

GANPAT UNIVERSITY									
FACULTY OF ENGINEERING & TECHNOLOGY									
Programme		Bachelor of Technology				Branch/Spec.		Biomedical Engineering	
Semester		V				Version		1.0.0.0	
Effective from Academic Year				2024-25		Effective for the batch Admitted in			July 2022
Course Code		2BM51PE02		Course Name		Hospital Management			
Teaching scheme						Examination scheme (Marks)			
(Per week)	Lecture(DT)			Practical (Lab.)	Total		CE	SEE	Total
	L	TU	P	TW					
Credit	3	-	-	-	3	Theory	40	60	100
Hours	3	-	-	-	3	Practical	--	--	--
Pre-requisites									
Basics of Hospital and basic biology and management skills									
Course Outcomes									
COs	Description								
CO1	Evaluate the development of high quality of hospital care in the community by understanding the role of biomedical engineer in hospitals								
CO2	Develop skills enabling biomedical engineers to serve in hospitals ,national and international industries and government agencies								
CO3	Understand the role and designing of critical care departments of hospital like ICCU, ICU and activities of Central Sterile Supply Department, various medical records and waste management.								
CO4	Apply their skills to Communicate effectively and develop their leadership and teambuilding abilities								
Theory syllabus									
Unit	Content								Hrs.
1	THE HOSPITAL Role of Hospitals in Health Care, Hospital Planning and Design, Effective Hospital Management, Planning, Organizing, Controlling, Financial Management.								9
2	ADMINISTRATIVE SERVICES The Role of Hospital Administrator and Biomedical Engineer in Hospital, Medical Records, Hospital Utilization Statistics, Materials Management, Marketing of Health Services, Evaluation of Hospital Services, Ethical and Legal Aspects of Hospital Administration, Disaster Management.								6
3	CLINICAL SUPPORTIVE SERVICES Radiology and Imaging Services, Laboratory Services, Operation Theatre Suite, Pharmacy, Central Sterile Supply Department (CSSD), Hospital Linen and Laundry Service								5
4	HOSPITAL SERVICES & INFORMATION SYSTEM Outpatient Services, the Nursing Unit, Intensive Care Unit, Nursing Services, Biomedical Engineering Services, Information system types, Open source Hospital Information system (HIS), Evaluation of Different HIS, Hospital Software, Use of IoT in patient data monitoring & management.								7
5	ILLNESS AND INFECTION CONTROL DEFINING ILLNESS Direct and indirect causes -Classification and description of disease- Medical asepsis, Nosocomial infection and communicable diseases ,Reservoir, carrier and mode of transmission-Infection control measures Sterilisation and aseptic techniques Infection control committee: purpose, composition and terms of reference.								8
6	BIOMEDICAL WASTE MANAGEMENT Hospital Waste, Effect of Hospital Waste on Environment and Health, Generation and Segregation, Transport and Storage, Treatment and Disposal of Waste, Managerial Issues in Biomedical Waste Management, New Concept in Biomedical Waste Management, Laws Related to Biomedical Waste Management.								7
7	NABH & NABL accreditation and facility management.								3

Practical content	
NA	
Text Books	
1	Principles of Hospital Administration and Planning by BM Sakharkar Pub.: Jaypee Brothers Medical Publishers
2	Hospital Waste Management: A Guide for Self-Assessment and Review by Basarkar Shishir Pub.: Jaypee Brothers Medical Publishers
Reference Books	
1	Innovations in Hospital Management: Success with Limited Resources by Rufino L Macagba Pub.: Central Book Supply
2	Hospital Administration and Management - A Comprehensive Guide by Gupta Joydeep Das Pub.: Jaypee Brothers Medical Publisher
ICT/MOOCs Reference	
1	https://nptel.ac.in/courses/112104118/
2	https://nptel.ac.in/courses/112105171/
3	https://nptel.ac.in/courses/105103095/

Mapping of CO with PO and PSO:															
	P O 1	P O 2	P O 3	P O 4	P O 5	P O 6	P O 7	P O 8	P O 9	P O 10	P O 11	P O 12	P S O 1	P S O 2	P S O 3
CO1	3	3	3	1	1	1	0	1	1	2	0	2	2	1	3
CO2	2	2	3	1	2	3	0	1	1	0	0	1	3	2	3
CO3	3	1	3	1	1	3	0	1	1	0	0	1	3	2	2
CO4	3	2	3	1	1	1	0	1	1	3	0	1	3	2	1