

As Per NEP 2020

University of Mumbai



Syllabus for Basket of OE	
Board of Studies in Biomedical Engineering	
UG First Year Programme	
Semester	IV
Title of Paper	Hospital Administration & Management
Credits	2
From the Academic Year	2024-25

Sr. No.	Heading	Particulars
1	Description the course:	Biomedical Engineering is a rapidly evolving field driven by the exponential growth of semiconductor industries and computer science. This course introduces fundamental concepts, techniques, and tools necessary to understand the requirement in a hospital, its procurement, its up keeping and management. It involves comprehending different modules of hospital management involving doctors, paramedical, canteen services, laundry services, pharmacy, HRD and equipment's. By analyzing case studies and learning about emerging trends, students will gain practical knowledge essential for leveraging data-driven decision-making. The course is designed for learners from diverse academic backgrounds, highlighting its interdisciplinary nature and relevance to multiple career paths.
2	Vertical :	Open Elective
3	Type :	Theory
4	Credit:	2 credits (1 Credit = 15 Hours for Theory or 30 Hours of Practical work in a Semester)
5	Hours Allotted :	30 Hours
6	Marks Allotted:	50 Marks
7	Course Objectives: 1. To understand various management concepts used specifically in hospital. 2. To analyze the management structure and its functions in hospital. 3. To develop core competency and skills in Inventory 4. To apply modern management principles to provide high quality of hospital care in the community.	
8	Course Outcomes: Six Course outcomes 1. Apply the management concepts used in a hospital. 2. Explain the management structure and its functions applied in hospital. 3. Understand and apply resource management concepts (personnel, finance, and material resources) and the processes and strategies needed in specific hospital sectors.	

	4. Understand the management structure and functions in hospital. Communicate effectively and develop their leadership and team building abilities. 5. Understand and apply materials management concept in industry 6. Explain the ethics practiced in healthcare industry.
	Modules: Pre-requisites: Knowledge functioning in a hospital Module 1: Process of management: : 5 Hours Principles of management, Leadership, Motivation, Freudian theory, Time management, Effective communication, Conflict resolution and labor relations, Management Stages, Classification of Employees, Behavioral Theory, Directions of communication, Module 2: H.R. management in a Hospital: : 5 Hours Elements of an HR Dept: Recruitment, Performance Appraisal, Training and Development, Roles of HR manager
	Module 3: Materials Management in a Hospital: : 5 Hours Purchase system (centralized, decentralized, local purchase), types of purchase, purchase procedures: selection of suppliers, tendering procedures, analyzing bids, price negotiations Material's (store) management: Functions of store manager, materials handling, flow of goods/FIFO, inventory control: lead-time, buffer stock, reorder level, two bin system, EOQ. Accounting - types of Budget. Module 4: Management of Auxiliary services in a hospital: : 4 Hours Waste Management, CSSD, Disaster management, Laundry, Dietary services,
	Module 5: Medical Ethics: 3 Hours
	Code of Medical ethics, Theories of Medical Ethics, Principles of Medical Ethics, Therapeutic Privilege, Paternalism, Right to refuse treatment.
	Module 6: Medico Legal aspects in a hospital: 3 Hours

	Legal Aspects in a hospital, Preventive Steps for Doctors/Hospitals to Avoid Litigation :Consent Form, Life Support and Dying Declaration, Death Certificate	
10	Text Books: 1. Hospital Management by Dr. Pradya Pai 2. Hospital Planning, Designing and Management: Kunders G D, Gopinath, A katakam (Private Pub Bangalore) 3. Hospital Information and Quality Assurance by Dr Souri Reddy Pyreddy, Mr R Srinivas, Medvarsity	
11	Reference Books: 1. Computers in Medicine: R. D. Lele (TMH Pub) 2. Hospital Care and Hospital Management AICTE Journal Vol. 1,2,3 by Dr. Kalanidhi. (AICTE Pub Bangalore) 3. Careers in Biomedical: Shantanu Thatte	
12	Internal Continuous Assessment: 40%	Semester End: 60%
13	Continuous Evaluation through: IAT-1 : 15 marks IAT-2: 15 marks Average of IAT-1 & IAT-2 = 15 marks. Projects, Presentation and assignments, (5 marks) etc.	Semester End Examination (30 marks) - Duration 1 hours.
14	Format of Question Paper: End-semester examination • Question Paper will comprise three questions each with 10 marks. All modules must be covered. All three questions need to be answered.	

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