# THE NEOTIA UNIVERSITY

# NEW DRAFT SYLLABUS AS PER NEP GUIDELINES- BACHELORS IN HOSPITAL MANAGEMENT PROGRAM( 4 YEARS DURATION)

Course Code	Name	Nature	Cred it
Course Code			
BHM-CC-101	Managerial Theories & Techniques	CORE COURSE	3
BHM-CC-102	Accounts	CORE COURSE	3
BHM-CC-103	Fundamentals of Health Systems	CORE COURSE	3
BHM-CC-104	Introduction to Hospital Administration	CORE COURSE	3
BHM-CC-105	Marketing	CORE COURSE	3
BHM-SEC-171	Computer Laboratory  Multidisciplinary elective paper	Skill Enhancement Course	2
	1,GE 1		2
AE-ENL101	English Language & Personality Development (Theory)	Ability Enhanced course	1
AE-ENP101	English Language & Personality Development (Practical)	Ability Enhanced course	1
EPM101	English Practical for Management 1	Skill	2
SECAP101	Skill Enhancement-Aptitude Skill 1	Enhancement Course	1
		Value added	
VAC	Indian Constitution	course	1
			25
	Minor		29
	minor subjects:Fundamentals of Hospital Quality control & NABH		23
	minor subjects:Home care & assisted services		

			Cred
Course Code	Name	Nature	it
	Hospital Operation		
BHM-CC-201	Management	CORE COURSE	4
BHM-CC-202	Bio Statistics	CORE COURSE	3
BHM-CC-203	Medical Terminology I	CORE COURSE	4
BHM-CC-204	Service Marketing	CORE COURSE	3
BHM-CC-205	Basic Economics	CORE COURSE	3
		Skill Enhancement	
BHM-SEC-201	Occupational Health	Course	2
	Multidisciplinary elective		
	paper ,GE2		2
		Ability	
D	English Language &	Enhancement	2
BHM-AEC-201	Personality Development	Course	2

VAC	Indian Constitution	Value added course	1
	Minor		4
			28

<b>Course Code</b>	Name	Nature	Credit
BHM-CC-301	Hospital Planning & Designing	CORE COURSE	3
BHM-CC-302	Medical Records	CORE COURSE	3
BHM-CC-303	Medical Terminology II	CORE COURSE	3
BHM-CC-304	Health Economics	CORE COURSE	3
BHM-CC-305	Materials and Equipment Planning	CORE COURSE	4
	Multidisciplinary elective paper ,GE3		2
VAC	Climate Change	Value added course	1
BHM-SIP-301	Summer Internship		2
EPM-301	ENGLISH PRACTICAL FOR MANAGEMENT		2
ENLS301	English Language & Soft skills Theory	Ability Enhanced course	1
ENPS301	English language & soft skills Practical	Ability Enhanced course	1
SECAP301	Skill Enhancement-Aptitude Skill 2	Skill Enhancement Course	1
			26
	Minor		4
			30

<b>Course Code</b>	Name	Nature	Credit
BHM-CC-401	Epidemiology	CORE COURSE	4
BHM-CC-402	Support & Utility Service I	CORE COURSE	4
BHM-SEC-401	Financial Reporting & Analysis	Skill Enhancement Course	4
ВНМ-СС-403	MIS & its application in Healthcare	CORE COURSE	4
	Multidisciplinary elective paper ,GE4		2
BHM-SEC-402	Project on Community care	Skill Enhancement Course	2
BHM-AEC-401	English Language & Personality Development	Ability Enhancement Course	2
VAC	Climate Change	Value added course	1 23
	Minor		4
	-		27

<b>Course Code</b>	Name	Nature	Credit
BHM-CC-501	Patient safety management	CORE COURSE	3
BHM-CC-502	Support & Utility Service II	CORE COURSE	3
BHM-CC-503	Ethical & Legal Aspects of Health	CORE COURSE	3
BHM-CC-504	Human Resource Management	CORE COURSE	4
BHM-CC-505	Biomedical Waste Management	CORE COURSE	2
	Multidisciplinary elective paper ,GE5		2
VAC	Gender Sensitization	Value added course	1
BHM-SIP-501	Summer Internship		2
EPM-501	ENGLISH PRACTICAL FOR MANAGEMENT		2
ENLS501	English Language & Soft skills Theory	Ability Enhanced course	1

ENPS501	English language & soft skills Practical	Ability Enhanced course	1
SECAP501	Skill Enhancement-Aptitude Skill 3	Skill Enhancement Course	1
			25
	Minor		4
			29

Course Code	Name	Nature	Credit
BHM-CC-601	Health Insurance	CORE COURSE	5
BHM-SEC-601	Public Relation	Skill Enhancement Course	4
VAC	Gender Sensitization	Value added course	1
	Multidisciplinary elective paper, GE6		2
BHM-AEC-601	English Language & Personality Development	Ability Enhancement Course	2

		14
	Minor	4
		18

Course Code	Name	Nature	Credit
BHM-CC-701	Research Methodology	CORE COURSE	5
ВНМ-СС-702	Hospital Preparedness for Disaster Management	CORE COURSE	5
ВНМ-СС-703	Professional based practices for health care managers	CORE COURSE	3
BHM-CC-704	International Health	CORE COURSE	4
BHM-CC-705	Entrepreneurship in Healthcare	CORE COURSE	5
ВНМ-СС-706	Organisation Behaviour	CORE COURSE	5
BHM-SEC-701	Presentation on Healthcare marketing	Skill Enhancement Course	2
			28

<b>Course Code</b>	Name	Nature	Credit
		Research	
		Project &	
BHM-RPD-801	Research Project & Dissertation	Dissertation	12
			12

# Total=201 # Internship/ Training as per suitability.

Assignments should be part with the course itself and there specific weightage during evaluation should be given.

#### Semester I

## **Management Theories & Techniques-**

#### **SECTION I: Principles and Practice of Management**

- 1. Basic concepts of management:
  - 1.1. Definition –
  - 1.2. Need and Scope
  - 1.3. Concept of Productivity, efficiency and effectiveness
  - 1.4. Systems theory
  - 1.5. Different schools of management thought
    - 1.5.1. Scientific Theories F.W. Taylor., Gilbreths
    - 1.5.2. Operational Theories: Henry Fayol.
    - 1.5.3. Behavioural theories Elton Mayo & Hawthorne Studies
    - 1.5.4. Modern Theories- Peter Druker
- 2. Functions of Management Introduction to different functions
  - 2.1. Planning (Concept, Nature, Importance, Steps, Limitations)
    - 2.1.1. Management by objectives
  - 2.2. Organizing (Concept, Nature, Importance, Principles)
    - 2.2.1. Centralization, Decentralization,
    - 2.2.2. Organization Structures- (Line and Staff Authority, Functional, Product, Matrix, Geographical, Customer wise)
  - 2.3. Staffing (Concept, Nature, Importance, Steps)
  - 2.4. Directing (Concept, Nature, Importance)
  - 2.5. Controlling (Concept, Nature, Importance, process)

#### **SECTION II: Organizational Behaviour**

- 1. Introduction to Organizational Behaviour
  - 1.1. Definition,
  - 1.2. Importance,
  - 1.3. Scope,
  - 1.4. Fundamental Concepts of OB
- 2. Perception
  - 2.1. Concept
  - 2.2. Factors influencing perception
  - 2.3. Attribution theory
  - 2.4. Frequently used shortcuts in judging others (Halo effect; Contrast effect; projection; stereotyping)
- 3. Personality & Attitudes:
  - 3.1. Meaning of personality,
  - 3.2. Determinants of personality
  - 3.3. Personality Traits
  - 3.4. Major personality attributes influencing OB
  - 3.5. Values- Definition and types
  - 3.6. Concept and component of Attitude
  - 3.7. Importance of attitude in organization
  - 3.8. Major job related attitude
- 4. Motivation:
  - 4.1. Definition,
  - 4.2. Importance,
  - 4.3. Theories of Motivation Maslow's Theory of need hierarchy Herzberg's theory, Factor X & Y, Vroom's Theory
- 5. Group Dynamics and Team building:
  - 5.1. Concept of Group & Team.
  - 5.2. Process of Group Formation
  - 5.3. Formal and Informal Groups.
  - 5.4. Importance of Team building.

## **Books:**

Organisational Behaviour
 Organisational Behaviour
 Utthans (TMH)
 Organisational Behaviour
 L. M. Prasad
 Essentials of Management:
 H. Koontz (TMH)

# **Accounts-**

- I. Financial & Management Accounting:
- I.1. Introduction: Introduction to Accountancy; definition and objectives; book keeping and accountancy, Need and Role of Accounting; Branches of Accounting; Systems of Accounting; Basic Terms of Accounting
- I.2. Generally Accepted Accounting Principles; Accounting Concepts , -Golden rules of accounting , Standard concept of single entry and double entry systems
- I.3. Double Entry Principles; Rules of Debit & Credit; Journals (Elementary, excluding shares & Partnerships), journal as a book of primary entry, recording in journal, recording of transactions narration based on voucher; ledger –rules for writing ledger –balancing of ledger accounts concept of b/d and c/d
- I.4. Ledger Posting; Trial Balance; preparation of trial balance, Cash Book (Single & Double entry), Cash book--Concept of cash book-single and double column -bank column, Basic idea of depreciation
- I.5. Preparation of Final accounts its periodicity trading accounts --profit and loss accounts -Balance sheet ---examples of simple adjustments.
- II. Cost Accounting:
- II.1. Difference between Cost & Financial Accounting; Basic Cost Concepts: Classification of costs based on Natural, Degree of Traceability, Functional and Behavioural Basis
- II.2. Cost Determination Process: Cost Sheet
- II.3. Costing for Materials: Costing for Materials purchased; Costing of Materials Issued LIFO, FIFO, Weighted Average methods
- II.4. Costing for Labour: Employee cost; Wage System Time & Piece Rate; Incentive Wage Plans –Merrick Differential Piece-Rate System, Halsey Premium Plan, Rowan Bonus Plan
- II.5. Costing for Overheads: Basic idea about overheads; Types of Overheads
  - III. Budget-Concept

- 1. Double Entry Book Keeping: TS Grewal (Sultan Chand)
- 2. Accounting For Managers: CA C. Rama Gopal (New Age International Publishers)
- 3. Cost Accounting: Jawahar Lal (McGraw Hill)
- 4. Cost & Management Accounting: Hanif & Mukherjee (McGraw Hill)
- 5. Corporate Accounting; Hanif & Mukherjee (McGraw Hill)

## **Fundamentals of Health System-**

1. HEALTH

Definitions; Meaning; Concepts; Changing Concepts; Concepts of Wellbeing; Relative Concepts; Dimension; Determinants; Positive Health; Spectrum of Health; Ecology of Health; Right to Health; Responsibility for Health; Health Development; Indicators of Health; Contrast in Health; PQLI; HDI.

2. HEALTH SERVICE PHILOSOPHY

Healthcare; Healthcare Services; Levels of Healthcare; Elements & Principles of Primary Healthcare; Health for All; Health Promotion; National Health Policy; Healthcare Delivery Model (Simplest Model of INPUT-OUTPUT Healthcare Delivery Services).

3. DISEASE (Basic idea)

Differences between Sick, Ill & Diseases. Spectrum of Disease

4. HISTORY & DEVELOPMENT OF 'HOSPITAL' (NATIONAL & INTERNATIONAL)

Modern Hospital; Complex & Uniqueness; Hospital Organogram; Present Status of Hospital in India—Comparison between Govt. & Private; Birth of Hospital Administration(Florence Nightingale); Systems theory in Hospital; Hospital as a part of Social System; Role of Hospitals in New Millennium; Types & Classification

5. HEALTHCARE SYSTEMS IN INDIA (BRIEFLY)

(Public-Private-Indigenous Systems-Voluntary Health Agencies-National Health Prog.)

- 1. Park's textbook of Preventive & Social Medicine
- 2. Joshi—Hospital Administration (Jaypee)

## **Introduction to Hospital Administration**

- 1. Definition of Hospital, History and Development of Hospital Administration, Hospital Organization structure
- 2. **Hospital Utilization Statistics-**Average Length of Stay (ALS), Bed Occupancy Rate, Turn Over Interval
- 3. Brief overview of all departments in hospital-clinical, administrative and support and utility, OPD, IPD
- 4. Daily Reports / Returns.-Hospital Census, Matron's Report, Medical Officer's Report

Casualty Report, Medico-Legal Cases, Report from ICU / ICCU, Security Report, Maintenance Department Report

- 5. Hospital Committees- introduction, Types of Hospital committees, Role, Composition, Frequency of Meetings, Minutes of the Meetings, Follow up Actions.
- 6. Patient Satisfaction Survey-Introduction, objective and importance, Interviews, Questionnaires, Observations, Group Discussions, Patient Opinion Polls, Report Writing.
- 7. Brief Idea about Purchase & procurement Department-Inventory management, Availability of Materials, Critical Items, Stock Level, Procurement Methods.
- 8. Front Office Department: Introduction, Importance Duties & Responsibilities.
- 9. Duties & Responsibilities of the Hospital Administrator/CE-In Profit Making Hospitals &In Non-Profit Making Hospitals

10. Triage-brief idea, ER

11 Standard Operating Procedures (SOPs) for a hospital-Brief idea

#### **Books:**

- 1. Hospital Administration, Goel, Gupta, Singh (ELSEVIER)
- 2. Hospital Administration, Joshi (Jaypee)
- 3. Front Office, Peter Abbott & Sue Lewry (ELSEVIER)
- 4. Effective Public Relation- Scott M. Cutlip, Allen H. Center, G.H. Broom (Pearson)

# Marketing-

- 1. Introduction to Marketing:
  - 1.1 Definition & Functions of Marketing.
  - 1.2 Core concepts of marketing- Need, Want, Desire, Benefits, Demand, Value, Exchange, Goods Services Continuum, Product, Market, Customer Satisfaction, Customer Delight
  - 1.3 Horizontal & Vertical Marketing conflict, Traditional& Modern Marketing
- 2. Approaches to Marketing
  - 2.1 Evolution of marketing-Product Production Sales Marketing Societal Relational. Holistic Marketing Orientation
  - 2.2 Concept of Marketing Myopia.
  - 2.3 Selling versus marketing.
  - 2.4 Customer perceived Value, total customer satisfaction
- **3.** Marketing Environment
  - 3.1 Major micro environment factors
- 4. Marketing Mix: Definition of each of the Four P's. Extended 7Ps for services ,types of complainers in service marketing
- **5.** Product:
  - 5.1 definition
  - 5.2 levels of Product, Product life stages
  - 5.3 classification of consumer product only
  - 5.4 Idea about Product mix, product line, product width, product depth, product length, consistency
  - 5.5 Product mix strategy
  - 5.6 Brief description Stages of New Product Development
- **6.** Pricing:
  - 6.1 Definition of Price

- 6.2 Objective of Pricing
- 6.3 Factors influencing pricing decision
- 6.4 Different pricing methods
- 6.5 Pricing strategies

#### 7. Place:

- 7.1 concept
- 7.2 levels of marketing channels
- 7.3 objective of distribution channel
- 7.4 objective of distribution channel intermediaries
- 7.5 factors influencing channel design decision

#### **8.** Promotion:

- 8.1 Definition
- 8.2 Objective
- 8.3 Promotional mix
- 8.4 Definition and characteristics of
  - 8.4.1 Advertising
  - 8.4.2 Sales promotion
  - 8.4.3 Direct Marketing.
- 9. Overview of Consumer Behaviour: Concept, factors influencing buyer's behaviour, Five steps Buyer decision process.
- **10.** Segmentation, Targeting and Positioning: Definition, Need & Benefits. Bases for market segmentation of consumer goods and services. Segment, Niche & Local Marketing, Effective segmentation criteria, Evaluating & Selecting Target Markets, Concept of Target Market and Concept of positioning, Market strategy
- 11. Rural Marketing

#### **Books:**

- 1. Marketing Management-P. Kotler (PHI)
- 2. Marketing Management-Kelvin Lane Keller & Phillip Kotler (PHI)
- 3. Consumer Behavior-Schiffman and Karuk (Pearson)
- 4. Marketing Management- R Saxena (TMH)
- 5. Marketing Management- Ramaswami&Ramakumari (Macmillan)

## SPECIALLY DESIGNED CURRICULUM BY DEPARTMENT OF ENGLISH

English Language & Personality Development (Theory)	Ability Enhanced course
English Language & Personality Development (Practical)	Ability Enhanced course
English Practical for Management 1	
Skill Enhancement-Aptitude Skill 1	Skill Enhancement Course

# **Computer Laboratory-**

- 1. Overview of computer hardware and software.
- 2. Peripherals: Scanners and printers.
- 3. Security
- 4. MS Word,
- 5. MS Excel advance level.
- 6. MS Power Point
- 7. The Internet.
  - a. www
  - b. Uploading and downloading files
  - c. Networking (LAN, MAN, WAN)
  - d. Security.
  - e. Email Control Panel.
  - f. Search engines and other applications
  - g. Other applications.
  - h. Internet Ethics

## **VAC- CONSTITUTION OF INDIA-1**

#### **Course Contents**

- 1. Salient features of the Constitution
- 2. Preamble of the Constitution: Significance and Judicial Interpretation
- 3. State under Article 12
- 4. Fundamental Rights: Right to Equality, Right to Freedom, Right to Life and Personal Liberty, Constitutional Safeguards against Arbitrary Arrest and Detention, Right against Trafficking and bonded labours, Freedom of Religion and Restrictions, Constitutional Remedies to Enforce Fundamental Rights, Public Interest Litigation.

#### Recommended books

- 1. Jain M. P., Indian Constitutional Law, Wadhwa and Company, Nagpur, 5<sup>th</sup> edition (2007)
- 2. Durga Das Basu, Shorter Constitution of India, Vol. 1 & 2 14th edition Lexis Nexis Butterworths Wadhwa, Nagpur, (2009)
- 3. Pandey J. N., Constitutional Law of India, Central Law Agency, 44th edition (2007)
- 4. Granville Austin, Working A Democratic Constitution: A History of the Indian Experience, Oxford, (2000)

# **Hospital Operation Management**

# 1. INTRODUCTION

Concepts of Hospital Operation Management & its Utility- Front Office- Admission- Billing & Discharge- Ambulatory Care (For IPD-OPD-ED).

Brief Concepts about CSSD, Radiology, Lab, Blood Bank

- 2. Management of Indian Hospitals Challenges & Strategies of professional management of hospitals in 21st Century
- 3. Concepts of **Telemedicine**.
- 4. SWOT Analysis for Hospital Operation Management

#### 5. Management of Quality Assured Services

What is QA services in Hospital; Working towards Quality Management; Why do we need QA services; Procedures for QA Implementations;

- 6. Operation Management process in health care-Flowchart
- 7. Brief concept on HAI(Hospital Acquired Infection )management,

## **Books:**

- 1. Park's textbook of Preventive & Social Medicine
- 2. Joshi—Hospital Administration (Jaypee)
- 3. Hospital Administration Tabish (O.U.P.)

# **Bio Statistics**

- 1. Introduction:
  - 1.1. Statistics as a subject;
  - 1.2. Functions,
  - 1.3. Importance and Limitations of Statistics;
  - 1.4. Planning and Execution of a statistical investigation;
  - 1.5. Census and sample investigation;
  - 1.6. Descriptive and Inferential statistics
- 2. Collection and Presentation of Data:
  - 2.1. Primary data and secondary data;
  - 2.2. Methods of collection;
  - 2.3. Presentation of data:
  - 2.4. textual and tabular presentations,
  - 2.5. Diagrammatic presentation of data: (Line diagrams, Bar diagrams, Histogram, Frequency Polygon; Ogive Scatter Diagram. Pie charts)
- 3. Frequency Distributions:
  - 3.1. Attribute and variable;
  - 3.2. Discrete and continuous variables;
  - 3.3. Frequency distributions of discrete and continuous variables;
  - 3.4. Bivariate and Multivariate Frequency Distributions.
  - 3.5. Measures of moments, skewness; Kurtosis and its implication. (Only concepts)
- 4. Measures of Central Tendency:

- 4.1. Definition and utility;
- 4.2. Characteristics of a good average;
- 4.3. Different measures of average; Arithmetic Mean; Median; Other positional measures quartiles, deciles, percentiles; Mode; Relation between Mean, Median and Mode;
- 4.4. Choice of a suitable measure of central tendency.
- 5. Measures of dispersion:
  - 5.1. Meaning and objective of dispersion;
  - 5.2. Characteristics of a good measure of dispersion;
  - 5.3. Different measures of dispersion Range, Quartile deviation, Mean deviation, Mean Absolute deviation, Standard deviation;
  - 5.4. Comparison of the different measures of dispersion.
- 6. Vital Statistics:
  - 6.1. Definition and formula (Birth Rate, General Fertility Rate, Age Specific Fertility Rate, Total Fertility Rate, Gross Reproduction Rate, Crude Death Rate, Specific Death Rate

- 1. Statistical Methods- NG DAS (M Das &Co)
- 2. Fundamental of Statistics: Goon Gupta & Das Gupta (The World Press Private Ltd)

#### **Medical Terminology-1**

#### 1. INTRODUCTION:

- 1.1 Objectives,
- 1.2 Basic Word Structure,
- 1.3 Sources,
- 1.4 Elements of Medical Terms,
- 1.5 Roots,
- 1.6 Prefixes,
- **1.7** Common Abbreviations.

#### 2. HUMAN BODY

- 2.1 CELL: Basic Study; Structure; Function; Division
- 2.2 TISSUE: Tissue fluid; Classification
- 2.3 ORGANS:
- 2.4 SYSTEMS: What is? Main Systems & their Organs
- 2.5 BODY CAVITIES: Imp viscera with their Contains; Division.

## 3. MUSCULOSKELETAL SYSTEM:

- 3.1 Muscular System
- 3.2 Properties
- 3.3 Characteristics & Functions of Muscular Tissue
- 3.4 Skeletal System; Formation, Function, Types & Terms used to describe, Bones of different location.
- 3.5 Joints; Movements of Joints
- 3.6 Bursae
- 3.7 Operative terms

## 4. CARDIOVASCULAR SYSTEM

- 4.1 Arteries
- 4.2 Veins
- 4.3 Capillaries
- 4.4 The Heart: Valves, Cardiac Cycle, Pulmonary & Systemic circulation, Portal circulation
- 4.5 Blood Pressure; Pulse; Electrical Conduction of the Heart
- 4.6 Common Cardiovascular Disorder

## 5. BLOOD & LYMPHATIC SYSTEM

- 5.1 Blood and its components
- 5.2 Electrolytes
- 5.3 Blood Clotting Mechanism
- 5.4 Blood Group
- 5.5 Lymphatic System
- 5.6 Lymph Nodes
- 5.7 Lymphatic Organs
- 5.8 Immunity
- 5.9 Disorders of the Blood & Lymphatic System

# 6. NERVOUS SYSTEM

- 6.1 Structure
- 6.2 Central Nervous System
- **6.3** Peripheral Nervous System

# 7. DIGESTIVE SYSTEM

- 7.1 Organs
- 7.2 Accessory Organs of Digestion
- 7.3 Metabolism & Common Abbreviations

1. PARAMEDICS 6-in-1 by GD MOGLI (JAYPEE)

## **Service Marketing**

- 1. Introduction to Service Marketing
  - 1.1. Characteristics of Service Marketing
  - 1.2. Service Demand and Capacity Management
  - 1.3. Service Marketing Mix
  - 1.4. Continuum of Service.
  - 1.5. Gap analysis
  - 1.6. Service Gap model by Parasuraman and Zithamal
  - 1.7. SERVQUL model
  - 1.8. Service recovery strategies.
- 2. Healthcare marketing
  - 2.1. Introduction
  - 2.2. Concept
  - 2.3. Distinct features
  - 2.4. Controversy
  - 2.5. Challenges for marketing in hospitals
- 3. Marketing Mix Strategies for Hospital
  - 3.1. Process of new Product Development.
  - 3.2. Product life cycle strategies.
  - 3.3. Pricing strategies.
  - 3.4. Channel management in Hospitals.
  - 3.5. Franchisee management.
  - 3.6. Hospital Promotion strategies.
  - 3.7. Promotional campaign design
- 4. Internal marketing
  - 4.1. Importance and objectives
  - 4.2. Roles of a service employee
  - 4.3. Internal marketing strategies;
- 5. Social Marketing
  - 5.1. Concept
  - 5.2. Application in Healthcare
  - 5.3. Social Marketing Wheel
  - 5.4. Challenges
- 6. Medical Tourism
  - 6.1. Concept
  - 6.2. Need
  - 6.3. India- competitive advantage
  - 6.4. India- challenges
  - 6.5. Key players
  - 6.6. Key trends
- 7. Branding of Hospital- introduction, objectives and importance of Branding, Tools of branding, Methods of branding applied in hospitals,—Telephone Courtesy, Guest Lectures, Organization of Camps, Seminars, Workshops, Continuous Medical Education, Public Participation.

# **Books:**

- 1. Service Marketing K Ramamohon Rao (Pearson Education)
- 2. Service Marketing- Zeithaml (Tata Mcgraw Hill)
- 3. Service Marketing- C. Lovelock (Pearson)
- 4. Hospital Management (Vol III)- Manisha Saxena (CBS Publishers)
- 5. Public Relations Principles and practices Iqbal S Sachdeva (Oxford HD)

# **Basic Economics-**

**1.Introduction:** Definition and Concept of Economics; Subject matter and Scope of Business Economics; Relationship of Business Economics with other subjects.

- 2. Elasticity of Demand: Concept and measurement of elasticity of demand; Price, Income, Cross Elasticity.
- A) Definition of Demand; Factors affecting demand; Law of Demand; Demand schedule; Demand Curve: individual Demand Curve & Market demand Curve; Concept of Demand Functions; The law of diminishing Marginal Utility- Downward sloping Demand Curve; Change in Quantity Demanded and Change in Demand;
- B) Elasticity of Demand: Different Types of Elasticity of Demand; Definition and Measurement of Income Elasticity of Demand; Definition of Cross Price Elasticity of Demand; Definition and Measurement of Direct or Own Price Elasticity of Demand: Measurement of Arc Elasticity of Demand & Point Elasticity of Demand.
- C)Average Revenue, Marginal Revenue and Elasticity of Demand: Concept of Revenue: Total Revenue, Average Revenue, Marginal Revenue; Relation among TR, AR and MR.
- **3. Production Function:** Law of Variable Proportions- Definition of Production, Factors of Production, Production Function; Total Product, Average Product, Marginal Product. The Law of Variable Proportions; Isoquants and their characteristics; Economic & uneconomic Regions; Ridge Lines; Iso-cost Lines; Choice of Best input Combination; Expansion Path; Returns to Scale; Economies & Diseconomies of Large Scale Production;

#### 4. Theory of costs:

A)Short run and long run curves-Traditional approaches- Definition & Concept of SR Cost, LR Cost, FC and VC. Components of TC, Shape of the SRTC Curve; Concept of AFC, AVC, & AC; Derivation of AC & MC Curves from TC Curve. Relation between AC& MC. Derivation of LRTC Curves, LRAC Curve& LRMC Curve;

- B) Short run and long run curves-Modern approaches- Modern Theory of SR Costs; Modern Theory of LR Costs
- 5. Market Structures: Meaning and Functions of Market; Classification of Market.
- A) Perfect competition: Definition and Features of Perfect Competition;
- ; Profit maximization and SR & LR equilibrium of firm and industry SR and LR supply curves; Profit maximization and equilibrium of industry SR and LR supply curves.

Price and output determination Practical applications

- B) Monopoly: Definition & Characteristics of Monopoly; Price and Output Determination under Monopoly; Some Features of Monopoly Equilibrium; Degree of Monopoly Power; Comparison between perfect competition and monopoly; Price Discrimination Different Types; Equilibrium under Price Discrimination; Degree of Price Discrimination.
- C) Monopolistic Competition: Meaning and characteristics; Price and output determination under monopolistic competition; Product differentiation; selling cost; comparison with perfect competition.
- 6. Practical Applications/ problems: Based on Market Price Output Determination; Profit Maximization.

## **Books:**

- 1. Normative Economics- Samuelson
- 2. Managerial Economics- Thomas & Maurice (TMH)
- 3. Modern Microeconomic Theories- A. Koutsoyiannis (Palgrave)
- 4. Microeconomic Theory- J Sarkhel (Book Syndicate Pvt. Ltd)

## **Occupational Health**

- 1. Occupational Health –Introduction, Concepts, Health of the Worker
- 2. Environment with man & physical, chemical & biological agents.
- 3. Types of Occupational hazards- Introduction

Physical, chemical, mechanical, psychosocial hazards-Definition and concept

- 4. Occupational diseases-Introduction, Types, Occupational Disease management ,Prevention and control
- 5. Accidents & injury in industry-Occurrence of accidents and injuries while working, Protective measures against accidents and injuries
- 6. Radiation hazards-Introduction, concept
- 7. Control of hazards in industries.
- 8. Indian Factories Act 1948
- 9. ESI Act 1948.
- 10. Workman's Compensation Act 1952
- 11. Personal Protection Equipment

- 1. Park's textbook of Preventive & Social Medicine
- 2. Labour Law- Ajay Garg(A Nabhi Publication)
- 3. Hospital Management (Vol 3)- Manisha Saxena (CBS)

#### **VAC- CONSTITUTION OF INDIA-2**

#### **Course Contents**

- 1. Directive Principles of State Policy
- 2. Fundamental Duties
- 3. President and Governors: Powers and Function
- 4. Lok Sabha and Rajya Sabha: Basic Idea
- 5. High Court and Supreme Court: Powers and Functions

#### **Recommended books**

- 1. Jain M. P., Indian Constitutional Law, Wadhwa and Company, Nagpur, 5<sup>th</sup> edition (2007)
- 2. Durga Das Basu, Shorter Constitution of India, Vol. 1 & 2 14th edition Lexis Nexis Butterworths Wadhwa, Nagpur, (2009)
- 3. Pandey J. N., Constitutional Law of India, Central Law Agency, 44th edition (2007)
- 4. Granville Austin, Working A Democratic Constitution: A History of the Indian Experience, Oxford, (2000)

	Ability
English Language & Personality	Enhancement
Development	Course

# Diploma Degree Se<u>Hospital Planning & Design</u>-

- 1. Hospital Feasibility Study:
  - a) Project conceptualization and Feasibility study including concept of project cost
  - b) Assessment of the demand and need for hospital
  - c) Factors influencing hospital utilization
  - d) Hospital Drawings & Documents
  - e) General idea about Project writing
- 2. Hospital Planning (General consideration):
  - a) Site survey and Selection including land requirement & local building rules
  - b) Concepts of planning, designing and size of hospital
  - c) Bed planning and Space Programming
  - d) Hospital Building (an overview) Architecture, Construction, Project planning process (Mechanical Electrical and Plumbing)
  - e) Hospital interiors, lighting and ventilation,
  - f) Hospital Commissioning

g) Planning of 30/50 Bedded hospital

## 3. Hospital Design:

To consider designing aspects of various departments of hospital such as space requirement and standards, its location, equipment, staffing pattern and utilization.

- a) Entrance & Ambulatory Zone -Planning and Design, Building & Layout
- b) Critical zone (CCU with Cathlab)-Planning and Design, Building & Layout
- c) Administrative zone–Planning and Design, Building & Layout
- d) Various Utility services -Planning and Design, Building & Layout
- e) Neurology Department-Planning and Design, Building & Layout
- f) Nephrology and dialysis unit–Planning and Design, Building & Layout
- g) transplant unit-Planning and Design, Building & Layout
- h) Gynecology& Obstetrics Department-Planning and Design, Building & Layout
- i) Physical Medicine and Rehabilitation-Planning and Design, Building & Layout
- j) Ophthalmology Department-Planning and Design, Building & Layout
- k) Dental-Planning and Design, Building & Layout
- 1) Urology–Planning and Design, Building & Layout
- m) Isolation ward- Infective and non- infective wards
- n) Burn Unit-Planning and Design, Building & Layout
- o) Pediatrics-Planning and Design, Building & Layout
- p) Emergency & Trauma care
- q) OT- modular and hybrid
- r) IPD
- s) Diagnostic Lab.
- t) Radiology & Imaging
- u) Pharmacy.

#### **Books:**

- 1. Joshi- Hospital Administration (Jaypee)
- 2. B M. Sakharkar- Principles of Hospital Administration and Planning (Jaypee)
- 3. G D Kunders- Hospitals (TMH)
- 4. National Building Code (category of hospitals

## **Medical Records**

- 1.Introduction to Medical Records Management
  - 1.1.Definition of medical Records and concept of Medical Records management
- 2.Definition & Types of Medical Records
  - 2.1. SOMR-Introduction, Methods of Preparation
  - 2.2. POMR -Introduction, Methods of Preparation
- 3. Development & Importance of Medical Records
  - 3.1. Characteristics of Medical Records
- 4. Preparation of Medical Records in correct format
- 4.1.Content Of MR
- 4.2. Maintenance Of MR
- 5. Concept of MPI-Master Patient Index
- 5.1.MRN-Definition & concept
- 5.2.Coding & Indexing-Introduction, importance
- 6. Filing of medical Records- Introduction, Steps
- 7. Medical Record Department
  - 7.1. Functions of MRD & Role of MRD Personnel
- 7.2. Organisation & management of MRD-Brief Idea
- 8. Different forms of Medical Records-
  - 8.1.Paper, Electronic& Hybrid based Medical records-Introduction, Advantages & Disadvantages of each form of MR
  - 8.2. Comparison Between Paper, Electronic & Hybrid
- 9. Retention Period & Preservation of Medical Records

Destruction Methods Of MR&Reconstruction of Medical records

- 10. International classification of Diseases(ICD)-Basic Idea
- 11. Patient information confidentiality & Legal Aspects Of MR(Medico Legal Cases)-Introduction, Concepts, Relevance

# Medical Terminology-II(Overview)-

#### 1. ENDOCRINE SYSTEM

- 1.1. Hormones
- 1.2. Different Endocrine Glands Present in the Human Body
  - 1.2.1. Thyroid Gland
  - 1.2.2. Adrenal Glands
  - 1.2.3. Pancreas
  - 1.2.4. Pituitary Gland
  - 1.2.5. Ovaries
  - 1.2.6. Testes
- 1.3. Endocrine & Metabolic Disorders

#### 2. RESPIRATORY SYSTEM

- 2.1. Parts of the Respiratory System
- 2.2. Mechanism
- 2.3. Vital Capacity
- 2.4. Factors influencing the Respiratory System
- 2.5. Symptomatic & Diagnostic Terms

#### 3. SENSE ORGANS

- 3.1. Eye
- 3.2. Ear
- 3.3. Skin
- 3.4. Tongue
- 3.5. Nose
- 3.6. Different terms commonly used

## 4. EXCRETORY SYSTEMS

- 4.1. Parts of Urinary System
- 4.2. Excretion Process of Urine
- **4.3.** Excretory system

# 5. REPRODUCTORY SYSTEM

- 5.1. Male Reproductive system
- 5.2. Female Reproductive System
- 5.3. Pregnancy, Labor & Birth
- 5.4. Reproductive Terminology; Antenatal & Neonatal

# 6. ONCOLOGY

- 6.1. Difference Between the Malignant & Benign Neoplasm
- 6.2. Carcinomas & Sarcomas
- 6.3. Mixed Tissue tumors
- 6.4. Staging & Grading
- 6.5. Treatment, Surgery, Radiation therapy & Chemotherapy

## **Books:**

1. PARAMEDICS 6-in-1 by GD MOGLI (JAYPEE)

# **Health Economics -**

- 1. Introduction to Health Economics
  - 1.1. Scope & coverage of Health Economics.
  - 1.2. Health a priceless commodity.
  - 1.3. Peculiarities of Health Goods and their Allocative implications.
  - 1.4. The Micro and Macro-economic views of Health.
  - 1.5. Cost benefit Analysis
- 2. Economic Evaluation in Health Care
  - 2.1. Demand & Supply for Health Services
  - 2.2. Demand & Supply elasticity of different health product
  - 2.3. Equilibrium and issues

- 2.4. Allocation of fund in Healthcare is as an investment and not expenditure.
- 3. Health Care Budget
  - 3.1. Purpose,
  - 3.2. Types
  - 3.3. Budgetary control
  - 3.4. Practices in Indian context.
- 4. Population growth- Economic implications.
  - 4.1. Overview of Malthusian theory
  - 4.2. Overview of Neo Malthusian theory of population growth.
- 5. Health Financing
  - 5.1. Public finance
  - 5.2. Private or Out of Pocket finance
  - 5.3. Health Insurance and TPA.
  - 5.4. Funding from CSR
- 6. Environmental influences on health & its economic impact
- 7. Economic implication of Health Policy
  - 7.1. National Health Policy of India
  - 7.2. Best Practices in Health Policy globally
- 8. Economics of Communicable & non-communicable diseases

- 1. Zweifel Peter, Breyer Friedrich. Health Economics. 1stEdi. New York, Oxford University Press, 1997
- 2. Folland S. Goodman, Stano M.: The Economics of Health and Health Care, New York, Macmillan Publishing, 1993
- 3. Feldstein P.J. Health Care Economics, 4<sup>th</sup> edi. New York, Delmar Publishers, 1993
- 4. Henderson W. James: Health Economics & Policy, 2<sup>nd</sup> Edi., New York, South- Western Thomson Learning, 2000
- 5. Cooper M. H, Culyer A.J., Health Economics. Penguin education
- 6. Hospital Administration Tabish (O.U.P.).
- 7. Hospital Management (Vol 3)- Manisha Saxena (CBS)

## **Materials & Equipment Planning**

- 1. Materials Management
  - 1.1 Introduction, Scope, Objective, Importance
  - 1.2 Integrated approach to Materials Management.
- 2. Material Planning
  - 2.1 Factors affecting material planning
  - 2.2 Techniques of material planning Dependent and Independent Demand, MPS, BOM
- 3. Purchasing & Procurement:
  - 3.1 Objective
  - 3.2 Principles of Purchase Management
  - 3.3 Purchasing cycle cyclical orientation of purchasing process
  - 3.4 Vendor Management Vendor Development, Approved Vendor List, Vendor Rating
  - 3.5 Legal aspects of purchasing –Sale of Goods Act, Law of agency
  - 3.6 Import substitution
- 4. Stores Management
  - 4.1 Stores system and procedures
  - 4.2 Stores accounting and stock verification
  - 4.3 Receipt Storage Issue
  - 4.4 Codification, Standardization, Variety Reduction
  - 4.5 Disposal of surplus and scrap
- 5. Inventory Management:
  - 5.1 Definition, Classification & Need for Inventories
  - 5.2 Merits & Demerits of Inventories
  - 5.3 Inventory control techniques and principles EOQ, ROL, Maximum & Minimum Stock, Safety Stock
  - 5.4 Selective Inventory Control ABC, VED, FSN, HML, SDE
  - 5.5 Procurement Systems P System & Q System
- 6. Material Handling Principles and Equipments Introduction
- 7. Contract Management Model Contract for Laundry, Dietary, Security & Ambulance Services
- 8. Basic Idea of Equipment Management

- 8.1 Purchasing of Equipment CAPEX, Vendor Selection & Tendering
- 8.2 Maintenance Preventive & Breakdown maintenance, Overhauling, AMC
- 8.3 Life Cycle Costing

- 1. Materials Management by A. K. Dutta, PHI
- 2. Introduction to Materials Management by Tony Arnold & Stephen N. Chapman, Pearson Education
- 3. Materials Management by P. Gopalakrishnan & M. Sundaresan, PHI
- 4. Hospital Store Management by Shakti Gupta,
- 5. Operations Management by Chase, Jacob & Acquilano, TMH

#### SYLLABUS PREPARED BY ENGLISH DEPARTMENT

2 1 2 2 1 2 0 2 1 1 2 1 1 1 1 2 2 1 2 1							
	ENGLISH PRACTICAL FOR						
EPM-301	MANAGEMENT						
ENLS301	English Language & Soft skills Theory	Ability Enhanced course					
ENPS301	English language & soft skills Practical	Ability Enhanced course					
SECAP301	Skill Enhancement-Aptitude Skill 2	Skill Enhancement Course					

#### **VAC- Introduction to Climate Change**

#### **Topic**

#### **Introduction to the history of Climate Change**

In this module basic concept related to climatology and contribution of GHG emissions in current global change will be discussed.

Paleoclimate, Heat Transfer, Simple Global Temperature Model, Black body radiation. Climate change response measures: definition and evolution and current status. Global atmospheric circulation Climate modeling and climate change feedbacks: linking atmosphere, oceans, biosphere, and cryosphere.

Aerosol Radiative Forcing The observational record of modern climate change. Greenhouse gases, The global carbon cycle – biogeochemistry

## Area specific sources with per capita allocation and Sector Based Approaches

The module will focus on available sectoral specific approaches of mitigation, the major sectors will be covered are—

Transport, power, agriculture, municipal waste, specific industries, and buildings. Food: our diet, our carbon footprint, Mitigation from cross sector perspective and its linkages with sustainable development will also be discussed using case study-based approach.

## **Emission computation techniques**

The module discusses various GHG emissions calculation techniques based on scientific principles of energy and carbon intensities. It will cover

Integrated assessment models; EIA & Life Cycle Assessment based techniques. Methodologies for regional GHG inventories; IPCC good practice guidelines for National greenhouse gas inventories.

# Required text:

- 1. Banerjee K.K. (1995) Global Warming Database Technology Options in Power and End-use Sectors Using Fossil Fuels, New Delhi.
- 2. Gupta M. (2006) Restricting Greenhouse Gas Emissions: Economic Implications for India, New Delhi.
- 3. Gilbert M. Masters and Wendell P. Ela (Author) (2007) Introduction to Environmental Engineering and Science. 3rd edition. PHI learnings New Delhi

## **Suggested readings**

- 1. Hardy J. (2003) Climate Change: Causes, Effects and Solutions, John Wily & Sons.
- 2. Nakicenovic N. (Eds) (1993) Integrative Assessment of Mitigation, Impacts and Adaptation to Climate Change, Austria.
- 3. Sathaye J. and Meyers S.D. (1995) Greenhouse Gas Mitigation Assessment: A Guidebook, Kluwer.
- 4. Thomas S. (2003) Policy Instruments for Environment and Natural Resource Management, RFF Publication, Washington DC.
- 5. Tiwari G.N. (2003) Greenhouse Technology for Controlled Environment, New Delhi

# **Summer internship**

#### **Semester IV**

#### **Epidemiology-**

#### 1. Introduction to Epidemiology

- 1.1. Concept, Definition,
- 1.2. Significance
- 1.3. Evolution of Public & Community Health
- 1.4. Methods of Epidemiological Investigations-Observational, Analytical & Experimental Studies
- 1.5. Epidemic, Endemic, Pandemic, and Sporadic diseases, Investigation of an epidemic

# 2. Disease

- 2.1. Concept of disease
- 2.2. Natural History of Disease
- 2.3. Levels of disease prevention
- 2.4. Incidence and prevalence
- 2.5. Iceberg Phenomenon of disease

#### 3. Basic Indicators of Health in respect to Epidemiological Perspective

- 3.1. Mortality-Definition
- 3.2. Morbidity-Definition
- 4.3. IMR
- 4.4. MMR
- 4.5. DALY

# **5. Preventive measures for Disease Outbreak**

- 5.1. Immunization-Introduction, types of Vaccines, cold chain for vaccines & storage of vaccines, Universal immunization Protocol, some adverse effects of vaccines
- 5.2. Screening
- 5.3 Monitoring
- 5.4. Surveillance

# 6. Transmission of Disease

- 6.1. Vehicles of transmission
- 6.2. Direct Transmission
- 6.3. Indirect Transmission
- 7. Control of Diseases-Introduction, Disease eradication and diseases elimination

# 8. Communicable and non-communicable diseases

- 1. Communicable Diseases —Introduction, Concept, Causative agent Signs & symptoms, Prevention and Control of: Influenza, Food poisoning, Tetanus, Filaria, Plague
- 2. Non- Communicable Diseases —Introduction, Concept, symptoms & Effects, Prevention and control of Diabetes, Stroke, Hypertension, Alcoholism, Smoking, Rheumatic heart Diseases
- 9. Management of accidents-Introduction and concept, Counselling- Definition and brief concept

## **Books:**

- 1. Oxford Textbook of Public Health- Roger Detels, James McEwen, Robert Beaglehole and Heizo Tanaka.
- 2. Text Book of Preventive and Social Medicine- K. Park (Bhanot)
- 3. Hospital & Health Services Administration Tabish (O.U.P.)
- 4. Epidemiology & Management of Health Care for all- P.V. Sathe & A.P. Sathe
- 5. Preventive & Social Medicine- Gupta & Mahajan (Jaypee)

## **Support & Utility Services-I-**

1. Introduction, Importance and integration of support and utility services in hospitals

- 2. Operation Theatre- Introduction , Role and Functions, Planning Construction Physical facilities ,Equipment , Staffing ,Policies and Procedures , Monitoring
- 3. Nursing Services-- Introduction, Role and Functions, Staffing, Monitoring, Planning Construction of the nursing unit Physical facilities
- 4. Pathology lab & Diagnostic Units (Radiology, Imaging, Nuclear Medicine)-Introduction, Role and Functions, Planning Construction Physical facilities, Equipment, Staffing, Policies and Procedures,
- 5. Blood Bank Introduction, Role and Functions, Planning Construction Physical facilities, Equipment, Staffing, Policies and Procedures
- 6. Dietary Services –Introduction, Role and Functions, Staffing, Policies and Procedures
- 7. Linen & Laundry Services -Introduction, Importance, Role and Functions, Workflow
- 8. CSSD (Central Sterile Supply Department) -Introduction, Role and Functions, Planning Construction Physical facilities, Equipment, Staffing, Policies and Procedures, Monitoring
- 9. Housekeeping-Introduction, Importance, Role and Functions
- 10. Control of Hospital Infection- Introduction, Functions of the Infection Control Committee, Staffing, Policies and Procedures, Monitoring
- 11. Transport Services in Hospitals-Introduction, Functions, important
- 12. Security Services in Hospitals-Introduction, Importance, functions
- 13. Maintenance Services -Introduction, functions
- 14. Hospital & Biomedical engineering Services Introduction, Role and Functions, Staffing, Policies and Procedures, Monitoring.
- 15. Medical Equipment & latest Health Technology.

- 1. Joshi—Hospital Administration (Jaypee)
- 2. Principles of Hospital Administration & Planning B.M.Sakharkar, Jaypee Brothers
- 3. Hospital Administration- Goel, Gupta & Singh (Elsevier)

## Financial Reporting and Analysis-

- 1. Introduction Definition; Objectives Profit maximization & Wealth maximization; Financial decisions Investing, Financing & Dividend policy; Role of Finance Manager
- 2. Financial Planning Budget Fixed & Flexible; Types of Departmental Budgets (Mention names only); Cash Budget; Budgetary control Material &Labour variances; Zero-based Budget
- 3. Working capital Management: Introduction; Concepts of Working Capital Permanent and Temporary; Operating Cycle; Computation of working capital; Determination of financing mix Hedging and Conservative approach
- 4. Management of Cash (Theory) Objective; Motives for Holding Cash; Cash Budgeting (covered under Financial Planning)
- 5. Receivable Management (Theory) Objective; Related costs; Credit Policy Credit Standard, Credit Analysis; Credit Terms Credit Period, Cash Discount & Cash Discount Period
- 6. Capital Budgeting Decisions- Introduction; Capital Budgeting Process; Methods to Evaluate Investment Proposals Pay-back period, ARR, Profitability Index, NPV, IRR; Capital Rationing
- 7. Break-even Analysis: Contribution; BEP determination; PV Ratio; Angle of Incidence; Margin of Safety; Implication of Breakeven Analysis
- 8. Ratio Analysis Liquidity ratios current ratio, quick ratio; Activity ratios inventory turnover; receivables turnover; payables turnover; working capital turnover; fixed asset turnover; total asset turnover; Leverage ratios debt to equity; interest coverage; Profitability or Performance ratios gross profit margin; operating profit margin; net profit margin; return on assets; return on equity, Earning per share; Valuation ration Price/Earnings (P/E)
- 9. Sources of Finance Introduction; Short-term Finance; Long-term Funds; Introduction to and Types of Shares and Debentures

- 1. Taxman's Financial Management- Ravi M. (Kishore)
- 2. Financial Management- Khan & Jain, (TMH)
- 3. Financial Management- Gupta, (Pearson Education)
- 4. Financial Management: Theory & Practice- Prasanna Chandra (Mcgraw Hill Education)
- 5. Financial Management- I.M. Pandey(Vikas)

# MIS & Its Application in Hospital

#### 1: MIS

- A. Introduction to Information System
  - a. Data & Information
  - b. System
    - 1) Introduction
    - 2) Classification of Systems
    - 3) Input of Data Resources
    - 4) Process Data into Information
    - 5) Output of Information
    - 6) Control and Feedback
    - 7) Computer-based Information Systems: Hardware, Software, Databases, Tele-communication
- B. Types of information systems
  - a. Operations Support System
    - 1) Transaction Processing System
    - 2) Process Control System
    - 3) Enterprise Collaboration System
  - b. Management Support System
    - 1) Management Information System
    - 2) Decision Support System
    - 3) Executive Information System
  - c. Classification based on Management Levels
- C. System Development Life Cycle:
  - a. Understanding SDLC Planning, Analysis, Design, Implementation, Support
  - b. Feasibility Test Operational, Schedule, Technical, Economic

#### 2: Application of MIS in Hospitals

- a) Historical overview
- b) Healthcare Information Priorities
- c) IPD & OPD
- d) Patient Registration, Appointment Scheduling, Admission Discharge Transfer (ADT)
- e) Computerised Physician Order Entry (CPOE), Nursing Workbench,
- f) Clinic Specialties
- g) Roster Management
- h) Laboratory Information System, Radiology Information System
- i) CSSD, Pharmacy, Blood bank, Operation Theatre, Dietary, Pharmacy
- j) Medical Records
- k) Patient Billing, Insurance and Contract Management
- 3: Artificial Intelligence in Healthcare an overview.

## **Books:**

- 1. Management Information System, James A.O'Brien, Tata Mc-graw Hill
- 2. Managing a Modern Hospital, A.V.Srinivasan, Response Books
- 3. Health Management Information System, Jack Smith, Open University Publication, U.K
- 4. Management Information Systems, Sadagopal, S, Prentice Hall
- 5. Management Information Systems by D. P. Goyal, Macmillan
- 6. Management Information System by Ashok Arora & Akshaya Bhatia, Excel Books
- 7. Hospital Information Systems by S. A. Kelkar, PHI

Practical/ Sessional:

BHM 461: Project and its' presentation on Public Healthcare Soft skills and Personality development

# 3 year UG

#### Semester V

## Patient Safety Management –

- QUALITY MANAGEMENT PROCESS 1. Measuring Performance 2. Evaluating Performance 3. Continuous Improvement
- ORGANIZING FOR QUALITY 1. Quality Management System 2. Quality Management Plan 3. Leadership for Quality 4. Organizational Staff and Quality 5. Implementing Quality as the Core Organizational Strategy
- :PERFORMANCE IMPROVEMENT METHODS 1. Performance Management Methods and Tools 2. Improvement Project Teams 3. Project Management 4. Process Redesign
- INFORMATION TECHNOLOGY APPLICATIONS FOR IMPROVED QUALITY 1. Medical Informatics 2. Technologies for Clinical Care Management Initiatives 3. Architecture Framework for Clinical Information Technology 4. Workflow Automation for Clinical Processes 5. Other Clinical Information Technology Components 6. Analytics in Healthcare Organizations
- ACCREDITATION 1. Benefits of Accreditation 2. Use of Accreditation in Healthcare 3. Review of Various Healthcare Accreditation Standards
- PATIENT SAFETY 1. Medical Harm: A Brief History 2. Causes of Medical Errors and Harm 3. The Emergence of Patient Safety 4. Integrating Safety and Quality
- MEASURING PATIENT SAFETY 1. Measuring Patient Safety 2. Reporting Patient Safety
- MANAGING SAFETY INCIDENTS 1. Managing Patients Affected by Medical Harm 2. Supporting Staff after Serious Incidents
- PREVENTING SAFETY INCIDENTS 1. Clinical Interventions and Process Improvements 2. Designing for Patient Safety 3. Using IT to Improve Patient Safety 4. Creating a Culture of Safety 5. Patient Involvement in Safety
- BUILDING A SAFE ORGANIZATION 1. Building Safety Skills 2. Team Approach 3. Leadership for Safety 4. Safe Healthcare Organizations 5. Patient-friendly Hospitals 6. High Performing Healthcare Systems
- Quality in Healthcare
  - a. TQM Definition for Healthcare
  - b. Defining Quality for Patient Care
    - i. Quality of Technical Care
    - ii. Quality of the art of Care
    - iii. Quality of the Environment
  - c. Dimensions of evaluation of Health Care Structure, Process & Outcome
  - d. Measuring Service Quality
    - i. Service intangibility
    - ii. Performance heterogeneity
    - iii. Customer-producer inseparability
  - Patient Safety-Introduction, Patient safety Factors, Importance, Ensuring of strict adherence to Patient safety aspects by the hospitals

# **Books:**

- 1. Fundamentals of Quality Control and Improvement by Amitava Mitra, Pearson Education
- 2. Quality Management by KanishaBedi, Oxford
- 3. Total Quality Management by D. H. Besterfield Et al., Pearson Education
- 4. Quality Control by D. H. Besterfield

# **Support & Utility Services –II**

## 1. Mortuary Services

Introduction, Role and Function, Planning Construction – Physical facilities Staffing, Policies and Procedures, Monitoring.

## 2. Pharmacy Services

Definition, Introduction, Brief History, Role& function and types, planning

Consideration, Policies and Procedures, Management issues – Control and evaluation, Computerization in Pharmacy Services.

## 3. Fire Hazards and Fire Manual Guideline

Introduction, Elements of fire, Fire hazard – Cause of Hospital Fire, Classification of fire, Fire protection – Fire points and Escape Route Risk evaluation, Manual for fire safety – Guidelines, Elements of Fire safety, Fire safety training – Do's and Don'ts for electrical fire prevention, Actions to be taken in case of fire in a Hospital.

# 4. Hospital Environmental Control

Aims, Components of Universal precautions, General Cleanliness- hand-washing techniques, sterilization and disinfection methods of syringe, needle, gloves, gowns, masks and eye-ware cleaning and decontamination of blood and other spills

#### **Texts:**

- 4. Joshi—Hospital Administration (Jaypee)
- 5. Principles of Hospital Administration & Planning B.M.Sakharkar, Jaypee Brothers
- 6. Hospital Administration- Goel, Gupta & Singh (Elsevier)
- 7. Essentials for hospital Support Services and Physical Infrastructure- Madhuri Sharma (Jaypee)

# **Ethical & Legal Aspects of Health -**

- 1. Laws pertaining to Establishment of Hospital:
  - a) General Idea about forming of society, Companies Act & Law of Partnership
  - b) Law of Contracts Essentialsof a contract, Offer & Acceptance
  - c) Capacity of the parties
  - d) Free consent
  - e) Consideration & Legality of object
  - f) Void Argument and contingent contract
  - g) The WBCE Act as amended till date.
- 2. Laws pertaining to Health:
  - a) Central Births and Deaths Registration Act, 1969 (with recent amendments)
  - b) Medical Termination of Pregnancy Act, 1971
  - c) Surrogacy Law

#### 3.Laws pertaining to Hospitals:

- a) Transplantation of Human Organs Act, 1994
- b) Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994
- c) Basic idea of CP Act, its application in hospital and its implication for health professionals.
- d) Drugs and cosmetic Act 1940
- e) Fire and Safely Rules & Act
- f) Shops &Establishment Act
- 4, Laws pertaining to Medico Legal aspects related to Hospitals:
  - a) CPA 2020. Indian Penal Code (u/s 302-307). Medical Negligence
  - b) Dying Declaration.
  - c) Consent Implied and Expressed,
  - d) Professional Secrets
  - e) Euthanasia
  - 5. Medical Ethics & Values:
  - a) Implementation of ethics and values in a hospital
  - b) Relationship Doctor Patient and Nurse Patient,
  - c) Duties and Responsibilities of Doctors and Hospitals.
  - d) MCI Act and Regulations regarding professional conduct, etiquette and ethics
  - e) Code of conduct Hippocrates Oath and Declaration of Geneva
  - f) Statutory compliances, Periodic Reporting etc. Health care organisation

- 1. Commercial Law- N D Kapur (S Chand)
- 2. Hospital Administration- Joshi (Jaypee)
- 3. Hospital Management (Vol 3)- Manisha Saxena (CBS)
- 4. Books on Relevant Acts
- 5. Medical Ethics by C.M. Francis (Revised & Edited by Rimpi Gupta)-Jaypee Publishers.

## **Biomedical waste management-**

- 1. Biomedical Waste Management
  - 1.1. Definition: Biomedical Waste; Biological; Occupier; Biomedical waste treatment facilities;
  - 1.2. Biomedical waste classification and Colour coding (Act- 2016)
  - 1.3. Segregation
  - 1.4. Packaging
  - 1.5. Transportation
  - 1.6. Storage
  - 1.7. Disposal
  - 1.8. Annual Report
  - 1.9. Maintenance of Records and Accident reporting

2.Hazardous Materials: Hazardous Substance Safety, OSHA Hazard Communication Standard, DOT Hazardous Material Regulations, Healthcare Hazardous Materials, Medical Gas Systems, Hazardous Waste Operations and Emergency Response Standard, Respiratory Protection

#### **Books:**

- 1. Environmental Studies, A.K.De&A.K.De, New Age International
- 2. Environmental Management, N.K. Oberoi, EXCEL BOOKS
- 3. Ecosystem Principles & Sustainable Agriculture, Sithamparanathan, Scitech
- 4. Biomedical Waste Management Rule 2016

# **Human Resource Management-**

- 1. Human Resource management-overview
  - 1.1. Meaning
  - 1.2. functions
  - 1.3. objectives
  - 1.4. Difference with Personnel management
  - 1.5. Qualities of HR Managers
- 2. HR Planning
  - 2.1. Concepts
  - 2.2. Importance
  - 2.3. Methods(Demand Forecasting and Supply Forecasting)
  - 2.4. Job Analysis (Job Description & Job Specification
- 3. Recruitment & Selection
  - 3.1. Meaning
  - 3.2. Importance
  - 3.3. Sources
  - 3.4. Methods
- 4. Training
  - 4.1. Concept and Need of Induction training
  - 4.2. Importance and Objectives of Training
  - 4.3. On-the job& Off-the Job training methods
- 5. Performance Appraisal
  - 5.1. Meaning
  - 5.2. Objectives
  - 5.3. Traditional & Modern Methods of PA(BARS, MBO, Ranking Method, Paired-Comparison method, Critical Incident Method, 360 Degree Performance appraisal method)
- 6. Financial Compensation
  - 6.1. Wage & Salary Administration-Concept, types of wages, Factors determining the wage and salary administration.
- 7. Non-Financial Compensation:
  - 7.1. Work environment, unemployment insurance, vacation & holidays, Parental leave & medical leave.
- 8. Labour Law
  - 8.1. Concept of Labour Law
  - 8.2. Trade Union Act, 1926
  - 8.3. Industrial Dispute Act,1946
- 9. Collective Bargaining-brief Concept
- 10. Grievance Handling Procedures: Introduction, Methodology (ICC Committee)

- 1. Human Resource Management- K. Aswathappa (Tata Mc Graw Hill)
- 2. Human Resource Management- Gary Dessler & Biju Varkkey (Pearson)
- 3. Labour Law- Ajay Garg(A Nabhi Publication)
- 4. HRM- Mamoria&Gankar (Himalaya)

	ENGLISH PRACTICAL FOR	
EPM-501	MANAGEMENT	
ENLS501	English Language & Soft skills Theory	Ability Enhanced course
ENPS501	English language & soft skills Practical	Ability Enhanced course
SECAP501	Skill Enhancement-Aptitude Skill 3	Skill Enhancement Course

Summer internship

# Semester VI Health Insurance-

- 1. Health Insurance-Introduction
  - 1.1. Brief of health insurance claims process
  - 1.2. Benefits
  - 1.3. Need of Health Insurance
- 2. TPA: Formation, Functions and Operations
- 3. Medical insurance companies and schemes in India
- 4. PPP in Health Care Scenario-Introduction, objective and importance, Health Care Financing.
- 5. IRDA- Role and Control
- 6. FDI in Insurance- an overview

#### Books:

- 1. Health Insurance Sector in India-T Mahendran (Abhijeet Publications)
- 2. Indian life and Health Insurance Industry: A marketing Approach-Novi Dewan (Springer Science and Business media)

# Public Relation

- 1. Public Relations
- 1.1. Introduction
- 1.2. Importance & Objectives
- 1.3. Public Relations in Hospital and Healthcare Industry-Basic components
  - 2, Public Relation- PR as a process Factors Affecting PR,
  - 2.1.Components of Hospital PR
  - 2.2.Role and responsibilities of PRO
  - 2.3.Importance of PR in Hospital Environment Management
  - 2.4. Key to proper PR in Hospitals
  - 2.5. PR in Crisis Management
  - 2.6. PR vs. Advertising
  - 2.7.PR vs. Propaganda.
- 3. Ethics in PR
- 4. Emerging trends in PR
- 5. PR- Laws

Textbooks:

PUBLIC RELATIONS Paperback, by Iqbal Sachdeva, Oxford University Press

Effective Public Relations and Media Strategy, by Reddi C.V.N, Prentice Hall India Learning Private Limited;

Soft skills and personality development

# 4 YEAR HONORS COURSe HEALTH RESEARCH METHODOLOGY

1. Introduction

Introduction

- 1.2 Social Survey-its role and development in India
- 1.3 Planning a Research Project and Selecting a Research Problem
- 1.4 Research Protocol Writing
- 1.5 Bibliographical Data
- 1.6 Questionnaires, Interview and Observations
- 1.7 Case Study
- 1.8 The Experimental Technique
- 1.9 Measurement and Analysis of Data
- 1.10 Reporting and Write-Up
- 1.11 Research in Social Sciences
- 1.12 Errors of Measurement. Social Survey-its role and development in India
- 2. Planning a Research Project and Selecting a Research Problem
- 2. 1 Research Protocol Writing
- 2.2. Bibliographical Data
- 2.3. Questionnaires, Interview and Observations
- 2. Introduction to Research Methodology
  - 2.1. Meaning, Objectives,
  - 2.2. Categories of Research,
  - 2.3. Features of good research studies,
  - 2.4. Types of Research Studies,
  - 2.5. Scientific & nonscientific methods,
  - 2.6. Research Methods & Research, Methodology.
  - 2.7.Importance of Research in Management Decisions: Defining Research Problems, Formation of Hypothesis,
  - 2.8.Research design: Types of Research design, Research design in case of different research studies.
- 3. Methods and Techniques of data collection:
  - 4.1. Types of data collection,
  - 4.2. Methods used for collection of different data types.
  - 4.3. Sampling and sampling distribution: Importance of Sampling, Methods of Sampling, Sampling errors,
  - 4.4. Test of Hypothesis. Attitude Measurement and Scales
- 5. Data presentation and analysis:
- 5.1. Data preparation & preliminary analysis,
- 5.2. Statistical Analysis & Interpretation of data:
- 5.3. Non parametric tests. Multivariate Analysis of Data.
- 5.4. Model Building & Decision Making, Additional Statistical Methods.
- 6. Report writing & presentation:
- 6.1. Writing & formatting of Reports,
- 6.2. Presenting your research reports & talks,
- 6.3. Graphical Presentation.
  - 7. Health Research Methodology: Definition, Concept, Importance, Tools
  - 8. Case Study discussion
  - 9. Research in Social Sciences
  - 10. Errors of Measurement.

Textbooks:

- 1) Research Methodology for Health Profession, by RC Goyal , Jaypee Brothers Medical Publishers; First Edition (15 June 2010)
- 2) Research Methodology, by C.R. Kothari, Gaurav Garg, New Age International Publishers; Fourth edition (1 September 2019)

3)

# HOSPITAL PREPAREDNESS FOR DISASTER MANAGEMENT

## UNIT-1: INTRODUCTION TO DISASTER.

Concepts of Hazard, Vulnerability, Risks, Natural Disasters (earthquake, Cyclone, Floods, Volcanoes), and Man Made Disaster (Armed conflicts and civil strip, Technological disasters, Human Settlement, Slow Disasters (famine, draught, epidemics) and Rapid Onset Disasters(Air Crash, tidal waves, Tsunami) Risks, Difference between Accidents and Disasters, Simple and Complex Disasters, , different

stake holders in Disaster Relief. Human Resettlement and Rehabilitation issues during and after disasters, Inter-sectoral coordination during disasters, Models in Disasters

#### UNIT-II: APPROACHES TO DISASTER RISK REDUCTION

Disaster Risk Reduction Strategies, Disaster Cycle, Phases of Disaster, Preparedness Plans, Action Plans and Procedures, Early warning Systems Models in disaster preparedness, Components of Disaster Relief-(Water, food, sanitation, shelter, Health and Waste Management), Community based DRR, Structural non structural measures in DRR, Factors affecting Vulnerabilities, , Mainstreaming disaster risk reduction in development, Undertaking risk and vulnerability assessments, Policies for Disaster Preparedness Programs, Preparedness Planning, Roles and Responsibilities, Public Awareness and Warnings,

#### UNIT- III: PRINICPLES OF DISASTER MEDICAL MANAGEMENT

Introduction to disaster medicine, Various definitions in disaster medicine, Disaster life cycle, Disaster planning, Disaster preparation, Disaster recovery in relation to disaster medical management, Medical surge, Surge capacity, Medical triage, National Assessing the nature of hazardous material - Types of injuries caused, Self protection contaminated area and decontaminated area - Pre hospital medical management of victims - Triaging medical & psychosocial identification of hospitals and other medical facilities to offer efficient disastrous medical service - Safe patient transportation - Identification of vulnerable groups (Pregnancy, pediatric and geriatric other people with associated medical co morbidities

#### UNIT-IV: PUBLIC HEALTH RESPONSE AND INTERNATIONAL COOPERATION

Principles of Disaster Epidemiology, Rapid Health Assessment, Rapid Health needs assessment. Outbreak Investigation Environment health hygiene and sanitation issues during disasters, Preventive and prophylactic measures including Measles immunization, ORS, water, supply, chemoprophylaxis, food fortification, food supplements, MISP-Reproductive Health Care, International cooperation in funding on public health during disaster, To identify existing and potential public health problems before, during and after disasters, international Health Regulation, United Nation International Strategy for Disaster Risk Reduction (UNISDR), United Nation Disaster Management Team, International Search and Rescue Advisory Group,

#### UNIT-V: DISASTER RISK MANAGEMENT IN INDIA

Hazard and Vulnerability Profile India,, Disaster Management Indian scenario, India's vulnerability profile, Disaster Management Act 2005 and Policy guidelines, National Institute of Disaster Management, , National Disaster Response Force (NDRF)National Disaster Management Authority, States Disaster Management Authority, District Disaster Management Authority Cases Studies: Bhopal Gas Disaster, Gujarat Earth Quake, Orissa Super-cyclone, south India Tsunami, Bihar floods, PlagueSurat, Landslide in North East,

# Textbook:

## 1)Text book of Disaster Management, SCIENTIFIC PUBLISHERS (INDIA) by A.K Srivsastava

2)Disaster Management And Preparedness : Based On The Syllabus Prescribed By Ugc For Disaster Management Education, By <a href="Dhawan">Dhawan</a> , CBS Publication

## **Professional based practices for Health care Managers**

UNIT – I: Introduction to Professional Ethics: Basic Concepts, Governing Ethics, Personal & Professional Ethics, Ethical Dilemmas, Life Skills, Emotional Intelligence, Thoughts of Ethics, Value Education, Dimensions of Ethics, Profession and professionalism, Professional Associations, Professional Risks, Professional Accountabilities, Professional Success, Ethics and Profession.

UNIT – II: Basic Theories: Basic Ethical Principles, Moral Developments, Deontology, Utilitarianism, Virtue Theory, Rights Theory, Casuist Theory, Moral Absolution, Moral Rationalism, Moral Pluralism, Ethical Egoism, Feminist Consequentialism, Moral Issues, Moral Dilemmas, Moral Autonomy.

UNIT – III Introduction To Medical Ethics
Definition of Medical ethics, Scope of ethics in medicine, International code of Ethics for occupational health professionals, Ethical Theories

–Deontology and Utilitarianism ,Casuist theory, Virtue theory, The Right Theory. Role of ethics in Healthcare workplace – Autonomy,
NonMalfeasance, Beneficence, Veracity, Justice, OSHA, Decision Model for Healthcare Dilemmas-Applications of Plus decision making
model

UNIT – IV: Professional Practices in Healthcare sector: Professions and Norms of Professional Conduct, Norms of Professional Conduct vs. Profession; Responsibilities, Obligations and Moral Values in Professional Ethics, Professional codes of ethics, the limits of predictability and responsibilities of the Healthcare profession,

Unit V: Introduction to Ethics a. Ethics b. Bioethics c. Ethical decision making d. Ethics in Professional practice II. Adult Health Ethics a. Medicalization b. Chronic disease and illness c. Organ transplantation, Psychiatric and mental health ethical issues a. Practice area of mental health: unique characteristics b. Boundaries VII. Geriatric and end of life ethical issues a. Life-prolonging treatments b. Euthanasia c. Physician assisted suicide

. Unit VI: Hospital Accreditation and Safety Standards

Accreditation – JCI Accreditation and its Policies.Life Safety Standards- Protecting Occupants, Protecting the Hospital and Individuals from Fire, Smoke, and Heat.Managing Hazardous Medical Material and Waste, Laboratory and Radiation safety, Health and safety hazards of shift work. Patient Safety – Human factors, Reliability, Evidence based Medicine, Root cause Analysis.

Textbook:

- 1) Professional Ethics, 2E, by R. Subramanian, Oxford University
- 2) CM Francis Medical Ethics, by Rimpi Gupta ,Jaypee Brothers Medical Publishers; Fourth edition

# INTERNATIONAL HEALTH

- Global trends in burden of diseases
- Communicable and non- communicable diseases in a global perspective
- Nutrition transition, malnutrition and health
- Gender inequalities in health
- Climate changes, natural catastrophes and environmental health
- International migration and its health related challenges
- Health policies, health management, and health systems
- International health organizations and the Millennium Development Goals (MDG)
- International health determinants in relation to water, food, climate, and living conditions
- Cultural aspects on health, living conditions and gender inequalities
  - Books:
  - 1. Oxford Textbook of Public Health- Roger Detels, James McEwen, Robert Beaglehole and Heizo Tanaka.
  - 2. Text Book of Preventive and Social Medicine- K. Park (Bhanot)
- 3 Principles Of Public Health: A Simple Text Book On Hygiene Presenting The Principles Fundamental To The Conservation Of Individual

And Community Health, by Thomas Dyer Tuttle

## **Reference Books**

Oxford Textbook of Global Public Health, by Roger Detels (Editor), Martin Gulliford (Editor), Quarraisha Abdool Karim (Editor), Chorh Chuan Tan

# **Entrepreneurship in Healthcare**

I: Introduction to Entrepreneurship Meaning and concept of entrepreneurship, the history of entrepreneurship development, role of entrepreneurship in economic development, Myths about entrepreneurs, agencies in entrepreneurship management and future of entrepreneurship types of entrepreneurs.

II: The Entrepreneur Why to become entrepreneur, the skills/ traits required to be an entrepreneur, Creative and Design Thinking, the entrepreneurial decision process, skill gap analysis, and role models, mentors and support system, entrepreneurial success stories. III: E-Cell Meaning and concept of E-cells, advantages to join E-cell, significance of E-cell, various activities conducted by E-cell

- IV. Micro-level Topics in Healthcare Entrepreneurship-Introduction & brief Discussion
- V. Entrepreneurship in Healthcare: Past Contributions and Future Opportunities, Scope

- VI. Value through Hybrid organising in health care sector.
- VII. Healthcare Innovation- Incubators and Accelerators & their Roles
- 6. Case Studies in Healthcare entrepreneurship
- 7. Entrepreneurial Challenges & Opportunities in Healthcare
- 8. The Antecedents of Healthcare Social Entrepreneurship

#### **Textbooks**

Entrepreneurship Development, by S A Kumar, New Age Publishers; First Edition (25 June 2021); NEW AGE International Pvt Ltd India's Healthcare Industry: Innovation in Delivery, Financing, and Manufacturing, by Lawton R. Burns, Cambridge University Press

#### Reference Book

Entrepreneurship in Healthcare (Routledge Studies in Health Management), by Ralf Wilden "Massimo Garbuio , Federica Angeli (Daniele Mascia

Health-Care Entrepreneurship: Embracing the Mindset and Skills for Competitive and Sustainable Healthcare Entrepreneurship, by PH D Ehiobuche, Chris, Xlibris Us

# **Organisation Behaviour:**

OB: Learning objectives, Definition & Meaning, Why to study OB, An OB model, New challenges for OB Manager

LEARNING: Nature of learning, How learning occurs, Learning & OB

I. Focus and Purpose Definition, need and importance of organizational behaviour – Nature and scope – Frame work – Organizational behavior models, Organization and the environmental factors. Organizational Theory, Organizational behavior modification. Misbehavior – Types II. Individual Behavior Personality – Types – Factors influencing personality – Theories. Learning – Types of learners – The learning process – Learning theories. . Attitudes – Characteristics – Components – Formation – Measurement- Values. Perceptions – Importance – Factors influencing perception – Interpersonal perception, Impression Management. Emotions and Moods in workplace

III Group Behavior Organization structure – Formation – Groups in organizations – Influence – Group dynamics – Interpersonal Communication Team building - Interpersonal relations – Group decision making techniques. Meaning of conflict and its types, Conflict Redressal process

IV. Leadership and Power Leadership – Meaning, importance, traits, styles and Theories. Leaders Vs Managers. Sources of power – Power centers – Power and Politics. Motivation at work – importance, need, types and its effects on work behavior. Motivation Theories: Maslow's, Herzberg, etc.

V Dynamics of Organizational Behavior Organizational culture and climate – Factors affecting organizational climate – Importance.

Organizational change – Importance – Stability Vs Change – Proactive Vs Reaction change – the change process – Resistance to change –

Managing change. Stress – Work Stressors – Prevention and Management of stress – Balancing work and Life. Organizational Development – Characteristics & objectives.

# **Textbooks**

A Textbook Of Organisational Behaviour, by Gupta C.B., S Chand & Company

Organizational Behavior, by Neharika Vohra Stephen P. Robbins, Timothy A. Judge, Pearson Education; Updated 18 edition (31 May 2022);

Essentials of	organisational	behaviour.	by T N	Chhabra.	Sun	India l	<b>Publications</b>

# **Presentation on Healthcare marketing**

# Semester 8-

# **Research Project & Dissertation**

# THE NEOTIA UNIVERSITY

# SYLLABUS- BACHELORS IN HOSPITAL MANAGEMENT PROGRAM (FOR FINAL YEARS STUDENTS ONLY) (3 YEARS)

	BA	CHELORS	IN HOSPITAL MAN	AGE	MEN	T PR	OGRAMM	IE .
SI	EMESTER-	1						
	COURSE CODE	COURSE TYPE		L	T	P	TOTAL	CREDITS
1	BHM 101	CC 1	Managerial Theories & Techniques	3	1		4	4
2	BHM 102	AECC1	Communication Skills	2	1		3	3
3	BHM 103	CC2	Accounts	2	1		3	3
4	BHM 104	CC3	Fundamentals of Health Systems	3	1		4	4
5	BHM 105	CC4	Introduction to Hospital Administration	2	1		3	3
6	BHM 106	CC5	Marketing	3	1		4	4
7		GE 1		2			2	2
	Semester1	: Theory T	otal Credits : 23					23
1	BHM 171	SEC1	Language Laboratory			4	4	2
2	BHM 172	SEC2	Computer Laboratory			4	4	2
	Semester 1 Credit:4	: Practical/	Sessional Total					
Se	mester 1: T	otal Credit	:27	18	6	8	32	27
SI	EMESTER-	2		1	1	I		1
1	BHM 201	CC6	Hospital Operation Management	3	1		4	4
2	BHM 202	CC7	Bio Statistics	3	1		4	4
3	BHM 203	CC8	Medical Terminology I	3	1		4	4
4	BHM 204	CC9	Service Marketing	3	1		3	4

5	BHM	CC10	Basic Economics	3	1		4			4	
6	205 BHM	DSE1	Occupational Health	1	1		2			2	
	206		Occupational Health								
7		GE2		2			2			2	
	Semester2:	Theory 7	Total Credits: 24							2	4
1	BHM 261	DSE2	Seminar			2	2			1	
2	BHM 262	DSE3	Public Speaking on Assigned Topic			4	4			2	
	Semester2: Credits: 3	Practical	/ Sessional Total								
Se	mester2: To	tal Credit	•27	16	6	6		28		2	7
	EMESTER-3		• <i>I</i> II I	10	0	0		20			
1	BHM 301	CC11	Hospital Planning & Designing	3	1		4			4	
2	BHM	CC 12	Medical Records	3	1		4			4	
3	302 BHM	CC13	Medical	3	1		4			4	
4	303 BHM	CC14	Terminology II Health Economics	3	1		4			4	
	304										
5	BHM 305	CC15	Materials and Equipment Planning	3	1		4	_		4	
	*English		& Soft skills Theory			PM-3			1	2	
	*English	language &	k soft skills Practical		EN	NPS3	301		1		
			k soft skills Practical nt-Aptitude Skill 2			NPS3			1		
	*Skill E *Intro	Enhanceme			SEC	CAP					
	*Skill E	Enhanceme oduction to	nt-Aptitude Skill 2		SEC	CAP	301		1		
	*Skill E  *Intro *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department	Enhanceme oduction to	nt-Aptitude Skill 2  Climate Change		SEC	CAP	2301 C-308		1		
1	*Skill E  *Intro  *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department	Enhanceme oduction to	nt-Aptitude Skill 2  Climate Change  Project on Hospital Overview		SEC	CAP	301	2	1		1
	*Skill E  *Intro  *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department  BHM 361  Semerster3 Credits: 1	CC16	nt-Aptitude Skill 2  Climate Change  Project on Hospital Overview  Al Sessional Total		VAC	CAP	2301 C-308	2	1		
Se	*Skill E  *Intro *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department  BHM 361  Semerster3 Credits: 1 mester3: To	CC16 CC16 CC16 CC16	nt-Aptitude Skill 2  Climate Change  Project on Hospital Overview  Al Sessional Total		VAC	CAP	2301 C-308		1		1 29
Se	*Skill E  *Intro  *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department  BHM 361  Semerster3 Credits: 1 mester3: To	CC16 3: Practica	Project on Hospital Overview  Il Sessional Total  :29	1	SEC	CAP C-CC	2301 C-308	2	1		29
Se SE	*Skill E  *Intro *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department  BHM 361  Semerster3 Credits: 1 mester3: To	CC16 CC16 CC16 CC16	Project on Hospital Overview  Il Sessional Total  :29  Epidemiology Support & Utility		SEC VAC	55	2301 C-308	2	1		
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Se	*Skill E  *Intro  *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department  BHM 361  Semerster3 Credits: 1 mester3: To EMESTER-4 BHM 401 BHM 402	CC16 S: Practica tal Credit CC17 CC18	Project on Hospital Overview  Il Sessional Total  Epidemiology Support & Utility Service I Financial Reporting & Analysis MIS & its application in	3 3	SEC VAC	CAP C-CC	2301 C-308	2 2 5 5 5	1		<b>29</b> 5 5
Se SE 1 2 3	*Skill E  *Intro  *these subjects were added upon the direction of higher authorities, syllabus prepared by offering Department  BHM 361  Semerster3 Credits: 1 mester3: To EMESTER-4 BHM 401 BHM 402  BHM 403	CC16  CC16  CC17  CC18  CC19	Project on Hospital Overview  If Sessional Total  Epidemiology Support & Utility Service I Financial Reporting & Analysis MIS & its	3 3 3 3	SEC VAC	CAP C-CC	2301 C-308	2 2 5 5 5	1		<b>29</b> 5 5 5

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1	BHM 461	CC 22	Project on				4	4		2
			Community							
			Healthcare							
			Sessional Total							
	Credits: 2 Semester4: Total Credit:24									
			24		14	8	4	- 2	26	24
SI	EMESTER-									
1	BHM 501	CC 25	Quality		4	1		5		5
			Management &							
			Patient safety							
2	BHM 502	CC26	Support & Utility		4	1		5		5
_	7777 7 700	~~~	Service II							_
3	BHM 503	CC27	Ethical & Legal		4	1		5		5
4	DID 4 504	A E C C C	Aspects of Health		2	1				1
4	BHM 504	AECC2	Environmental Science & Bio-		3	1		4		4
			Medical waste							
			Management							
5	BHM 505	CC28	Human Resource		4	1		5		5
3	Binvi 303	CC20	Management		-	1				
6		GE5	- Trianagement		2			2		2
								<u> </u>		<u> </u>
*]	ENGLISH P	RACTICAL	L FOR MANAGEMEN'	T						
		3				EP	M-50	1	2	
	*English	Language &	& Soft skills Theory			EN	LS50	1	1	
	*English	language &	soft skills Practical		ENPS501 1					
	*Skill F	Enhancemen	t-Aptitude Skill 3		SECAP501 1					
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		*Gender Se	ncitization		SHMSS-VAC- 01A				1	
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$\frac{1}{2}$	BHM	CC 30	Public Relation	3		1		4		1
_	602	CC 30	i udiic Keiatidii	3		1		<del>  4</del>	'	t
		: Theory T	Total Credits: 8		+					8
1	BHM	CC 31	Internship/ Training				]			3
1	661	CC 31	Evaluation #							·
	551									
2	BHM	CC30	Project Defense						1	3
	662		<b>J</b>							
	Semester6	Practical/	Sessional Total							
	Credits: 16	<u> </u>								
Se	mester6: To	tal Credit:		6	5	2		8		24
	Degree To									151
# Ir	nternship/ T	raining cou	ıld be placed in-betwe	en 4	4 <sup>th</sup> &	5 <sup>th</sup>	Seme	ster o	r 5 <sup>th</sup> &6	<sup>th</sup> semester a

<sup>#</sup> Internship/ Training could be placed in-between 4th & 5th Semester or 5th & 6th semester as per suitability.

Assignments should be part with the course itself and there specific weightage during evaluation should be given.

# **FIRST YEAR**

#### **Semester I**

# BHM 101: Management Theories & Techniques-4 CREDITS

#### **SECTION I: Principles and Practice of Management**

- 1. Basic concepts of management:
  - 1.1. Definition –
  - 1.2. Need and Scope
  - 1.3. Concept of Productivity, efficiency and effectiveness
  - 1.4. Systems theory
  - 1.5. Different schools of management thought
    - 1.5.1. Scientific Theories F.W. Taylor., Gilbreths
    - 1.5.2. Operational Theories: Henry Fayol.
    - 1.5.3. Behavioural theories Elton Mayo & Hawthorne Studies
    - 1.5.4. Modern Theories- Peter Druker
- 2. Functions of Management Introduction to different functions
  - 2.1. Planning (Concept, Nature, Importance, Steps, Limitations)
    - 2.1.1. Management by objectives
  - 2.2. Organizing (Concept, Nature, Importance, Principles)
    - 2.2.1. Centralization, Decentralization,
    - 2.2.2. Organization Structures- (Line and Staff Authority, Functional, Product, Matrix, Geographical, Customer wise)
  - 2.3. Staffing (Concept, Nature, Importance, Steps)
  - 2.4. Directing (Concept, Nature, Importance)
  - 2.5. Controlling (Concept, Nature, Importance, process)

#### **SECTION II: Organizational Behaviour**

- 1. Introduction to Organizational Behaviour
  - 1.1. Definition,
  - 1.2. Importance,
  - 1.3. Scope,
  - 1.4. Fundamental Concepts of OB
- 2. Perception
  - 2.1. Concept
  - 2.2. Factors influencing perception
  - 2.3. Attribution theory
  - 2.4. Frequently used shortcuts in judging others (Halo effect; Contrast effect; projection; stereotyping)
- 3. Personality & Attitudes:
  - 3.1. Meaning of personality,
  - 3.2. Determinants of personality
  - 3.3. Personality Traits
  - 3.4. Major personality attributes influencing OB
  - 3.5. Values- Definition and types
  - 3.6. Concept and component of Attitude
  - 3.7. Importance of attitude in organization
  - 3.8. Major job related attitude
- 4. Motivation:
  - 4.1. Definition,
  - 4.2. Importance,
  - 4.3. Theories of Motivation Maslow's Theory of need hierarchy Herzberg's theory, Factor X & Y, Vroom's Theory
- 5. Group Dynamics and Team building:
  - 5.1. Concept of Group & Team.
  - 5.2. Process of Group Formation
  - 5.3. Formal and Informal Groups.
  - 5.4. Importance of Team building.

# **Books:**

Organisational Behaviour
 Organisational Behaviour
 Utthans (TMH)
 Organisational Behaviour
 L. M. Prasad
 Essentials of Management:
 H. Koontz (TMH)

# BHM 102: Communication Skills-3 CREDITS

1. Communication:

- 1.1. Meaning of Communication;
- 1.2. Role of Communication in Business;
- 1.3. Basic elements of the Communication process,
- 1.4. level of Communication, forms,
- 1.5. models and media of Communications,
- 1.6. Verbal and non-verbal Communication-functions and types.
- 1.7. Barriers to effective Communication. Grammar

#### 2. Grammar

- 2.1. Articles and preposition
- 2.2. Subject verb agreement,
- 2.3. tense,
- 2.4. voice,
- 2.5. Direct Indirect Narration
- 2.6. improvement of sentences,
- 2.7. Rearrangement of sentences.
- 2.8. Vocabulary: usage, synonyms, antonyms.
- 3. Comprehension
- 4. Forms of Writing
  - 4.1. The Essay,
  - 4.2. The Précis,
  - 4.3. The Report,
  - 4.4. The Proposal,
  - 4.5. The C.V. and
  - 4.6. Job Application letter.
- 5. Intra- and Inter-Organizational Communication: (Memo, Notice, Circular, Agenda / Minutes etc.)

#### **Books:**

- 1. Grammar: Wren & Martin
- 2. Effective Business Communication- Asha Kaul (PHI)
- 3. Hospital Management (Vol-III): Manisha Saxena (CBS)

# BHM 103: Accounts-3 CREDITS

# I. Financial & Management Accounting:

- I.1. Introduction: Definition, Need and Role of Accounting; Branches of Accounting; Systems of Accounting; Basic Terms of Accounting
- I.2. Generally Accepted Accounting Principles; Accounting Concepts
- I.3. Double Entry Principles; Rules of Debit & Credit; Journals (Elementary, excluding shares & Partnerships)
- I.4. Ledger Posting; Trial Balance; Cash Book (Single & Double entry)
- I.5. Preparation of Final Accounts: Adjustments; Trading and Profit & Loss A/C; Balance Sheet
- I.6. Bank Reconciliation Statement- basic concepts
- I.7. Cash Flow and Fund Flow Statements

## **II. Cost Accounting:**

- II.1. Difference between Cost & Financial Accounting; Basic Cost Concepts: Classification of costs based on Natural, Degree of Traceability, Functional and Behavioural Basis
- II.2. Cost Determination Process: Cost Sheet
- II.3. Costing for Materials: Costing for Materials purchased; Costing of Materials Issued LIFO, FIFO, Weighted Average methods
- II.4. Costing for Labour: Employee cost; Wage System Time & Piece Rate; Incentive Wage Plans –Merrick Differential Piece-Rate System, Halsey Premium Plan, Rowan Bonus Plan
- II.5. Costing for Overheads: Basic idea about overheads; Types of Overheads

- 1. Double Entry Book Keeping: TS Grewal (Sultan Chand)
- 2. Accounting For Managers: CA C. Rama Gopal (New Age International Publishers)
- 3. Cost Accounting: Jawahar Lal (McGraw Hill)
- 4. Cost & Management Accounting: Hanif & Mukherjee (McGraw Hill)
- 5. Corporate Accounting; Hanif & Mukherjee (McGraw Hill)

## **BHM-104: Fundamentals of Health System-4 CREDITS**

1. HEALTH

Definitions; Meaning; Concepts; Changing Concepts; Concepts of Wellbeing; Relative Concepts; Dimension; Determinants; Positive Health; Spectrum of Health; Ecology of Health; Right to Health; Responsibility for Health; Health Development; Indicators of Health; Contrast in Health; PQLI; HDI.

#### 2. HEALTH SERVICE PHILOSOPHY

Healthcare; Healthcare Services; Levels of Healthcare; Elements & Principles of Primary Healthcare; Health for All; Health Promotion; National Health Policy; Healthcare Delivery Model (Simplest Model of INPUT-OUTPUT Healthcare Delivery Services).

3. DISEASE (Basic idea)

Differences between Sick, Ill & Diseases. Spectrum of Disease

4. HISTORY & DEVELOPMENT OF 'HOSPITAL' (NATIONAL & INTERNATIONAL)

Modern Hospital; Complex & Uniqueness; Hospital Organogram; Present Status of Hospital in India—Comparison between Govt. & Private; Birth of Hospital Administration(Florence Nightingale); Systems theory in Hospital; Hospital as a part of Social System; Role of Hospitals in New Millennium; Types & Classification

5. HEALTHCARE SYSTEMS IN INDIA (BRIEFLY)

(Public-Private-Indigenous Systems-Voluntary Health Agencies-National Health Prog.)

6. INTERNATIONAL HEALTH AGENCIES (Basic Idea)

WHO, UNICEF, UNDP, FAO, ILO, WORLD BANK, USAID, SIDA, DANIDA, ROCKFELLER FOUNDATION, CARE, INTERNATIONAL RED CROSS

#### **Books:**

- 1. Park's textbook of Preventive & Social Medicine
- 2. Joshi—Hospital Administration (Jaypee)

## **BHM 105: Introduction to Hospital Administration-3 CREDITS**

- 1. Definition of Hospital, History and Development of Hospital Administration, Hospital Organization structure
- 2. **Hospital Utilization Statistics-**Average Length of Stay (ALS), Bed Occupancy Rate, Turn Over Interval
- 3. Brief overview of all departments in hospital-clinical, administrative and support and utility
- 4. Daily Reports / Returns.-Hospital Census, Matron's Report, Medical Officer's Report

Casualty Report, Medico-Legal Cases, Report from ICU / ICCU, Security Report, Maintenance Department Report

- 5. Hospital Committees- introduction, Types of Hospital committees, Role, Composition, Frequency of Meetings, Minutes of the Meetings, Follow up Actions.
- 6. Patient Satisfaction Survey-Introduction, objective and importance, Interviews, Questionnaires, Observations, Group Discussions, Patient Opinion Polls, Report Writing.
- 7. Brief Idea about Purchase & procurement Department-Inventory management, Availability of Materials, Critical Items, Stock Level, Procurement Methods.
- 8. Front Office Department: Introduction, Importance Duties &Responsibilities.
- 9. Duties & Responsibilities of the Hospital Administrator/CE-In Profit Making Hospitals &In Non-Profit Making Hospitals
- 10. Disaster Management Definition of Disaster, Disaster management cycle, types of Disaster, Triage, Disaster planning in Hospitals, universal emergency codes declared in hospitals, Dealingwith Crisis Situation: Mob violence, Bomb threat, Terrorist strike, Mass casualties, Political agitation, Prisoners, Disaster management agencies in India
- 11. Standard Operating Procedures (SOPs) for a hospital-Brief idea

- 1. Hospital Administration, Goel, Gupta, Singh (ELSEVIER)
- 2. Hospital Administration, Joshi (Jaypee)
- 3. Front Office, Peter Abbott & Sue Lewry (ELSEVIER)
- 4. Effective Public Relation- Scott M. Cutlip, Allen H. Center, G.H. Broom (Pearson)

# **BHM 106: Marketing-4 CREDITS**

- **1.** Introduction to Marketing:
  - 1.1 Definition & Functions of Marketing.
  - 1.2 Core concepts of marketing- Need, Want, Desire, Benefits, Demand, Value, Exchange, Goods Services Continuum, Product, Market, Customer Satisfaction, Customer Delight
  - 1.3 Horizontal & Vertical Marketing conflict, Traditional& Modern Marketing
- 2. Approaches to Marketing
  - 2.1 Evolution of marketing-Product Production Sales Marketing Societal Relational. Holistic Marketing Orientation
  - 2.2 Concept of Marketing Myopia.
  - 2.3 Selling versus marketing.
  - 2.4 Customer perceived Value, total customer satisfaction
- 3. Marketing Environment
  - 3.1 Major micro environment factors
- 4. Marketing Mix: Definition of each of the Four P's. Extended 7Ps for services ,types of complainers in service marketing
- **5.** Product:
  - 5.1 definition
  - 5.2 levels of Product, Product life stages
  - 5.3 classification of consumer product only
  - 5.4 Idea about Product mix, product line, product width, product depth, product length, consistency
  - 5.5 Product mix strategy
  - 5.6 Brief description Stages of New Product Development
- **6.** Pricing:
  - 6.1 Definition of Price
  - 6.2 Objective of Pricing
  - 6.3 Factors influencing pricing decision
  - 6.4 Different pricing methods
  - 6.5 Pricing strategies
- 7. Place:
  - 7.1 concept
  - 7.2 levels of marketing channels
  - 7.3 objective of distribution channel
  - 7.4 objective of distribution channel intermediaries
  - 7.5 factors influencing channel design decision
- **8.** Promotion:
  - 8.1 Definition
  - 8.2 Objective
  - 8.3 Promotional mix
  - 8.4 Definition and characteristics of
    - 8.4.1 Advertising
    - 8.4.2 Sales promotion
    - 8.4.3 Direct Marketing.
- **9.** Overview of Consumer Behaviour: Concept, factors influencing buyer's behaviour, Five steps Buyer decision process.
- 10. Segmentation, Targeting and Positioning: Definition, Need & Benefits. Bases for market segmentation of consumer goods and services. Segment, Niche & Local Marketing, Effective segmentation criteria, Evaluating & Selecting Target Markets, Concept of Target Market and Concept of positioning, Market strategy
- 11. Rural Marketing

- 1. Marketing Management-P. Kotler (PHI)
- 2. Marketing Management-Kelvin Lane Keller & Phillip Kotler (PHI)
- 3. Consumer Behavior-Schiffman and Karuk (Pearson)
- 4. Marketing Management- R Saxena (TMH)
- 5. Marketing Management- Ramaswami&Ramakumari (Macmillan)

- 1. Presentation
- 2. Group Discussions
- 3. Listening Skill through Language Lab Audio device
- 4. Speaking Skill (Pronunciation/ Phonetics/ Voice modulation/ Stress/ Intonation/ Pitch & Accent)
- 5. Conversation Skill using Language Lab Audio –Visual input
- 6. Conversational Practice Sessions (Face to Face, via Telephone and Role Play Mode)

## **BHM172: Computer Laboratory-2 CREDITS**

- 1. Overview of computer hardware and software.
- 2. Peripherals: Scanners and printers.
- 3. Security
- 4. MS Word,
- 5. MS Excel advance level.
- 6. MS Power Point
- 7. The Internet.
  - a. www
  - b. Uploading and downloading files
  - c. Networking (LAN, MAN, WAN)
  - d. Security.
  - e. Email Control Panel.
  - f. Search engines and other applications
  - g. Other applications.
  - h. Internet Ethics

#### **Semester II**

## **BHM 201: Hospital Operation Management -4 CREDITS**

#### 1. INTRODUCTION

Concepts of Hospital Operation Management & its Utility- Front Office- Admission- Billing & Discharge- Ambulatory Care (For IPD-OPD-ED).

Brief Concepts about CSSD, Radiology, Lab, Blood Bank

- 2. Management of Indian Hospitals Challenges & Strategies of professional management of hospitals in 21st Century
- 3. Concepts of **Telemedicine**.
- 4. SWOT Analysis for Hospital Operation Management
- 5. Management of Quality Assured Services

What is QA services in Hospital; Working towards Quality Management; Why do we need QA services; Procedures for QA Implementations;

- 6. Operation Management process in health care-Flowchart
- 7. Brief concept on HAI(Hospital Acquired Infection )management,

# **Books:**

- 1. Park's textbook of Preventive & Social Medicine
- 2. Joshi—Hospital Administration (Jaypee)
- 3. Hospital Administration Tabish (O.U.P.)

# BHM 202: Bio Statistics -4 CREDITS

- 1. Introduction:
  - 1.1. Statistics as a subject;
  - 1.2. Functions,
  - 1.3. Importance and Limitations of Statistics;
  - 1.4. Planning and Execution of a statistical investigation;
  - 1.5. Census and sample investigation;
  - 1.6. Descriptive and Inferential statistics
- 2. Collection and Presentation of Data:

- 2.1. Primary data and secondary data;
- 2.2. Methods of collection;
- 2.3. Presentation of data:
- 2.4. textual and tabular presentations,
- 2.5. Diagrammatic presentation of data: (Line diagrams, Bar diagrams, Histogram, Frequency Polygon; Ogive Scatter Diagram. Pie charts)
- 3. Frequency Distributions:
  - 3.1. Attribute and variable;
  - 3.2. Discrete and continuous variables;
  - 3.3. Frequency distributions of discrete and continuous variables;
  - 3.4. Bivariate and Multivariate Frequency Distributions.
  - 3.5. Measures of moments, skewness; Kurtosis and its implication. (Only concepts)
- 4. Measures of Central Tendency:
  - 4.1. Definition and utility;
  - 4.2. Characteristics of a good average;
  - 4.3. Different measures of average; Arithmetic Mean; Median; Other positional measures quartiles, deciles, percentiles; Mode; Relation between Mean, Median and Mode;
  - 4.4. Choice of a suitable measure of central tendency.
- 5. Measures of dispersion:
  - 5.1. Meaning and objective of dispersion;
  - 5.2. Characteristics of a good measure of dispersion;
  - 5.3. Different measures of dispersion Range, Quartile deviation, Mean deviation, Mean Absolute deviation, Standard deviation;
  - 5.4. Comparison of the different measures of dispersion.
- 6. Vital Statistics:
  - 6.1. Definition and formula (Birth Rate, General Fertility Rate, Age Specific Fertility Rate, Total Fertility Rate, Gross Reproduction Rate, Crude Death Rate, Specific Death Rate

- 1. Statistical Methods- NG DAS (M Das &Co)
- 2. Fundamental of Statistics: Goon Gupta & Das Gupta (The World Press Private Ltd)

## BHM-203: Medical Terminology-1-4 CREDITS

## 1. INTRODUCTION:

- 1.1 Objectives,
- 1.2 Basic Word Structure,
- 1.3 Sources,
- 1.4 Elements of Medical Terms,
- 1.5 Roots,
- 1.6 Prefixes,
- 1.7 Common Abbreviations.

## 2. HUMAN BODY

- 2.1 CELL: Basic Study; Structure; Function; Division
- 2.2 TISSUE: Tissue fluid; Classification
- 2.3 ORGANS:
- 2.4 SYSTEMS: What is? Main Systems & their Organs
- 2.5 BODY CAVITIES: Imp viscera with their Contains; Division.

## 3. MUSCULOSKELETAL SYSTEM:

- 3.1 Muscular System
- 3.2 Properties
- 3.3 Characteristics & Functions of Muscular Tissue
- 3.4 Skeletal System; Formation, Function, Types & Terms used to describe, Bones of different location.
- 3.5 Joints; Movements of Joints
- 3.6 Bursae
- 3.7 Operative terms

# 4. CARDIOVASCULAR SYSTEM

- 4.1 Arteries
- 4.2 Veins
- 4.3 Capillaries
- 4.4 The Heart: Valves, Cardiac Cycle, Pulmonary & Systemic circulation, Portal circulation
- 4.5 Blood Pressure; Pulse; Electrical Conduction of the Heart
- 4.6 Common Cardiovascular Disorder

## 5. BLOOD & LYMPHATIC SYSTEM

- 5.1 Blood and its components
- 5.2 Electrolytes
- 5.3 Blood Clotting Mechanism
- 5.4 Blood Group
- 5.5 Lymphatic System

- 5.6 Lymph Nodes
- 5.7 Lymphatic Organs
- 5.8 Immunity
- 5.9 Disorders of the Blood & Lymphatic System

#### 6. NERVOUS SYSTEM

- 6.1 Structure
- 6.2 Central Nervous System
- **6.3** Peripheral Nervous System

#### 7. DIGESTIVE SYSTEM

- 7.1 Organs
- 7.2 Accessory Organs of Digestion
- 7.3 Metabolism & Common Abbreviations

#### **Books:**

1. PARAMEDICS 6-in-1 by GD MOGLI (JAYPEE)

# **BHM 204: Service Marketing -4 CREDITS**

- 1. Introduction to Service Marketing
  - 1.1. Characteristics of Service Marketing
  - 1.2. Service Demand and Capacity Management
  - 1.3. Service Marketing Mix
  - 1.4. Continuum of Service.
  - 1.5. Gap analysis
  - 1.6. Service Gap model by Parasuraman and Zithamal
  - 1.7. SERVQUL model
  - 1.8. Service recovery strategies.
- 2. Healthcare marketing
  - 2.1. Introduction
  - 2.2. Concept
  - 2.3. Distinct features
  - 2.4. Controversy
  - 2.5. Challenges for marketing in hospitals
- 3. Marketing Mix Strategies for Hospital
  - 3.1. Process of new Product Development.
  - 3.2. Product life cycle strategies.
  - 3.3. Pricing strategies.
  - 3.4. Channel management in Hospitals.
  - 3.5. Franchisee management.
  - 3.6. Hospital Promotion strategies.
  - 3.7. Promotional campaign design
- 4. Internal marketing
  - 4.1. Importance and objectives
  - 4.2. Roles of a service employee
  - 4.3. Internal marketing strategies;
- 5. Social Marketing
  - 5.1. Concept
  - 5.2. Application in Healthcare
  - 5.3. Social Marketing Wheel
  - 5.4. Challenges
- 6. Medical Tourism
  - 6.1. Concept
  - 6.2. Need
  - 6.3. India- competitive advantage
  - 6.4. India- challenges
  - 6.5. Key players
  - 6.6. Key trends
- 7. Branding of Hospital- introduction, objectives and importance of Branding, Tools of branding, Methods of branding applied in hospitals,—Telephone Courtesy, Guest Lectures, Organization of Camps, Seminars, Workshops, Continuous Medical Education, Public Participation.

**Books:** 

- 1. Service Marketing K Ramamohon Rao (Pearson Education)
- 2. Service Marketing- Zeithaml (Tata Mcgraw Hill)
- 3. Service Marketing- C. Lovelock (Pearson)
- 4. Hospital Management (Vol III)- Manisha Saxena (CBS Publishers)
- 5. Public Relations Principles and practices Iqbal S Sachdeva (Oxford HD)

### BHM 205: Basic Economics- 4 CREDITS

- **1.Introduction:** Definition and Concept of Economics; Subject matter and Scope of Business Economics; Relationship of Business Economics with other subjects.
- 2. Elasticity of Demand: Concept and measurement of elasticity of demand; Price, Income, Cross Elasticity.
- A) Definition of Demand; Factors affecting demand; Law of Demand; Demand schedule; Demand Curve: individual Demand Curve & Market demand Curve; Concept of Demand Functions; The law of diminishing Marginal Utility- Downward sloping Demand Curve; Change in Quantity Demanded and Change in Demand;
- B) Elasticity of Demand: Different Types of Elasticity of Demand; Definition and Measurement of Income Elasticity of Demand; Definition of Cross Price Elasticity of Demand; Definition and Measurement of Direct or Own Price Elasticity of Demand: Measurement of Arc Elasticity of Demand & Point Elasticity of Demand.
- C)Average Revenue, Marginal Revenue and Elasticity of Demand: Concept of Revenue: Total Revenue, Average Revenue, Marginal Revenue; Relation among TR, AR and MR.
- **3. Production Function:** Law of Variable Proportions- Definition of Production, Factors of Production, Production Function; Total Product, Average Product, Marginal Product. The Law of Variable Proportions; Isoquants and their characteristics; Economic & uneconomic Regions; Ridge Lines; Iso-cost Lines; Choice of Best input Combination; Expansion Path; Returns to Scale; Economies & Diseconomies of Large Scale Production;

#### 4. Theory of costs:

A)Short run and long run curves-Traditional approaches- Definition & Concept of SR Cost, LR Cost, FC and VC. Components of TC, Shape of the SRTC Curve; Concept of AFC, AVC, & AC; Derivation of AC & MC Curves from TC Curve. Relation between AC& MC. Derivation of LRTC Curves, LRAC Curve& LRMC Curve;

- B) Short run and long run curves-Modern approaches- Modern Theory of SR Costs; Modern Theory of LR Costs
- 5. Market Structures: Meaning and Functions of Market; Classification of Market.
- A) Perfect competition: Definition and Features of Perfect Competition;
- ; Profit maximization and SR & LR equilibrium of firm and industry SR and LR supply curves; Profit maximization and equilibrium of industry SR and LR supply curves.

Price and output determination Practical applications

- B) Monopoly: Definition & Characteristics of Monopoly; Price and Output Determination under Monopoly; Some Features of Monopoly Equilibrium; Degree of Monopoly Power ;Comparison between perfect competition and monopoly; Price Discrimination Different Types; Equilibrium under Price Discrimination; Degree of Price Discrimination.
- C) Monopolistic Competition: Meaning and characteristics; Price and output determination under monopolistic competition; Product differentiation; selling cost; comparison with perfect competition.
- 6. **Practical Applications/ problems:** Based on Market Price Output Determination; Profit Maximization.

### **Books:**

- 1. Normative Economics- Samuelson
- 2. Managerial Economics- Thomas & Maurice (TMH)
- 3. Modern Microeconomic Theories- A. Koutsoyiannis (Palgrave)
- 4. Microeconomic Theory- J Sarkhel (Book Syndicate Pvt. Ltd)

# BHM 206-Occupational Health (2 CREDITS)

- 1. Occupational Health –Introduction, Concepts, Health of the Worker
- 2. Environment with man & physical, chemical & biological agents.
- 3. Types of Occupational hazards- Introduction

Physical, chemical, mechanical, psychosocial hazards-Definition and concept

- 4. Occupational diseases-Introduction, Types, Occupational Disease management, Prevention and control
- 5. Accidents & injury in industry-Occurrence of accidents and injuries while working, Protective measures against accidents and injuries
- 6. Radiation hazards-Introduction, concept
- 7. Control of hazards in industries.
- 8. Indian Factories Act 1948
- 9. ESI Act 1948.
- 10. Workman's Compensation Act 1952
- 11. Personal Protection Equipment

- 1. Park's textbook of Preventive & Social Medicine
- 2. Labour Law- Ajay Garg(A Nabhi Publication)
- 3. Hospital Management (Vol 3)- Manisha Saxena (CBS)

**BHM 261: Seminar -1 CREDITS** 

BHM 262: Public Speaking on Assigned Topic-2 CREDITS

# **SECOND YEAR**

### **Semester III**

## BHM 301: Hospital Planning & Design- 4 credits

- 1. Hospital Feasibility Study:
  - a) Project conceptualization and Feasibility study including concept of project cost
  - b) Assessment of the demand and need for hospital
  - c) Factors influencing hospital utilization
  - d) Hospital Drawings & Documents
  - e) General idea about Project writing
- 2. Hospital Planning (General consideration):
  - a) Site survey and Selection including land requirement& local building rules
  - b) Concepts of planning, designing and size of hospital
  - c) Bed planning and Space Programming
  - d) Hospital Building (an overview) Architecture, Construction, Project planning process (Mechanical Electrical and Plumbing)
  - e) Hospital interiors, lighting and ventilation,
  - f) Hospital Commissioning
  - g) Planning of 30/50 Bedded hospital

### 3. Hospital Design:

To consider designing aspects of various departments of hospital such as space requirement and standards, its location, equipment, staffing pattern and utilization.

- a) Entrance & Ambulatory Zone -Planning and Design, Building & Layout
- b) Critical zone (CCU with Cathlab)-Planning and Design, Building & Layout

- c) Administrative zone-Planning and Design, Building & Layout
- d) Various Utility services -Planning and Design, Building & Layout
- e) Neurology Department-Planning and Design, Building & Layout
- f) Nephrology and dialysis unit-Planning and Design, Building & Layout
- g) transplant unit-Planning and Design, Building & Layout
- h) Gynecology& Obstetrics Department-Planning and Design, Building & Layout
- i) Physical Medicine and Rehabilitation-Planning and Design, Building & Layout
- j) Ophthalmology Department–Planning and Design, Building & Layout
- k) Dental-Planning and Design, Building & Layout
- l) Urology–Planning and Design, Building & Layout
- m) Isolation ward- Infective and non- infective wards
- n) Burn Unit-Planning and Design, Building & Layout
- o) Pediatrics-Planning and Design, Building & Layout
- p) Emergency & Trauma care
- q) OT- modular and hybrid
- r) IPD
- s) Diagnostic Lab.
- t) Radiology & Imaging
- u) Pharmacy.

- 1. Joshi- Hospital Administration (Jaypee)
- 2. B M. Sakharkar- Principles of Hospital Administration and Planning (Jaypee)
- 3. G D Kunders- Hospitals (TMH)
- 4. National Building Code (category of hospitals

### **BHM 302:**Medical Records 4 credits

1.Introduction to Medical Records Management

- 1.1.Definition of medical Records and concept of Medical Records management
- 2.Definition & Types of Medical Records
  - 2.1. SOMR-Introduction, Methods of Preparation
  - 2.2. POMR -Introduction, Methods of Preparation
- 3. Development & Importance of Medical Records
  - 3.1. Characteristics of Medical Records
- 4. Preparation of Medical Records in correct format
- 4.1.Content Of MR
- 4.2. Maintenance Of MR
- 5. Concept of MPI-Master Patient Index
  - 5.1.MRN-Definition & concept
  - 5.2.Coding & Indexing-Introduction, importance
- 6. Filing of medical Records-Introduction, Steps
- 7. Medical Record Department
  - 7.1. Functions of MRD & Role of MRD Personnel
- 7.2. Organisation & management of MRD-Brief Idea
- 8. Different forms of Medical Records-
  - 8.1.Paper, Electronic Hybrid based Medical records-Introduction, Advantages & Disadvantages of each form of MR
  - 8.2. Comparison Between Paper, Electronic & Hybrid
- 9. Retention Period & Preservation of Medical Records

Destruction Methods Of MR&Reconstruction of Medical records

- 10. International classification of Diseases(ICD)-Basic Idea
- 11. Patient information confidentiality & Legal Aspects Of MR(Medico Legal Cases)-Introduction, Concepts, Relevance

Medical Records Organization & Management- G D Mogli (Jaypee )

BHM361: Project on Hospital Overview :2 credits.

# BHM-303: Medical Terminology-II(Overview)-4 CREDITS

#### 1. ENDOCRINE SYSTEM

- 1.1. Hormones
- 1.2. Different Endocrine Glands Present in the Human Body
  - 1.2.1. Thyroid Gland
  - 1.2.2. Adrenal Glands
  - 1.2.3. Pancreas
  - 1.2.4. Pituitary Gland
  - 1.2.5. Ovaries
  - 1.2.6. Testes
- 1.3. Endocrine & Metabolic Disorders

### 2. RESPIRATORY SYSTEM

- 2.1. Parts of the Respiratory System
- 2.2. Mechanism
- 2.3. Vital Capacity
- 2.4. Factors influencing the Respiratory System
- 2.5. Symptomatic & Diagnostic Terms

### 3. SENSE ORGANS

- 3.1. Eye
- 3.2. Ear
- 3.3. Skin
- 3.4. Tongue
- 3.5. Nose
- 3.6. Different terms commonly used

# 4. EXCRETORY SYSTEMS

- 4.1. Parts of Urinary System
- 4.2. Excretion Process of Urine
- **4.3.** Excretory system

# 5. REPRODUCTORY SYSTEM

- 5.1. Male Reproductive system
- 5.2. Female Reproductive System
- 5.3. Pregnancy, Labor & Birth
- 5.4. Reproductive Terminology; Antenatal & Neonatal

## 6. ONCOLOGY

- 6.1. Difference Between the Malignant & Benign Neoplasm
- 6.2. Carcinomas & Sarcomas
- 6.3. Mixed Tissue tumors
- 6.4. Staging & Grading
- 6.5. Treatment, Surgery, Radiation therapy & Chemotherapy

### **Books:**

1. PARAMEDICS 6-in-1 by GD MOGLI (JAYPEE)

# BHM 304: Health Economics -4 credits

- 1. Introduction to Health Economics
  - 1.1. Scope & coverage of Health Economics.
  - 1.2. Health a priceless commodity.
  - 1.3. Peculiarities of Health Goods and their Allocative implications.
  - 1.4. The Micro and Macro-economic views of Health.

- 1.5. Cost benefit Analysis
- 2. Economic Evaluation in Health Care
  - 2.1. Demand & Supply for Health Services
  - 2.2. Demand & Supply elasticity of different health product
  - 2.3. Equilibrium and issues
  - 2.4. Allocation of fund in Healthcare is as an investment and not expenditure.
- 3. Health Care Budget
  - 3.1. Purpose,
  - 3.2. Types
  - 3.3. Budgetary control
  - 3.4. Practices in Indian context.
- 4. Population growth- Economic implications.
  - 4.1. Overview of Malthusian theory
  - 4.2. Overview of Neo Malthusian theory of population growth.
- 5. Health Financing
  - 5.1. Public finance
  - 5.2. Private or Out of Pocket finance
  - 5.3. Health Insurance and TPA.
  - 5.4. Funding from CSR
- 6. Environmental influences on health & its economic impact
- 7. Economic implication of Health Policy
  - 7.1. National Health Policy of India
  - 7.2. Best Practices in Health Policy globally
- 8. Economics of Communicable & non-communicable diseases

- 1. Zweifel Peter, Breyer Friedrich. Health Economics. 1stEdi. New York, Oxford University Press, 1997
- 2. Folland S. Goodman, Stano M.: The Economics of Health and Health Care, New York, Macmillan Publishing, 1993
- 3. Feldstein P.J. Health Care Economics, 4<sup>th</sup> edi. New York, Delmar Publishers, 1993
- 4. Henderson W. James: Health Economics & Policy, 2<sup>nd</sup> Edi., New York, South- Western Thomson Learning, 2000
- 5. Cooper M. H, Culver A.J., Health Economics. Penguin education
- 6. Hospital Administration Tabish (O.U.P.).
- 7. Hospital Management (Vol 3)- Manisha Saxena (CBS)

### BHM 305: Materials & Equipment Planning-4 credits

- 1. Materials Management
  - 1.1 Introduction, Scope, Objective, Importance
  - 1.2 Integrated approach to Materials Management.
- 2. Material Planning
  - 2.1 Factors affecting material planning
  - 2.2 Techniques of material planning Dependent and Independent Demand, MPS, BOM
- 3. Purchasing & Procurement:
  - 3.1 Objective
  - 3.2 Principles of Purchase Management
  - 3.3 Purchasing cycle cyclical orientation of purchasing process
  - 3.4 Vendor Management Vendor Development, Approved Vendor List, Vendor Rating
  - 3.5 Legal aspects of purchasing –Sale of Goods Act, Law of agency
  - 3.6 Import substitution
- 4. Stores Management
  - **4.1** Stores system and procedures
  - 4.2 Stores accounting and stock verification
  - $4.3\;Receipt-Storage-Issue$
  - 4.4 Codification, Standardization, Variety Reduction
  - 4.5 Disposal of surplus and scrap
- 5. Inventory Management:
  - 5.1 Definition, Classification & Need for Inventories
  - 5.2 Merits & Demerits of Inventories
  - 5.3 Inventory control techniques and principles EOQ, ROL, Maximum & Minimum Stock, Safety Stock
  - 5.4 Selective Inventory Control ABC, VED, FSN, HML, SDE
  - 5.5 Procurement Systems P System & Q System
- 6. Material Handling Principles and Equipments Introduction

- 7. Contract Management Model Contract for Laundry, Dietary, Security & Ambulance Services
- 8. Basic Idea of Equipment Management
  - 8.1 Purchasing of Equipment CAPEX, Vendor Selection & Tendering
  - 8.2 Maintenance Preventive & Breakdown maintenance, Overhauling, AMC
  - 8.3 Life Cycle Costing

- 1. Materials Management by A. K. Dutta, PHI
- 2. Introduction to Materials Management by Tony Arnold & Stephen N. Chapman, Pearson Education
- 3. Materials Management by P. Gopalakrishnan & M. Sundaresan, PHI
- 4. Hospital Store Management by Shakti Gupta,
- 5. Operations Management by Chase, Jacob & Acquilano, TMH

#### **SESSIONAL SUBJECTS:**

### Project on Hospital Overview (BHM 361)- 1credit

#### **Semester IV**

### BHM 401: Epidemiology-5 CREDITS

- 1. Introduction to Epidemiology
  - 1.1. Concept, Definition,
  - 1.2. Significance
  - 1.3. Evolution of Public & Community Health
  - 1.4. Methods of Epidemiological Investigations-Observational, Analytical & Experimental Studies
  - 1.5. Epidemic, Endemic, Pandemic, and Sporadic diseases, Investigation of an epidemic

### 2. Disease

- 2.1. Concept of disease
- 2.2. Natural History of Disease
- 2.3. Levels of disease prevention
- 2.4. Incidence and prevalence
- 2.5. Iceberg Phenomenon of disease

### 3. Basic Indicators of Health in respect to Epidemiological Perspective

- 3.1. Mortality-Definition
- 3.2. Morbidity-Definition
- 4.3. IMR
- 4.4. MMR
- 4.5. DALY

# 5. Preventive measures for Disease Outbreak

- 5.1. Immunization-Introduction, types of Vaccines, cold chain for vaccines & storage of vaccines, Universal immunization Protocol, some adverse effects of vaccines
- 5.2. Screening
- 5.3 Monitoring
- 5.4. Surveillance

### 6. Transmission of Disease

- 6.1. Vehicles of transmission
- 6.2. Direct Transmission
- 6.3. Indirect Transmission
- 7. Control of Diseases-Introduction, Disease eradication and diseases elimination

### 8. Communicable and non-communicable diseases

1. Communicable Diseases —Introduction, Concept, Causative agent Signs & symptoms, Prevention and Control of: Influenza, Food poisoning, Tetanus, Filaria, Plague

- 2. Non- Communicable Diseases —Introduction, Concept, symptoms & Effects, Prevention and control of Diabetes, Stroke, Hypertension, Alcoholism, Smoking, Rheumatic heart Diseases
- 9. Management of accidents-Introduction and concept, Counselling- Definition and brief concept

- 1. Oxford Textbook of Public Health- Roger Detels, James McEwen, Robert Beaglehole and Heizo Tanaka.
- 2. Text Book of Preventive and Social Medicine- K. Park (Bhanot)
- 3. Hospital & Health Services Administration Tabish (O.U.P.)
- 4. Epidemiology & Management of Health Care for all- P.V. Sathe & A.P. Sathe
- 5. Preventive & Social Medicine- Gupta & Mahajan (Jaypee)

### BHM 402: Support & Utility Services-I- 5 CREDITS

- 1. Introduction, Importance and integration of support and utility services in hospitals
- 2. Operation Theatre- Introduction , Role and Functions, Planning Construction Physical facilities ,Equipment , Staffing ,Policies and Procedures , Monitoring
- 3. Nursing Services-- Introduction, Role and Functions, Staffing, Monitoring, Planning Construction of the nursing unit Physical facilities
- 4. Pathology lab & Diagnostic Units (Radiology, Imaging, Nuclear Medicine)-Introduction, Role and Functions, Planning Construction Physical facilities, Equipment, Staffing, Policies and Procedures,
- 5. Blood Bank Introduction, Role and Functions, Planning Construction Physical facilities, Equipment, Staffing, Policies and Procedures
- 6. Dietary Services –Introduction, Role and Functions, Staffing, Policies and Procedures
- 7. Linen & Laundry Services -Introduction, Importance, Role and Functions, Workflow
- 8. CSSD (Central Sterile Supply Department) -Introduction, Role and Functions, Planning Construction Physical facilities, Equipment, Staffing, Policies and Procedures, Monitoring
- 9. Housekeeping-Introduction, Importance, Role and Functions
- 10. Control of Hospital Infection- Introduction, Functions of the Infection Control Committee, Staffing, Policies and Procedures, Monitoring
- 11. Transport Services in Hospitals-Introduction, Functions, important
- 12. Security Services in Hospitals-Introduction, Importance, functions
- 13. Maintenance Services -Introduction, functions
- 14. Hospital & Biomedical engineering Services Introduction, Role and Functions, Staffing, Policies and Procedures, Monitoring.
- 15. Medical Equipment & latest Health Technology.

### **Books:**

- 1. Joshi—Hospital Administration (Jaypee)
- 2. Principles of Hospital Administration & Planning B.M.Sakharkar, Jaypee Brothers
- 3. Hospital Administration- Goel, Gupta & Singh (Elsevier)

# BHM 403: Financial Reporting and Analysis- 5 credits

- 1. Introduction Definition; Objectives Profit maximization & Wealth maximization; Financial decisions Investing, Financing & Dividend policy; Role of Finance Manager
- 2. Financial Planning Budget Fixed & Flexible; Types of Departmental Budgets (Mention names only); Cash Budget; Budgetary control Material &Labour variances; Zero-based Budget
- 3. Working capital Management: Introduction; Concepts of Working Capital Permanent and Temporary; Operating Cycle; Computation of working capital; Determination of financing mix Hedging and Conservative approach
- 4. Management of Cash (Theory) Objective; Motives for Holding Cash; Cash Budgeting (covered under Financial Planning)
- 5. Receivable Management (Theory) Objective; Related costs; Credit Policy Credit Standard, Credit Analysis; Credit Terms Credit Period, Cash Discount & Cash Discount Period
- 6. Capital Budgeting Decisions- Introduction; Capital Budgeting Process; Methods to Evaluate Investment Proposals Pay-back period, ARR, Profitability Index, NPV, IRR; Capital Rationing
- 7. Break-even Analysis: Contribution; BEP determination; PV Ratio; Angle of Incidence; Margin of Safety; Implication of Breakeven Analysis

- 8. Ratio Analysis Liquidity ratios current ratio, quick ratio; Activity ratios inventory turnover; receivables turnover; payables turnover; working capital turnover; fixed asset turnover; total asset turnover; Leverage ratios debt to equity; interest coverage; Profitability or Performance ratios gross profit margin; operating profit margin; net profit margin; return on assets; return on equity, Earning per share; Valuation ration Price/Earnings (P/E)
- 9. Sources of Finance Introduction; Short-term Finance; Long-term Funds; Introduction to and Types of Shares and Debentures

- 1. Taxman's Financial Management- Ravi M. (Kishore)
- 2. Financial Management- Khan & Jain, (TMH)
- 3. Financial Management- Gupta, (Pearson Education)
- 4. Financial Management: Theory & Practice- Prasanna Chandra (Mcgraw Hill Education)
- 5. Financial Management- I.M. Pandey(Vikas)

## BHM 404: MIS & Its Application in Hospitals -5 CREDITS

- 1: MIS
  - A. Introduction to Information System
    - a. Data & Information
    - b. System
      - 1) Introduction
      - 2) Classification of Systems
      - 3) Input of Data Resources
      - 4) Process Data into Information
      - 5) Output of Information
      - 6) Control and Feedback
      - 7) Computer-based Information Systems: Hardware, Software, Databases, Tele-communication
  - B. Types of information systems
    - a. Operations Support System
      - 1) Transaction Processing System
      - 2) Process Control System
      - 3) Enterprise Collaboration System
    - b. Management Support System
      - 1) Management Information System
      - 2) Decision Support System
      - 3) Executive Information System
    - c. Classification based on Management Levels
  - C. System Development Life Cycle:
    - a. Understanding SDLC Planning, Analysis, Design, Implementation, Support
    - b. Feasibility Test Operational, Schedule, Technical, Economic
- 2: Application of MIS in Hospitals
  - a) Historical overview
  - b) Healthcare Information Priorities
  - c) IPD & OPD
  - d) Patient Registration, Appointment Scheduling, Admission Discharge Transfer (ADT)
  - e) Computerised Physician Order Entry (CPOE), Nursing Workbench,
  - f) Clinic Specialties
  - g) Roster Management
  - h) Laboratory Information System, Radiology Information System
  - i) CSSD, Pharmacy, Blood bank, Operation Theatre, Dietary, Pharmacy
  - j) Medical Records
  - k) Patient Billing, Insurance and Contract Management
- 3: Artificial Intelligence in Healthcare an overview.

### **Books:**

- 1. Management Information System, James A.O'Brien, Tata Mc-graw Hill
- 2. Managing a Modern Hospital, A.V.Srinivasan, Response Books
- 3. Health Management Information System, Jack Smith, Open University Publication, U.K
- 4. Management Information Systems, Sadagopal, S, Prentice Hall
- 5. Management Information Systems by D. P. Goyal, Macmillan
- 6. Management Information System by Ashok Arora & Akshaya Bhatia, Excel Books
- 7. Hospital Information Systems by S. A. Kelkar, PHI

#### Practical/ Sessional:

# BHM 461: Project and its' presentation on Public Healthcare -2 CREDITS

## THIRD YEAR

# Semester V

## BHM 501: Quality Management & Patient Safety-5 CREDITS

- 1. Introduction:
  - a. Quality Definition, Dimensions of Quality, Relation of Quality to Productivity & profitability
  - b. Objectives of Quality Management
  - c. Principles of Total Quality Management Customer Focus, Leadership, Involvement of People, Process Approach, Systems approach to management, Continual Improvement, Factual approach to Decision making, Supplier Partnership
  - d. Quality Gurus Contributions of Juran, Deming, Shewhart, Crosby, Ishikawa, Taguchi
  - e. Quality Planning
  - f. Quality Control
    - i. 100% Inspection
    - ii. Brief Introduction to Statistical Quality Control
    - iii. Advantages & Disadvantages of SQC
  - g. Quality Assurance
  - h. Quality Improvement
- 2. Quality Management Tools & Techniques
  - a. Basic QC Tools Check Sheet, Histogram, Pareto Chart, Process Mapping, Control Chart, Cause-and-Effect Diagram, Scatter Diagram, Stratification
  - b. Kaizen
  - c. Quality Circle
  - d. Statistical Process Control & Process Capability
  - e. Six Sigma
  - f. Cost of Quality
  - g. Benchmarking
- 3. Quality Management System
  - a. Quality Manual
  - b. Quality Audit
  - c. Introduction to ISO 9000, ISO 14000
  - d. Accreditation related to Health Care NABH, NABL, JCI
- 4. Quality in Healthcare
  - a. TQM Definition for Healthcare
  - b. Defining Quality for Patient Care
    - i. Quality of Technical Care
    - ii. Quality of the art of Care
  - iii. Quality of the Environmentc. Dimensions of evaluation of Health Care Structure, Process & Outcome
  - d. Measuring Service Quality
    - i. Service intangibility
    - ii. Performance heterogeneity
    - iii. Customer-producer inseparability
- 5. Patient Safety-Introduction, Patient safety Factors, Importance, Ensuring of strict adherence to Patient safety aspects by the hospitals

## **Books:**

1. Fundamentals of Quality Control and Improvement by Amitava Mitra, Pearson Education

- 2. Quality Management by KanishaBedi, Oxford
- 3. Total Quality Management by D. H. Besterfield Et al., Pearson Education
- 4. Quality Control by D. H. Besterfield

### BHM 502: Support & Utility Services –II-5 credits

#### 1. Mortuary Services

Introduction, Role and Function, Planning Construction – Physical facilities Staffing, Policies and Procedures, Monitoring.

#### 2. Pharmacy Services

Definition, Introduction, Brief History, Role& function and types, planning Consideration, Policies and Procedures, Management issues – Control and evaluation, Computerization in Pharmacy Services.

#### 3. Fire Hazards and Fire Manual Guideline

Introduction, Elements of fire, Fire hazard – Cause of Hospital Fire, Classification of fire, Fire protection – Fire points and Escape Route Risk evaluation, Manual for fire safety – Guidelines, Elements of Fire safety, Fire safety training – Do's and Don'ts for electrical fire prevention, Actions to be taken in case of fire in a Hospital.

#### 4. Hospital Environmental Control

Aims, Components of Universal precautions, General Cleanliness- hand-washing techniques, sterilization and disinfection methods of syringe, needle, gloves, gowns, masks and eye-ware cleaning and decontamination of blood and other spills

#### **Texts:**

- 4. Joshi—Hospital Administration (Jaypee)
- 5. Principles of Hospital Administration & Planning B.M.Sakharkar, Jaypee Brothers
- 6. Hospital Administration- Goel, Gupta & Singh (Elsevier)
- 7. Essentials for hospital Support Services and Physical Infrastructure- Madhuri Sharma (Jaypee)

### BHM 503: Legal Aspects of Health and Ethics- 5 CREDITS

- 1. Laws pertaining to Establishment of Hospital:
  - a) General Idea about forming of society, Companies Act & Law of Partnership
  - b) Law of Contracts Essentialsof a contract, Offer & Acceptance
  - c) Capacity of the parties
  - d) Free consent
  - e) Consideration & Legality of object
  - f) Void Argument and contingent contract
  - g) The WBCE Act as amended till date.
- 2. Laws pertaining to Health:
  - a) Central Births and Deaths Registration Act, 1969 (with recent amendments)
  - b) Medical Termination of Pregnancy Act, 1971
- 3.Laws pertaining to Hospitals:
  - a) Transplantation of Human Organs Act, 1994
  - b) Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994
  - c) Basic idea of CP Act, its application in hospital and its implication for health professionals.
  - d) Drugs and cosmetic Act 1940
  - e) Fire and Safely Rules & Act
  - f) Shops &Establishment Act
- 4, Laws pertaining to Medico Legal aspects related to Hospitals:
  - a) CPA 2020. Indian Penal Code (u/s 302-307). Medical Negligence
  - b) Dying Declaration.

- c) Consent Implied and Expressed,
- d) Professional Secrets
- e) Euthanasia
- 5. Medical Ethics & Values:
- a) Implementation of ethics and values in a hospital
- b) Relationship Doctor Patient and Nurse Patient,
- c) Duties and Responsibilities of Doctors and Hospitals.
- d) MCI Act and Regulations regarding professional conduct, etiquette and ethics
- e) Code of conduct Hippocrates Oath and Declaration of Geneva
- f) Statutory compliances, Periodic Reporting etc. Health care organisation

- 1. Commercial Law- N D Kapur (S Chand)
- 2. Hospital Administration- Joshi (Jaypee)
- 3. Hospital Management (Vol 3)- Manisha Saxena (CBS)
- 4. Books on Relevant Acts
- 5. Medical Ethics by C.M. Francis (Revised & Edited by Rimpi Gupta)-Jaypee Publishers.

### BHM 504: Environmental Science and Biomedical waste management- 4 Credits

- 1. Ecology
  - 1.1. Fundamentals and Elements of Ecology;
  - 1.2. brief discussion on Ecological balance and consequences of change,
  - 1.3. Principles of environmental impact assessment. Environmental Impact Assessment report (EIA)
- 2. Environment
  - 2.1. Definition of Environment & relevance for Hospital Administrators.
  - 2.2. Brief outline of the Environment (Protection) Act 1986 & its importance for Hospital Administration.
- 3. Air Pollution and Control
  - 3.1. Primary & Secondary pollutants
  - 3.2. Factors responsible for causing Air Pollution in Hospitals.
  - 3.3. Sources & effects of Air pollutants in the Hospital context,
  - 3.4. Green House Effect,
  - 3.5. Depletion of Ozone Layer.
  - 3.6. Air pollution Control measures
  - 3.7. Brief on PREVENTION & CONTROL OF POLLUTION ACT,1989.
- 4. Biomedical Waste Management
  - 4.1. Definition: Biomedical Waste; Biological; Occupier; Biomedical waste treatment facilities;
  - 4.2. Biomedical waste classification and Colour coding (Act- 2016)
  - 4.3. Segregation
  - 4.4. Packaging
  - 4.5. Transportation
  - 4.6. Storage
  - 4.7. Disposal
  - 4.8. Annual Report
  - 4.9. Maintenance of Records and Accident reporting

### **Books:**

- 1. Environmental Science, Cunningham, TMH
- 2. Environmental Studies, A.K.De&A.K.De, New Age International
- 3. Environmental Pollution Control Engineering, C.S.Rao, New Age International
- 4. Environmental Management, N.K. Oberoi, EXCEL BOOKS
- 5. Ecosystem Principles & Sustainable Agriculture, Sithamparanathan, Scitech
- 6. Biomedical Waste Management Rule 2016

# BHM 505: Human Resource Management-5 CREDITS

- 1. Human Resource management-overview
  - 1.1. Meaning
  - 1.2. functions
  - 1.3. objectives

- 1.4. Difference with Personnel management
- 1.5. Qualities of HR Managers
- 2. HR Planning
  - 2.1. Concepts
  - 2.2. Importance
  - 2.3. Methods(Demand Forecasting and Supply Forecasting)
  - 2.4. Job Analysis (Job Description & Job Specification
- 3. Recruitment & Selection
  - 3.1. Meaning
  - 3.2. Importance
  - 3.3. Sources
  - 3.4. Methods
- 4. Training
  - 4.1. Concept and Need of Induction training
  - 4.2. Importance and Objectives of Training
  - 4.3. On-the job& Off-the Job training methods
- 5. Performance Appraisal
  - 5.1. Meaning
  - 5.2. Objectives
  - 5.3. Traditional & Modern Methods of PA(BARS, MBO, Ranking Method, Paired-Comparison method, Critical Incident Method, 360 Degree Performance appraisal method)
- 6. Financial Compensation
  - 6.1. Wage & Salary Administration-Concept, types of wages, Factors determining the wage and salary administration.
- 7. Non-Financial Compensation:
  - 7.1. Work environment, unemployment insurance, vacation & holidays, Parental leave & medical leave.
- 8. Labour Law
  - 8.1. Concept of Labour Law
  - 8.2. Trade Union Act, 1926
  - 8.3. Industrial Dispute Act,1946
- 9. Collective Bargaining-brief Concept
- 10. Grievance Handling Procedures: Introduction, Methodology (ICC Committee)

- 1. Human Resource Management- K. Aswathappa (Tata Mc Graw Hill)
- 2. Human Resource Management- Gary Dessler & Biju Varkkey (Pearson)
- 3. Labour Law- Ajay Garg(A Nabhi Publication)
- 4. HRM- Mamoria&Gankar (Himalaya)

### **Semester VI**

### BHM 601: Health Insurance-4 Credits

- 1. Health Insurance-Introduction
  - 1.1. Brief of health insurance claims process
  - 1.2. Benefits
- 1.3. Need of Health Insurance
- 2. TPA: Formation, Functions and Operations
- 3. Medical insurance companies and schemes in India
- 4. PPP in Health Care Scenario-Introduction, objective and importance, Health Care Financing.
- 5. IRDA- Role and Control
- 6. FDI in Insurance- an overview

- 1. Health Insurance Sector in India-T Mahendran (Abhijeet Publications)
- 2. Indian life and Health Insurance Industry: A marketing Approach-Novi Dewan (Springer Science and Business media)

# **BHM 602: Public Relation 4 Credits**

- 1. Public Relations
- 1.1. Introduction
- 1.2. Importance & Objectives
- 1.3. Public Relations in Hospital and Healthcare Industry-Basic components
  - 2, Public Relation- PR as a process Factors Affecting PR,
  - 2.1.Components of Hospital PR
  - 2.2.Role and responsibilities of PRO
  - 2.3.Importance of PR in Hospital Environment Management
  - 2.4.Key to proper PR in Hospitals
  - 2.5.PR in Crisis Management
  - 2.6.PR vs. Advertising
  - 2.7.PR vs. Propaganda.
- 3. Ethics in PR
- 4. Emerging trends in PR
- 5. PR- Laws

## **Sessional course**

BHM 661: Internship and /or Training Evaluation (8 Credits)

**BHM 662: Project Defense-(8 credits)**