Semester-IV

Course Name: SUPPORT & UTILITY SERVICES-I BBAHM 401 (MAJOR)

Mode: Offline Credits: 5(4T+1T)

Aim of the Course: The aim of the course on support and utility services in a hospital is to provide participants with a comprehensive understanding and practical skills necessary to manage and optimize non-clinical functions critical to the smooth operation of a healthcare facility.

Course Objectives: This course aims to provide students with comprehensive insights into diverse facets of hospital management. Topics covered include the significance of effective management, key functions such as policies and procedures, equipping facilities, control mechanisms, coordination strategies, communication protocols, staffing considerations, reporting practices, and documentation requirements for both clinical and non-clinical services within a hospital setting. Through this holistic exploration, students will develop a well-rounded understanding of the intricacies involved in managing various aspects of healthcare services, ensuring they are well-equipped to navigate the complex dynamics of hospital administration.

Goals:

CO1: This course enables students to Gain a comprehensive understanding of the importance and scope of support services within a hospital, including functions such as housekeeping, maintenance, security, and catering.

CO2: Familiarize students with the policies and procedures governing support and utility services in a healthcare setting, emphasizing compliance with regulations and industry standards.

CO3: Develop skills in managing resources efficiently, including personnel, equipment, and facilities, to ensure the smooth operation of support services.

CO4: Learn methods for maintaining high standards of quality in support services, with a focus on enhancing the overall patient experience and satisfaction.

CO5: Enhance problem-solving and decision-making skills relevant to the challenges faced in managing support and utility services within a hospital.

SI	Course content	Mapped Module	Hours allotted
CO1	Support and utility services:	M1	8
	Concept & Meaning & importance		
	Difference between support and utility services		
CO2	Support services: Functions, Physical facilities, Staffing and Managerial issues of the following departments: Radiology Diagnostic and therapeutic department CSSD Nuclear Medicine Nursing Services Blood Bank: Blood donation, labelling, transfusion reactions, legal aspects and accreditation. Diet Services Transportation & Ambulance Services: History, Administrative aspects, Basic Life Support (BLS) and Advanced Life support (ALS).	M2	13
CO3	Utility services: Functions, Physical facilities, Staffing and Managerial issues of the following departments: Hospital Linen and Laundry Housekeeping services Mortuary Maintenance & store management,	МЗ	12
CO4	Hospital Infection control: Basic concept of HAI Causes Mode of transmission Functions of Infection control committee	M4	5
CO5	Hospital Information System and Computer Application	M5	2

Learning Outcome/ Skills:

- 1. **Holistic Understanding:** Develop a comprehensive understanding of the diverse support and utility services required for the effective functioning of a hospital, encompassing areas such as housekeeping, maintenance, security, catering, and more.
- 2. **Quality Service Delivery:** Equip participants with the knowledge and skills to maintain high standards of quality in support services, ensuring that patient care is enhanced, and the overall hospital experience is positive for patients, visitors, and staff.
- 3. **Efficient Resource Management:** Provide insights and strategies for efficiently managing resources, including personnel, equipment, and facilities, to ensure the seamless provision of support and utility services.
- 4. **Compliance and Regulations:** Familiarize participants with the regulatory frameworks and compliance requirements governing support and utility services in healthcare settings, emphasizing the importance of adherence to standards and guidelines.

- 5. **Communication and Coordination:** Foster effective communication and coordination skills among participants to facilitate seamless collaboration within and between support service departments, contributing to overall operational efficiency.
- 6. **Emergency Preparedness:** Prepare participants to handle emergency situations effectively, ensuring the safety and well-being of patients, staff, and visitors during critical incidents.
- 7. **Technological Integration:** Explore the integration of technology into support and utility services, enabling participants to leverage innovative solutions for enhanced efficiency, tracking performance, and improving overall service delivery.
- 8. **Environmental Sustainability:** Instill an awareness of the importance of incorporating sustainable practices into support services, aligning with the hospital's commitment to environmental responsibility and social sustainability.
- 9. **Customer-Centric Approach:** Develop customer service skills tailored to the unique challenges and sensitivities of the healthcare environment, emphasizing the importance of patient satisfaction and positive interactions.
- 10. **Problem-Solving and Decision-Making:** Enhance participants' problem-solving and decision-making skills, preparing them to address challenges and make informed decisions in the dynamic context of support and utility services in a hospital.

Module Number	Content	Total Hours	% of questions	Bloom Level (applicable)	Remarks, if any
M1	Support and utility services	8	30%	1,2	NA
M2	Support services: Functions, Physical facilities, Staffing and Managerial issues of the following departments	13	30%	1,2,3	NA
M3	Utility services: Functions, Physical facilities, Staffing and Managerial issues of the following departments	12	20%	1,2,3	NA
M4	Hospital Infection control	5	10%	1,2	NA
M5	Hospital Information System and Computer Application	2	10%	2,3	NA
Total Theory		40	100		
Tutorial	Tutorial				
Total		48			

Paper Name: Hospital Inventory & purchase management

Paper code: BBA(HM) 402 (MAJOR)

Mode: Offline Credits: 4(3L+1T)

Aim of the Course: The objective is to attain a comprehensive understanding of hospital Inventory management.

<u>Course Objectives:</u> The course is designed to foster comprehension of the core principles of hospital materials, inventory and purchase management. It also covers operational aspects on Inventory, purchase and stores. Upon finishing this course, students should have a grasp of the foundational tenets of Hospital Inventory Management.

Goals:

- CO1: This course equips students with foundational knowledge in Hospital Inventory management.
- CO2: Through this course, students will gain the ability to harmonize practice with theoretical knowledge in Inventory, purchase and stores management
- CO3: The course will facilitate active learning and the acquisition of knowledge regarding emerging trends in inventory control and management
- CO4: The course is designed to furnish students with decision-making skills relevant to purchase management.
- CO5: Upon completing this course, students will be equipped to detect and assess hospital planning challenges and
 possibilities in practical settings.

SI	Course content	Mapped modules	Hour allotted
CO1	1. Integrated Materials Management: Need, scope, advantage, concept; Materials Requirement Planning (MRP I) - definition, concept and process of MRP1, problem of MRP1 with or without lead time, bills of materials, product tree; concept of Manufacturing resource planning (MRP2); make or buy decision;	M1	6
CO2	2. Purchasing Management: Definition, Objective, Purchase system, policy and procedure (Purchasing Cycle), Types of Purchasing/Buying, JIT Purchasing, different 'R's of Purchasing; source selection, vendor development and evaluation and Rating; legal aspects of buying – Contract Act 1872, Sale of Goods Act 1930, Law of Agency. Import Substitution.	M2	8
CO3	3. Stores Management: Definition, Objective, location & layout of general stores and different Hospital Stores, standardization, Codification, stores system and procedures; stores accounting (FIFO, LIFO, WEIGHTED AVERAGE METHOD, SIMPLE AVERAGE METHOD), Codification, stock verification; disposal of surplus and scrap management – definition of disposal, obsolete and scrap, biomedical waste, types of biomedical waste, objective of disposal management, Collection, segregation, storage and transportation of biomedical waste of Hospital.	М3	10
CO4	4. Inventory Control: Definition and concept of Inventory. types of inventory, Inventory Control - definition, objectives of inventory control, types of inventory cost. Economic Ordering Quantity; inventory systems. Economic order quantity - types of inventory control systems, basic formula of EOQ, derivation of the basic formula in graphical method, buffer stock, maximum usage rate, minimum usage rate, average usage rate, problems on inventory control – calculation of EOQ, Annual Total Cost, Buffer stock, ROL etc. under simplex method. Selective Control of Materials – ABC, HML, XYZ, VED,FSN, GOLF, SDE, S-OS ANALYSIS, basic knowledge on two bin system, KANBAN	M4	12
CO5	5. Distribution management (logistics Management)-distribution of materials to various departments & auxiliary services.	M5	4
	Exceptional management needs in Healthcare Units: Mgmt. of Blood Bank, Donated Organs, Morgues, Pharmacy.		

Learning Outcome/ Skills:

Hospitals are complex organizations with intricate structures. Student will study how different departments and functions within a hospital interact, and how the organizational structure affects decision-making and efficiency.

Module Number	Content	Total Hours	% of questions	Bloom Level (applicable)	Remarks, if any
THEORY					
M1	Introduction to Integrated materials management	6	20	1,2	NA
M2	Purchase Management	8	25	1,2,3	NA
M3	Stores Management	10	20	1,2	NA
M4	Inventory Management and control	12	25	1,2,3	NA
M5	Logistics and exceptional Management of Hospital	4	10	1,2,3	NA
Total Theo	ry	40	100		
TUTORI	AL	8			
TOTAL	TOTAL				

Course Name: Environment & sustainable development BBAHM 403 (MAJOR)

Mode: Offline Credits: 4(3L+1T)

Aim of the course: Environment and Sustainable Development is to provide participants with a comprehensive understanding of the intricate relationship between environmental considerations and the pursuit of sustainable development.

Course Objectives: The course on Environment and Sustainable Development is designed with specific objectives to ensure participants gain a thorough understanding of key concepts and are equipped with practical skills.

Goals:

CO1: Provide students with a thorough understanding of key environmental concepts, challenges, and the principles of sustainable development.

CO2: Foster an interdisciplinary perspective by integrating ecological, social, and economic dimensions in the study of environmental and sustainable development issues.

CO3: Develop critical thinking skills to analyze environmental challenges, evaluate potential solutions, and make informed decisions for sustainable development.

CO4: Increase awareness of international, national, and local policies related to environmental protection and sustainable development, and understand how these policies shape decision-making.

CO5: Equip students with practical skills for the responsible management of natural resources, emphasizing sustainable practices for current and future generations.

SI	Course content	Mapped	Hours
		Module	allotted
CO1	Concept of Environment: Definition and concept of environment; Types and components of environment (Lithosphere, Atmosphere, Hydropshere, Biosphere); Scope and multidisciplinary nature of the subject; Man-environment relationships; Public awareness – Earth Summits, recent Conventions on climate change	M1	8
CO2	Environmental Education: Goals of environmental education; Environmental education at primary, secondary and tertiary level; Green politics; Concepts and importance of triple bottom line, Environmental movements – The Chipko movement, Silent Valley movement, Narmada Bachaao Andolan, Tehri Dam Conflict	M2	12
	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.		
CO3	Pollutions and control factors: 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	M3	12

	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 (muncicipal,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. Noise Pollution: Sources, effects, standards & control		
CO4	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.	M4	5
CO5	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), Club of Rome.	M5	3

Learning Outcome/ Skills:

- 1. **Foundational Knowledge:** Demonstrate a solid understanding of key concepts, principles, and theories related to environmental science and sustainable development.
- 2. **Interdisciplinary Perspective:** Recognize and appreciate the interconnectedness of environmental issues across various disciplines, including ecology, economics, sociology, and policy.
- 3. **Critical Thinking and Analysis:** Develop critical thinking skills to analyze complex environmental problems, evaluate potential solutions, and consider ethical implications.
- 4. **Policy Awareness:** Understand local, national, and global environmental policies and regulations, and assess their impact on sustainable development.
- 5. **Sustainable Practices:** Apply knowledge of sustainable practices to personal and professional decision-making, considering environmental, social, and economic dimensions.
- 6. **Climate Change Literacy:** Understand the science of climate change, its causes, impacts, and potential mitigation and adaptation strategies.
- 7. **Biodiversity Conservation:** Appreciate the importance of biodiversity for ecosystem health and understand strategies for conservation.

- 8. **Community Engagement:** Develop skills for effective community engagement, recognizing the importance of involving local communities in sustainable development initiatives.
- 9. **Global Citizenship:** Cultivate a sense of global citizenship and an awareness of one's role in contributing to global sustainability goals.
- 10. **Advocacy and Communication:** Effectively communicate environmental issues, advocate for sustainable practices, and engage with diverse audiences.

Module Number	Content	Total Hours	% of questions	Bloom Level (applicable)	Remarks, if any
M1	Concept of Environment	8	30%	1,2	NA
M2	Environmental Education	12	30%	1,2,3	NA
M3	Pollutions and control factors	12	20%	1,2,3	NA
M4	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.	5	10%	1,2	NA
M5	Brief outline on Elements of Ecology	3	10%	2,3	NA
Total Theory		40	100		
Tutorial		8			l
Total		48			