

# West Bengal University of Technology

BF-142, Salt Lake City, Kolkata-700064

PH:-033-2321-8771/1327/1345/7578

**Hospital Management**

## COURSE STRUCTURE FOR HOSPITAL MGMT.

### FIRST SEMESTER

| <b>THEORY</b>            |             |   |                                |          |          |              |                |
|--------------------------|-------------|---|--------------------------------|----------|----------|--------------|----------------|
| <b>SL. NO.</b>           | <b>CODE</b> | <b>THEORY</b>                                     | <b>CONTACTS (PERIODS/WEEK)</b> |          |          |              | <b>CREDITS</b> |
|                          |             |   | <b>L</b>                       | <b>T</b> | <b>P</b> | <b>TOTAL</b> |                |
| 1                        | BHM-101     | Principles of Management                          | 3                              | 1        |          | 4            | 4              |
| 2                        | BHM-102     | English Language & Communication                  | 3                              | 1        |          | 4            | 4              |
| 3                        | BHM-103     | Medical Terminology -I                            | 3                              | 1        |          | 4            | 4              |
| 4                        | BHM-104     | Accounts  | 3                              | 1        |          | 4            | 4              |
| 5                        | BHM-105     | Hospital & Health System -I (History & Evolution) | 3                              | 1        |          | 4            | 4              |
| Total of Theory          |             |   |                                |          |          | 20           | 20             |
| <b>PRACTICAL</b>         |             |   |                                |          |          |              |                |
| 1                        | BHM-191     | Language Laboratory                               |                                |          | 3        | 3            | 2              |
| 2                        | BHM-192     | Computing Laboratory                              |                                |          | 6        | 6            | 4              |
| Total of Practical       |             |   |                                |          |          | 9            | 6              |
| <b>Total of Semester</b> |             |   | <b>29</b>                      |          |          |              | <b>26</b>      |

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## Hospital Management

### COURSE STRUCTURE FOR HOSPITAL MGMT

#### SECOND SEMESTER

| THEORY                   |         |  |                         |   |   |       |           |
|--------------------------|---------|--|-------------------------|---|---|-------|-----------|
| SL. NO.                  | CODE    | THEORY   | CONTACTS (PERIODS/WEEK) |   |   |       | CREDITS   |
|                          |         |  | L                       | T | P | TOTAL |           |
| 1                        | BHM-201 | Hospital Operation Management I                    | 3                       | 1 |   | 4     | 4         |
| 2                        | BHM-202 | Bio-Statistics- I                                  | 3                       | 1 |   | 4     | 4         |
| 3                        | BHM-203 | Medical Terminology II                             | 3                       | 1 |   | 4     | 4         |
| 4                        | BHM-204 | Marketing Management                               | 3                       | 1 |   | 4     | 4         |
| 5                        | BHM-205 | Hospital & health system -II (History & Evolution) | 3                       | 1 |   | 4     | 4         |
| Total of Theory          |         |  |                         |   |   | 20    | 20        |
| SESSIONALS               |         |  |                         |   |   |       |           |
| 1                        | BHM-286 | Seminar  |                         |   | 6 | 6     | 4         |
| 2                        | BHM-287 | Public Speaking on Assigned Topic                  |                         |   | 3 | 3     | 2         |
| Total of Sessional       |         |  |                         |   |   | 9     | 6         |
| <b>Total of Semester</b> |         |  | <b>29</b>               |   |   |       | <b>26</b> |

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## Hospital Management

### COURSE STRUCTURE FOR HOSPITAL MGMT

#### THIRD SEMESTER

| SL. NO.                  | CODE    | THEORY                                  | CONTACTS (PERIODS/WEEK) |   |   |       | CREDITS   |
|--------------------------|---------|---|-------------------------|---|---|-------|-----------|
|                          |         |   | L                       | T | P | TOTAL |           |
| 1                        | BHM-301 | Hospital Operations Management- II      | 3                       | 1 | 0 | 4     | 4         |
| 2                        | BHM-302 | Bio-statistics-II                       | 3                       | 1 | 0 | 4     | 4         |
| 3                        | BHM-303 | Health Economics                        | 3                       | 1 | 0 | 4     | 4         |
| 4                        | BHM-304 | Medical Record Science-I                | 3                       | 1 | 0 | 4     | 4         |
| 5                        | BHM-305 | Inventory Control & Purchase Management | 3                       | 1 | 0 | 4     | 4         |
| Total of Theory          |         |   |                         |   |   | 20    | 20        |
| <b>SESSIONALS</b>        |         |   |                         |   |   |       |           |
| 1                        | BHM-386 | Minor Project                           |                         |   |   | 6     | 4         |
| 2                        | BHM-387 | Seminar of Assigned Topic               |                         |   | 3 | 3     | 2         |
| Total of Sessional       |         |   |                         |   |   | 9     | 6         |
| <b>Total of Semester</b> |         |   | <b>29</b>               |   |   |       | <b>26</b> |

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**Hospital Management**

## COURSE STRUCTURE FOR HOSPITAL MGMT

### Fourth Semester

| <b>THEORY</b>             |             |  |                                |          |          |              |                |
|---------------------------|-------------|--|--------------------------------|----------|----------|--------------|----------------|
| <b>SL. NO.</b>            | <b>CODE</b> | <b>THEORY</b>                                      | <b>CONTACTS (PERIODS/WEEK)</b> |          |          |              | <b>CREDITS</b> |
|                           |             |  | <b>L</b>                       | <b>T</b> | <b>P</b> | <b>TOTAL</b> |                |
| 1                         | BHM-401     | Epidemiology & Analysis of Health Information Data | 3                              | 1        | 0        | 4            | 4              |
| 2                         | BHM-402     | Support & Utility Services-I                       | 3                              | 1        | 0        | 4            | 4              |
| 3                         | BHM-403     | Environment & Ecology                              | 3                              | 0        | 0        | 3            | 3              |
| 4                         | BHM-404     | Medical Record Science-II                          | 3                              | 1        | 0        | 4            | 4              |
| 5                         | BHM-405     | Management Information System                      | 3                              | 0        | 0        | 3            | 3              |
| <b>Total of Theory</b>    |             |  |                                |          |          | <b>18</b>    | <b>18</b>      |
| <b>SESSIONALS</b>         |             |  |                                |          |          |              |                |
|                           |             |  | 0                              | 0        | 0        | 0            | 0              |
| <b>Total of Sessional</b> |             |  |                                |          |          | <b>0</b>     | <b>0</b>       |
| <b>Total of Semester</b>  |             |  | <b>18</b>                      |          |          |              | <b>18</b>      |

### FIFTH SEMESTER

| <b>THEORY</b>          |             |                               |                                |          |          |              |                |
|------------------------|-------------|-------------------------------|--------------------------------|----------|----------|--------------|----------------|
| <b>SL. NO.</b>         | <b>CODE</b> | <b>THEORY</b>                 | <b>CONTACTS (PERIODS/WEEK)</b> |          |          |              | <b>CREDITS</b> |
|                        |             |                               | <b>L</b>                       | <b>T</b> | <b>P</b> | <b>TOTAL</b> |                |
| 1                      | BHM-501     | Quality in Health Care        | 3                              | 1        |          | 4            | 4              |
| 2                      | BHM-502     | Support & Utility Services-II | 3                              | 1        |          | 4            | 4              |
| 3                      | BHM-503     | Law                           | 3                              | 1        |          | 4            | 4              |
| 4                      | BHM-504     | Financial Mgmt.               | 3                              | 1        |          | 4            | 4              |
| 5                      | BHM-505     | Human Resource Mgmt.          | 3                              | 1        |          | 4            | 4              |
| <b>Total of Theory</b> |             |                               |                                |          |          | <b>20</b>    | <b>20</b>      |

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| Sessional                |         |  |  |  |           |   |           |
|--------------------------|---------|--|--|--|-----------|---|-----------|
| 1                        | BHM-581 | Summer Training Evaluation                   |  |  | 3         | 3 | 2         |
| 2                        | BHM-582 | Project on Marketing of Health Care Services |  |  | 6         | 6 | 4         |
| Total of Practical       |         |  |  |  |           | 9 | 6         |
| <b>Total of Semester</b> |         |  |  |  | <b>29</b> |   | <b>26</b> |

### SIXTH SEMESTER

| THEORY                   |                |                                   |                         |   |           |       |           |
|--------------------------|----------------|-----------------------------------|-------------------------|---|-----------|-------|-----------|
| SL. NO.                  | CODE           | THEORY                            | CONTACTS (PERIODS/WEEK) |   |           |       | CREDITS   |
|                          |                |                                   | L                       | T | P         | TOTAL |           |
| 1                        | BHM-601        | Public Relations                  | 3                       | 1 |           | 4     | 4         |
| 2                        | BHM-602        | Medical Ethics                    | 3                       | 1 |           | 4     | 4         |
| 3                        | BHM-603        | Organizational Behavior           | 3                       | 1 |           | 4     | 4         |
| 4                        | BHM-604A/B/C/D | Elective-I                        | 3                       | 1 |           | 4     | 4         |
| Total of Theory          |                |                                   |                         |   |           | 16    | 16        |
| Sessional                |                |                                   |                         |   |           |       |           |
| 1                        | BHM-681        | Major Project on Specialised Area |                         |   | 3         | 3     | 8         |
| 2                        | BHM-682        | Defense of Project                |                         |   | 6         | 6     | 4         |
| Total of Practical       |                |                                   |                         |   |           | 9     | 12        |
| <b>Total of Semester</b> |                |                                   |                         |   | <b>25</b> |       | <b>28</b> |

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## Hospital Management

**Code: BHM- 101**

**Contacts: 3L + 1T**

**Credits: 4**

**Introduction to Management:** The evolution of Management, Definition and importance of Management. Different schools of Management thought- classical school, Management Sciences School, Behavioral School, Human Relation School, Operational approach, system approach and contingency approach to Management.

**Management Process:** An overview of Planning, Organizing, Staffing, Directing and Controlling.

**Planning:** Meaning objective, nature and importance of planning, planning process, planning premises, types of plan.

**Organizing:** Meaning and importance, organization structure / chart, responsibility and authority, span of control, delegation of authority, centralization-decentralization, line and staff relationships, types of organizations, formal and informal groups in organizations, Matrix organization.

**Staffing:** Staffing function, manpower needs, manpower position, recruitment & selection, training & development, performance appraisal, human resource audit.

**Directing:** Meaning of direction, nature of directing; Motivation; basis of motivation-fear, money, satisfaction; importance of behaviour; individual needs, needs of organization; factors influencing performance; work environment, group dynamics- formal & informal, Communication principles and practices.

Leadership-nature, styles, attitudes, leader behaviour, leader effectiveness, leadership models.

**Controlling:** Concept of managerial control, importance of control, control process, methods of control, essentials of effective control.

**Social Responsibility of Management:** Professional Management as compared to traditional system of owner Management, Impact of political system, government Policy, national economic planning on managerial policy.

Managing Ethics- Top Management, Codes of Ethics, Ethics Committees, Ethics Hotlines. Ethics and Law. Corporate Culture and Ethical Climate. Improving Ethical Decision Making- Difficulties in Decision-Making, Suggestions for making Ethical Decisions.

## English Language & Communications

**Code: BHM- 102**

**Contacts: 3L + 1T**

**Credits: 4**

**Introduction:** Meaning of Communication; Role of Communication in Business; Basic elements of the Communication process, level of Communication, forms, models and media of Communications, Verbal and non-verbal Communication-functions and types. Barriers to effective Communication.

**Grammar:** Subject verb agreement, tense, voice, improvement of sentences, rearrangement of sentences. Vocabulary: usage, synonyms, antonyms.

**Comprehension**

**Forms of Writing:** The Essay, The Precis, The Report, The Proposal, The C.V. and Job Application letter. The Presentation.

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## Hospital Management

*Role Playing.*

*Group Discussion*

### Medical Terminology-I

**Paper Code: BHM-103**

**Contacts: 3L + 1T**

**Credits: 4**

- i. Introduction to medical terminology
- ii. Word formation & syntax
  - a) Greek alphabet
  - b) Greek & Latin prepositional & adverbial prefixes
  - c) Singular & plural endings
- iii. Commonly used prefixes in medical terminology
- iv. Commonly used suffixes in medical terminology
- v. Commonly used root words in medical terminology
- vi. Common Latin term used in prescription writing
- vii. Study of standard abbreviations
- viii. Commonly used medical terms to define different parts of the body

### Accounts

**Code: BHM-104**

**Contacts: 3L + 1T**

**Credits: 4**

*Financial Accounting: An Overview*

*Accounting Postulates, concepts and principles*

*Accounting Mechanics – Journals*

*Accounting Mechanics – Ledger Posting and Trial Balance*

*Preparation of Financial Statements: Profit & Loss A/C.*

*Preparation of Financial Statements: Balance Sheet*

*Basic cost concepts, Cost Determination Process*

*Costing for materials, labour and overheads.*

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## Hospital Management

### Hospital & Health System –I (History & Evolution)

**Paper Code: BHM-105**

**Contacts: 3L + 1T**

**Credits: 4**

Definition and meaning of Health, Holistic approach to health, Basic information relating to health, Historical development of health care system in India, Definition and meaning of hospital, historical development of hospitals, growth of hospital in India, Changing concept of hospital during 1900-2003, The modern hospital, A complex entity, Present status of hospitals in India, Present State of Govt. hospital, National Health policy, Goals for Health for all by 2000 AD and beyond, Health committee and their recommendation, Health plan outlay during 1951-2003, Hospital viewed as a system, Role of Hospitals, Hospital Viewed as a Social system, Peculiarities of hospital systems, benefits to the Health Care systems, Overview of Health Care delivery system.

## Second Semester

### Medical Terminology-II

**Paper Code: BHM-203**

**Contacts: 3L + 1T**

**Credits: 4**

- i. Medical terminology used by Cardiologist
- ii. Medical terminology used by Neurologist
- iii. Medical terminology used by Nephrologist
- iv. Medical terminology used by Gastro-intestiniologist
- v. Medical terminology used by ENT surgeon
- vi. Medical terminology used by Dentist
- vii. Medical terminology used by Orthopedic surgeon
- viii. Medical terminology used by Gynecologist
- ix. Medical terminology used by Oncologist
- x. Medical terminology used by Dermatologist
- xi. Medical terminology used by Endocrinologist

#### **Text:**

Paramedics-Six in One, Jaypee Brothers



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## Hospital Management

### Hospital & Health System –II (History & Evolution)

**Paper Code: BHM-205**

**Contacts: 3L + 1T**

**Credits:4**

The reforms of Healthcare System- the healthcare system in US/UK & Canada

The healthcare system in China, SriLanka, India. The future of Healthcare System-Canadian lessons in Healthcare reforms.

Future of Healthcare System

International Health under United Nations- History & Evolutions.

Health manpower planning & distribution. Economics of Health manpower planning & political process. Evaluating health Systems. Role of hospitals in Primary health Care. Administration of rural hospitals.

Health Programmes in India.

Managerial process in National Health Development.

Cost benefit analysis in health field.

Text:

1.The Evolution of International Health System, Cumper G.E, OUP New York, 1991

2.Management of Hospital ( 4 Vols), S.L Goel & R. Kumar, Deep & Deep Publications Pvt. Ltd.

### **BHM- 204**

#### **Marketing Management**

**Contacts: 3L + 1T**

**Credits: 4**

*Introduction:* Definition, nature, scope and importance of Marketing- approaches to the study of marketing; marketing and economic development- traditional and modern concepts of marketing.

*Marketing functions:* Selling, buying, transportation, storage, finance, risks, grading and standardization and Information; features and characteristics of markets; market segmentation.

*Consumer and marketing:* Consumer behavior and motivation-stages and participation in buying process.

*Product:* Concept of Product; product line; product additions and deletion; New Product development.

*Pricing:* Pricing objectives- basic price concepts-price determination factors influencing pricing policy-methods of pricing- pricing policies and strategies.

*Channels of distribution:* Need for marketing specialists- types of marketing channels- selection of channels.

*Promotion:* Nature and importance of promotion-promotional methods- advertising – advertising copy-evaluation of advertising-personal selling-sales promotion.

*Marketing Research:* Importance-types and techniques of organizing marketing research.

*Developing Marketing Strategy:* Differentiating and positioning the market offering tools for competitive differentiation developing a positioning strategy.

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## Hospital Management

*Marketing Organizations:* marketing performance and central, Global marketing; Customer service; Rural marketing.

*Service Marketing:* Relating to Health Care Services.

Books:

1. Marketing Management , Rajan Saxena, TMH
2. Marketing, Joel R. Evans, Wiley Dreamtech
3. Marketing Management & Research. P.K.Gupta. EPH.
4. Marketing Research . M.V.Kulkarni.EPH.

## Hospital Operation Management I

**Code : BHM 201**

**Contacts: 3L+1T**

**Credits: 4**

Epidemiological basis for healthcare management.

Management development-towards development of professional management of Indian Hospitals.

Management of Indian Hospitals- chalanges & strategies.

Modern Techniques of hospital management.

Operation concept- use of models.

Health services research & formalized managerial methods.

Text:

1. Management of Hospital ( 4 Vols), S.L Goel & R. Kumar, Deep & Deep Publications Pvt. Ltd.
2. Hospital Mgmt. In Tropics & Subtropics, James A. William, McMillan , London,1991

## Bio-Statistics I

**Code: BHM-202**

**Contacts: 3L+1T**

**Credits: 4**

Statistics & Samples.

Handling & Presenting Numerical Information.Pie-Diagram, Bar Diagram, Histogram, Frequency Polygon. Scatter Diagram.

Measures of Central tendency- mean, median & mode.

Measures of Dispersion or variability- range, standard deviation

The Normal Distribution-its characteristics. Best Fitting Normal Distribution.

Student's 't' distribution.

Data Collection for Vital Statistics:-

- a) Birth
- b) Deaths
- c) Fetal Deaths

Text:

1. A Short Text Book of Medical Statistics-Hill A.B, 10<sup>th</sup> Ed, ELBS
2. Elementary Statistics for Medical Workers, Indervir Singh, Jaypee Brothers
3. Element of Health Statistics-Rao NSN

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## Hospital Management

### Note

1. BHM-101 (Principles of Management) is same as BBA-101
2. BHM-102 (English Language & Communication) is same as BBA-102
3. BHM-104 (Accounts) is same as BBA –103 (Business Accounting)
4. BHM-191 (Language Laboratory) is same as BBH-192
5. BHM 192 (Computing Laboratory) is same as BBC- 195

## Hospital Management Syllabus of Third Semester

### **BHM – 301**

#### **Hospital Operations Management-II**

##### **Hospital Planning**

- Guiding principles in planning hospital facilities & services

- Planning the hospital building

Stages in planning, Finance, Location, Need assessment survey of community, factors determining site, legal requirements, design consideration, Project management & implementation, Gantt Chart

- Planning the operational units, engineering, lighting etc.

##### **Organization of the hospital**

- Management structure

Types of hospitals, Governing body, Hospital committee and hospital functionaries

- Duties and responsibilities of various positions

##### **Hospital Operational management**

Management of Quality Assured services of professional service units of hospital.

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## Hospital Management

Function, location, flow chart of operation, design based on flow chart, organization, physical facilities and space requirements, statutory requirements, special features, problem situation, Staff requirement, Auxiliary requirements, Work load estimation, Documentation, Equipment & supplies.

Emergency services.

### **Outpatient & In patient services in the following fields (Basic knowledge only):**

|                       |                                    |                            |
|-----------------------|------------------------------------|----------------------------|
| Radiotherapy          | Nuclear medicine                   | Surgical units and OT      |
| Medical units         | G & Obs.units & LR                 | Paediatric, neonatal units |
| Critical care units   | Physical medicine & Rehabilitation |                            |
| Skin                  | Eye                                | ENT                        |
| Neurology             | Dental                             | Gastroenterology           |
| Endoscopy             | Pulmonology                        | Cardiology, Cath lab       |
| Nephrology & Dialysis | Urology                            | Orthopedics                |
| Transplant units      | Burn Unit                          |                            |

### **Disaster and mass casualty management**

Classification of disasters, Principle of disaster management plan.

Plan for disaster management, Specific problems of disaster management.

#### **Text:**

1. Principles of Hospital Administration & Planning: B.M.Sakharkar
2. Park's textbook of Preventive & Social medicine
3. Management of Hospitals: S.L.Goel, R.Kumar
4. Hospital & Health Services administration-Principles & practices, Tabish, OUP

### **BHM - 302**

#### **Bio-statistics -II (Basic Medical Statistics and Health Information)**

##### **Health Information:**

Data & Information, Health Information System- components, uses, source

Basic Descriptive methods,

Distribution table, Frequency distribution, Presentation of statistical data,

Measure of central tendency and location, Measures of dispersion

##### **Probability:**

Introduction, Measurement of Probability, Frequency Probability, Laws of probability for independent events, Conditional events, Bayes' Theorem and its application in community screening programme

Decision analysis, Normal distribution, 't' distribution

Sampling variation and Bias, method of sampling, sampling & non sampling errors. Test of significance, Standard errors, Chi- Square test, Correlation & Regression

#### **Text:**

1. Park's textbook of Preventive & Social medicine
2. Statistical Methods in the Biological & Health Science: J.Susan Milton (McGraw-

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## Hospital Management

Hill)

3. An Introduction to Biostatistics, a manual for students in health sciences:

P.S.S. Sunder Rao: J. Richard

4. An introduction to Probability & Statistics, N. G. Das, Vol.1 & II

### **BHM – 304**

#### **Medical record Science-I**

Definition and Types of medical record, Importance of medical record, Flow chart of function, Statutory requirements of maintenance, coding, indexing and filing, Computerization of record, Report and returns by the record department, Statistical information and ICD.

**Text:** 1.Principles of Hospital Administration & Planning: B.M.Sakharkar (Jaypee)

2. Hospital Administration: C.M.Francis (Jaypee)

### **BHM-303**

#### **Health Economics**

##### **1. Fundamentals of Economics:**

Scope & coverage of Health Economics, demand for Health Sciences; Health as an investment, population, Health & Economic Development.

Some Basic Graphical & Mathematical Techniques.

Functions –Linear & non-linear.

Straight Lines & Slopes, Marginal values & Incremental Ratios.

Tools of Economics-Concepts of need, demand, supply & price in Health Services.

##### **2. Methods & Techniques of Economic Evaluation of Health Programmes:**

Cost benefit & cost effective methods-output & input analysis.

Market, monopoly, perfect & imperfect competition. Health Financing from various sources – Public, Private, TPA.

3.Economics of Health Programmes for Nutrition, diet & population control, economics of abuse of tobacco & alcohol, environmental influences on health & its economic impact, economics of breast feeding.

Economics of Communicable (STDs & Malaria) & non-communicable (IHD & Cancers) diseases.

4. Health Care Budget: purpose, types & practices in Indian context.

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## Hospital Management

### **BHM-305**

#### **Inventory Control & Purchase Management**

1.Inventory Control & Purchase Management-meaning & significance

2.Purchasing & procurement:

Principles of sourcing, purchase methods & procedures, legal aspects of purchasing.

Reference to Contract Act, Sale of Goods Act, Drug Control Act in respect to purchase activities.

Import substitution

3.Quality Control & quality management-Principles & methods.

4.Principles of storage & stores accounting-types of storage care & preservation of materials & equipments in inventory control.

5.Distribution management ( logistics Management)-distribution of materials to various departments & auxiliary services.

6.Exceptional management needs in Healthcare Units: Mgmt. of Blood Bank, Donated Organs,Morgues, Dispensaries .

#### **7.Contract Administration:**

Administration of services obtained through Contract Principles. Model Contract for Laundry, dietary, dispensary, security & Ambulance Services.

### **Epidemiology & Analysis of Health Information Data [BHM-401]**

1>Concept of disease—

Natural History

Level of prevention

Rehabilitation

2>Concept of Epidemiology--

Definition and concept

Types of uses

Incidence and prevalence

3>Communicable and non-communicable diseases-

a) Communicable Diseases--

Influenza

Food poisoning

Filaria

Plague

Tetanus

b) Non- Communicable Diseases-- Diabetes

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## Hospital Management

Stroke

Alcoholism

Smoking

Rheumatic Heart Diseases

4>Epidemiological studies

-- Epidemic, Eudemic, Pandemic, Sporadic

-- Investigation of an epidemic

5>Mortality, Morbidity, IMR, MMR.

6>Preventive measures for disease Outbreak

--Vaccination, Immunisation, Surveillance, Monitoring

7>Transmission of Disease—Vehicles of transmission

8>Observational, Analytical & Experimental Studies

### Texts :

1. Text Book of Preventive and Social Medicine — Park.
2. Hospital Administration — Tabish (O.U.P.).
3. Epidemiology & Management of Health Care for all-P.V. sathe & A.P. Sathe

### Support & Utility Services – I [BHM-402]

- Meaning, Importance and integration
- Nursing Services
- Pathology lab / Diagnostic Units (Radiology, Scan Centre)
- Blood Bank
- Diet Services
- Linen Laundry Services
- CSSD ( Central Sterile Supply Department.)
- Housekeeping
- Control of Hospital Infection
- Transport Services (Ambulance)

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## Hospital Management

- Disposal of Medical Waste
- Security Services
- Maintenance Services
- Office Administration
- Hospital Information System and Computer Application

### References :

#### Texts :

- 1.Hospital Administration — Tabish (O.U.P.).
- 2.Principles of Hospital Administration & Planning — B.M.Sakharkar, Jaypee Brothers
- 3.Hospital Administration & Management — C.M. Francis & D'Souza.

## Environment & Ecology (BHM-403)

### **General**

Meaning of Environment & relevance of the subject Environment & Ecology for Hospital Administrators.

Brief outline of the Environment (Protection) Act 1986 & its importance for Hospital Administration.

Legislation vs. Social obligation of Hospitals. Role of NGO's like green peace in Environmental protection.

### **Ecology**

Brief outline on Elements of Ecology; brief discussion on Ecological balance and consequences of change, principles of environmental impact assessment. Environmental Impact Assessment report (EIA) .

### **Air Pollution and Control**

Factors responsible for causing Air Pollution in Hospitals .Sources & effects of Air pollutants in the Hospital context. Primary & Secondary pollutants ,Green House Effect,depletion of Ozone Layer. Brief discussion on THE AIR (PREVENTION & CONTROL OF POLLUTION ) ACT,1989.

### **Water Pollution and Control**

Brief Discussion on Hydrosphere, natural water, pollutants: their origin and effects, river/lake/ground water pollution, The financial implication of water pollution control and steps required to be taken e.g. Sewerage treatment plant, water treatment plant. Standards and control in relation to the effect of legislation by Central and State Boards for prevention and control of Water Pollution.

### **Land Pollution**

Brief understanding of lithosphere, pollutants(municipal,industrial,commercial,agricultural,hospital,hazardous solid waste); their original effects, collection and disposal of solid waste, recovery & conversion methods in relation to an hospital enterprise with discussion about the financial implication.



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## Hospital Management

### **Noise Pollution:**

Sources, effects, standards & control

### **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, Sithamparamanathan, Scitech

### **Medical Record Science-II(BHM-404)**

Utility & functions of Medical Records in Health care delivery System.

Organizations & management of Medical Records Department.

Role of Hospital managers & MRD personnel in Medical record keeping.

Reports & returns in Medical Record System.

Basic knowledge of legal aspects of Medical Records including Factories Act, Workmen Compensation Act & Consumer Protection Act.

Procedures of Medical Auditing & its importance.

Government Regulations & requirements.

### **Texts :**

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

### **Management Information System (BHM – 405)**

Information, data & its role in decision-making, system and its model., Information System (IS)-operating elements, process, function, layout of information flow in an organization, classification of IS, executive Support System (ESS),

Managerial process, managerial decision making, approaches to management decision making, implication for information systems

Hospital Information System – Genesis, scope, basic management cycles in hospitals, categories of information system in hospitals, sources of health information, uses of health and hospital data, managing information system, and need of information in hospital.

### **Books:**

- 1.Management Information Systems, O'Brien, TMH
2. Management Information Systems, Arora & Bhatia, EXCEL BOOKS
3. Management Information Systems.M.M.Oka.EPH.

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### BHM (5<sup>th</sup> Semester)

**Name of the Subject: Quality in Health Care.**

**Course Code: BHM-501**

#### Course Structure:

- Fundamentals of Quality Management: Introduction – Objectives - Historical Back Ground – Concept of Quality Care and Quality Management – ISO 9000 Quality Management System - Effects and Benefits of ISO 9000 management System – Present Indian Scenario – Organization of quality Management System – Approaches to measurement of Quality.
- Techniques of Quality Management: Improving Hospital Performance – Patient Participation – Quality Health Care through Patient Satisfaction – Conceptual model of potential Contribution in quality in the health care system.
- Organization wide Quality Improvement in Health Care: Introduction – organizing for Quality Assessment – Deming's Contribution and his 14 management guideline – Organization wide Quality Improvement fundamentals – A Quality Improvement model of daily Patient Care – Quality Assurance and Quality improvement.
- Assessing Quality Health Care: Some attributes of Quality in Health Care – Some attributes of a Good Patient Practitioners Relationship – The measurement of Quality – Procedure for formulating explicit Criteria and standards – Determinates of Quality – Structure – Process – Outcome.
- The implementation of Total Quality: Planning Quality – organizing Quality – Evaluating Quality – Transforming organizations to a Total Quality Philosophy and Culture.
- Outcome Management and Total Quality: Background of Quality outcome – What is quality outcome and what is outcome – Management?

#### Books:

1. Reference Books: Raandi Schmidt J. Trumbo and R. Jonson, Quality in Health Care Sector – ASQC Quality – Press.
2. Quality Improvement in Health Care, 2<sup>nd</sup> Ed, Nelson Thrones

### BHM (5<sup>th</sup> Semester)

**Name of the Subject: Support and Utility Service**

**Course Code: BHM-502**

#### Course Structure:

- Mortuary Services

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

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- Medical Records

Introduction – Definition – Purpose – Planning organizing and Staffing - Physical facilities – Processing of Records and their flow – Coding and Indexing – storage and Retrieval – Reports and Returns – Medico legal aspect of medical Records.

- Pharmacy Services

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

- 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 – meaning of fire manual – Guideline – Elements of Fire safety – Fire safety training – Do's and Don'ts for electrical fire prevention – Action to be taken in case of fire in a Hospital.

- Integrated Hospital and Patient Care

Information System: Meaning – objectives – Need – Designs of HIS – Application of HIS – Stages of computerisation – HIS Design objectives and consideration - Conceptual Database Design – meaning of Patient Care information System – elements of Patient Care information System – Direct Care Process - Efficiency of care providers – Improved information access – in Patient Care.

- Disaster Management

Introduction – Stages of Disaster – Disaster Planning – Disaster operating procedure – Disaster Manual – Lesson from Japan – Recent Trends – the Action Plan – Looking Ahead.

- Reference Books :

(1) Hospital and Health Services Administration – Principals and Practice – Syed Amin Tabish – Oxford University Press.

(2) Essential for Hospital Support Services and Physical Instructions – Sharma – Jaypae Brothers – New Delhi.

(3) Management in Health Care, Nelson Thrones

(4) Health Care Provisions, 2<sup>nd</sup> Ed, Nelson Thrones

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### BHM (5<sup>th</sup> Semester)

**Name of the Subject: law**

**Course Code: BHM-503**

#### Course Structure:

- General Law of Contract : Essentials of a Contract – Offer and acceptance – Capacity of Parties - Free Consent – Consideration and legality of object – Void argument and Contingent Contract.
- Legal Aspect and Consumers Protection Act :

Introduction – Medico–Legal Aspect on Clinical practice – Duties and Responsibilities of Doctors – Professional Secrets and Privileged Communication – Consent - Implied Consent and Expressed Consent.

Consumer Protection Act – Definition – Consumer Protection Council – Consumer Disputes Redressal Agencies – Other Salient features – Application of C.P Act in Hospital – Recent judgment of Supreme Court – Implication for Health Professionals.

- W.B Clinical Establishment Act 2000:-
- Biomedical Waste Management and Handling Rule – 1998: Meaning – Classification of Bio-medical waste – Treatment and disposal – Colour Coding and type of Container for Disposal of Bio-medical wastes – Biomedical waste Management Rule - Annexure of Ministry of Environment and Forest Notification in regard to Bio-Medical Waste Management and Handling Rule 1998(Schedule I-VI)
- Shops and Establishment Act:-
- References Books:
  - 1>Kapoor, N.D; 2004: Mercantile Law – Sultan Chand & Sons: New Delhi(Chapter 1-5)
  - 2>Kuchhel, M.c, 2003, Marcentile Law; Vikas Publishing Private Ltd. New Delhi (chapter 1-5)
  - 3>Pathak,Legal Aspect of Business, TMH
  - 4>P.L Mallick – Industrial Law – Eastern Book Company – Lucknow.
  - 5>Bio-Medical Waste Management Handling Rule 1998.
  - 6>Law & Ethics in Nursing & Health Care,Nelson Thrones

### BHM (5<sup>th</sup> Semester)

**Name of the Subject: Financial Management**

**Course Code: BHM-504**

#### Course Structure:

- Meaning of Financial Management – Modern Approaches to FM – Objectives, scope, function and importance of Financial Management.

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- Financial Statement Analysis: Meaning of Financial Statement – Different types of F.S viz Income Statement, Balance Sheet, Statement of Retained earning, Fund Flow Statement, Cash Flow Statement – definition, significance and limitations.
- Fund Flow Statement – Practical Problems.
- Cash Flow Statement – Practical problems.
- Ratio Analysis: Meaning of Ratio Analysis – Different types of ratios, their meaning and importance – Practical problems on Ratio Analysis – Limitation of Ratio Analysis.
- Break–Even and CPV Analysis – Meaning – importance – Uses – Significance – Practical Problems.
- Accounting for Non- Profit Seeking Concern – Hospital Accountings and Hospital Costing.
- Working Capital Management: Definition – Components of W.C.M – Factors affecting working Capital – Classification of Working Capital – Practical Problem on Working Capital requirement.
- Capital Budgeting – Definition – Techniques of Capital Budgeting –NPV, IRR, ARR, Pay-back-period, Profitability Index – Practical Problem on Capital Budgeting.
- Sources of Short term and long term finance.
  
- Reference Books:
  - 1>Taxman’s Financial Management by Ravi M. Kishore.
  - 2> Advance Financial Management by Dr. S. N. Maheswar.
  - 3> Financial Management,Khan & Jain, TMH
  - 4> Financial Management,Gupta,Pearson Education
  - 5>Finance for Non-Finance Manager,B.K. Chatterjee, Jaico

## BHM (5<sup>th</sup> Semester)

**Name of the Subject: Human Resource Management**

**Course Code: BHM-505**

### Course Structure:

- HRM-meaning , role in an organization, difference with personnel mgmt.
- HR planning, concept & methods.
- Recruitment, selection & placement,Sources of recruitment, methods of Selection-Promotion & transfer,Implementation of selection methods in hospitals.Transfer & Promotion in Hospitals
- Training & Development –concept,differences,importance.Organizing training programmes & evaluation. System of training & development in hospitals.
- Performance appraisal –meaning,objective,different theories in PA
- Wage & salary Administration-concept, principles in determining enrolment techniques
- Work Environment-Fatigue,monotony & Boredom(Reference to Hospital concept)

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- Morale-meaning & importance.Factors influencing morale-Impact of Morale on employees in an organization.
- Safety-meaning & importance,legal provisions for safety in an organization including Hositals.
- Trade Union-concept,impact on functioning of an organization,role of Trade Union in Hospital functioning.

### Books:

- 1.Aswathappa,Human Resource & Personal Management, TMH
- 2.Gomez –Mezia,Managing Human Resources,Pearson Education

Paper Code: BHM-601

Paper Name: Public Relations

1. PR- Definition, PR & Advertising, PR & Propaganda
2. History of PR:
  - PR- as a management function
  - PR- principles, planning, implementation
3. PRO- qualities of PRO, Functions
4. PR in Hospitals:
  - Organization
  - Role
  - Implementation Mechanism
5. Importance of PR in Hospital Environment Management:
  - Media
  - Government
  - Patients & Their Relations
  - Employee Relations
  - Political Parties
6. PR in Crisis Management, Event Management in Hospitals
7. PR Counselling, PR- Agencies
8. Ethics in PR, PR Laws
9. Emerging Trends in PR

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Paper Name: Organizational Behaviour

Paper Code: BHM-603

-OB-overview-Meaning of OB, importance of OB, field of OB, Contributing Disciplines.

-OB Models, S-O-B-C model, contingency O-B model, challenges and opportunities for OB

-Individual Behaviour: Biographical characteristics Learning, Value, Attitudes

-Personality: Meaning of Personality, Determinants of Personality, Theories of Personality, Management and Development of Personality

-The Process of Perception: Process and Principles, Factors influencing Perception, Perceptual Selectivity, Making Judgments, Social Perception.

-Interpersonal Behaviour: Nature of Interpersonal Behaviour, Transactional Analysis, Johari Window, Benefits and uses of TA.

-Group Dynamics & Behaviour: Concepts of Group, Types of Group, Stages of Group Development, Group Structure, Intergroup Relationship.

-Motivation: Approaches to Motivation. Theories of Motivation- Maslow's Hierarchy of Need theory, Alderfer's ERG theory, Herzberg's two factor Motivation theory, Mclelland's Achievement Motivation Theory.

-Leadership: Meaning, Styles, Theories on Leadership, Managerial Grid, Fiedler Model.

## **BHM-602**

### **Medical Ethics**

Definition of ethics.

Ethical Principles & rules:core concepts.

Law & ethics-a comparasion.

Law in relation to medical profession-Indian medical degree.

Act 1916, IMC act & State medical act.

Declaration of Geneva.

Disciplinary control-professional misconduct.

Compulsory & voluntary duties of a medical practitioner towards the state & the patient.

Doctor patient relationship.

Professional secrets & privileged communication-births,deaths,abortion,MTP,C.S,communicable diseases.

Helsinki declaration on medical research,ICMR guidelines of medical research-death,dying & incurable ill patient.

Euthanasia-ethical framework on decision making.

## **Elective-I**

### **Occupational Health**

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## Hospital Management

### **BHM-604A**

Occupational environment-man & physical,chemical & biological agents.  
Occupational hazards-physical,chemical,mechanical,psychological hazards.  
Occupational diseases.  
Accidents & injury.  
Radiation hazards.  
Control of hazards in industries.  
Indian Factories Act 1948  
ESI Act 1948.  
Workman's Compensation Act 1952.

Books:

Park & Park-Preventative & Social Medicine.

### **Geriatrics**

#### **BHM-604B**

Definition of Geriatrics & gerontology.  
Concept of aging –cellular aging, tissue organ aging, individual aging.  
Aging population.  
Demographic trends-past, present & future.  
The preservation & control of the disabilities of the aging .  
Routine health examination of the elderly population.  
Economic & social implications of aging population.  
Retirement & occupation.

Books:

1.Oxford Book of preventive Medicine ,Third Edition.

2.Aging society, Social & economic issues-Edited by Rajarshi Ghosh,The ICFAI University Press

### **Nutrition**

#### **BHM-604C**

Elements of Physical Nutrition –cell & human physiology.  
Human Nutrition-Functional anatomy,Nutritional Physiology & Biochemistry.  
Requirements of: adults,children,pregnant women.  
Food-the source of energy:carbohydrates,Monosaccharides,Disaccharides,Polisaccharides.  
Enzymes,digestion.  
Nutritional requirements: carbohydrates,Fat,Minerals.  
Malnutrition:classification & control.  
Obesity & its control.  
Nutritional factors in disease.  
Iron deficiency.  
National programmes on diet & nutrition.

### **Cardiovascular diseases**



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### **BHM-604D**

Essential anatomy & physiology of cardiovascular system.

Classical signs & symptoms of heart disease.

Blood pressure.

Basic concepts of investigations: X-Ray, ECG, Eco-cardiography with C-Doppler, Holter monitoring, CT Scanning, coronary angiography.

Biochemical changes in C.V. diseases.

Therapeutic procedures of heart like cardiac Resuscitation, Defibrillation etc.

Basic concepts of cardiac failure, Cardisgenic shock, pulmonary acdema, Cardiac arrest.

Basic concepts of cardiac surgery-Prothetic heart values, cardiac transplantation, coronary angioplasty.

Replacement of heart values.

Control of cardiovascular diseases.