protection Act.

Unit II

Legal compliances for hospitals.

Unit III

Kind and formation of contracts. Breach of contracts , remedies and Damages, law of Torts, sales of goods Act, Negotiable instruments Act, Evidence Act.

Unit IV

Medical Licensure law, the doctor patient relationship, medical malpractices, Quality and standard of medical care, Medical negligence.

Unit V

Legal issue in death cases. Drugs and cosmetic Act, Drug control policy, Narcotic laws.

Text Books :-

S.N	AUTHOR	TITLE	PUBLICATION
1.	H.L.Kumar	Labour Problems And Remedies	Universal Law
2.	H.Kumar	What Everbody Should Know About Labour]	Universal Law Publishing Co. Pvt. Ltd
3.	Raj Kumar	Acts applicable to hospital in India	
4.	Raj Kumar	Consumer protection Act 1986	
5.	Knight Bernard	Legal aspects of medical practice	

MAJOR BASED ELECTIVE II – HOSPITAL DIETARY SERVICES MANAGEMENT

Unit I

Food – meaning, concept and types. Nutrition – definition, role of nutrition in growth & development, Food pyramid, Energy suppliers of nutrition with caloric value

Unit II

Food Hygiene: Hygienic practices to be followed by food handlers & suppliers.

Unit III

Dietary Dept. – Location, Layout, role of dietary department in diseases & treatment facilities, equipment, staff distribution

Unit IV

Supply Services: Role & responsibilities of dietician, Dietary officer, centralized & decentralized system of supply, Different types of diet – cardiac, diabetes, ECU patients, new born & under five

Unit V

Inventory control of Dietary department, purchase procedure, stock verification, stocking, wastage, Management in kitchen role of store keeper

Text Book:

MAJOR BASED ELECTIVE III–HOSPITAL INFECTION CONTROL MANAGEMENT

Unit I:

Hospital infection control committee's – Infrastructure facilities, & types of Hospital infections

Unit II

Identification of high risk areas of infection

Unit III

Modalities of cross-infection [OPD, wards ICU, OT, Labour wards & kitchen]

Unit IV

Infection control committee – formation, involving different departments & hospital supporting systems

Unit V

Waste Management – with specific emphasis on Bio-medical waste & disposal of dead bodies

Text Book:

References:

Mr. K. Park – Preventive & Social medicine Brown