SEM - IV

SI.	Subject	Code	Subject Name		Credits	5	To tal
	Туре			L	Т	P	Credits
1.	CC	BBA(HM)	Public Health and Health Care	5	1		6
		401	Planning				
2.		BBA (HM)	Support Utility Systems-I	5	1		6
		402					
3.		BBA(HM)	Hospital Inventory Management	5	1		6
		403					
4.	GE		Any one course from GE basket				6
5.	SEC	BBA(HM)	Basic Healthcare Analytics	2			2
		405					
Total Credit					26		

Paper: Public Health and Health Care Planning Code: BBA (HM)-401 Contacts Hours/Week:5 L + 1 T Credits: 6 CO :

- 1) Students will understand the public health hazards.
- 2) Students will understand the epidemiology of disease.
- 3) Students will know various healthcare programmes operated by governments.
- 4) Students will learn various international health programmes.

Module	Topics	Hours
I	Definition, Meaning of Public Health, Approaches of Public Health, Community diagnosis and need assessment Epidemiological basis for healthcare management, Right to health, Responsibilities of Health, Community Participation.	12
II	Health Planning, National Health Policy, 2002 (overview), National Health Policy, 2017, National Population Policy.	12
III	National Health Programmes (National Dengue control programme, National Leprosy Eradication Control Programme, National Framework for Malaria Elimination (2016-2030) programme, NACP-IV(2012-2017), RNTCP, Universal Immunisation Programme including Indradhanush , RCH Phase II,Vision2020,National Health Mission, National Mental Health Programme, National Family Planning Programme.	12
IV	Universal Immunisation Programme including Indradhanush ,RCH Phase II,Vision2020,National Health Mission, National Mental Health Programme, National Family Planning Programme.	12
V	Epidemiological basis for healthcare management, Right to health, Responsibilities of Health, Community Participation.	12
VI	Health Manpower Planning and Distribution, Health Service Research.	12

Suggested Readings:

- 1. Community Medicine, AH Suryakantha JAYPEE
- 2. Preventive and Social Medicine, K.Park- Bhanot
- Healthcare Management and Administration, S.L Goel— Deep and Deep Publication Private Limited
- 4. Hospital Administration, CM Francis & Mario C D'Souza-JAYPEE
- 5. The Hospital Administrator, MA George-JAYPEE
- 6. Management of Hospitals— Goel & Kumar-Deep & Deep.

Paper: Support Utility and Clinical Services I Code: BBA (HM)-402 Contacts Hours/Week:5 L + 1 T Credits: 6 CO:

- 1) Hospital support system studying the allows us the ability to optimize and digitize all the processes within the hospitals.
- 2) Studying the support services to improve customer service, reduce process costs
- 3) Helps to search the search of medical records, bills, patients, doctors, etc thus, having a database of each module implemented in the hospital.
- 4) To know the different departments that are there in the hospital there work flow structure etc.
- 5) To know how the organizational hierarchy is important to properly manage the departments using the administrative point of view.

Module	Торіс	
Ι	Meaning of support and utility services & their importance	12
П	Clinical services: Functions, location, work flow, physical facilities, design & space requirement, staffing, equipment, managerial issues of the following departments –Operation Theatre Outpatient Department Emergency Department	12
Ш	Support services: Functions, location, workflow, physical facilities, design & space requirement, staffing, equipment, managerial issues of the following departments -Radiology: Diagnostic and therapeutic, Nuclear Medicine Laboratory, CSSD	12
IV	Utility services: Functions, location, work flow, physical facilities, design & space requirement, staffing, equipment, managerial issues of the following departments - Laundry House-keeping Dietary service, Security services.	
V	Hospital Infection Control: its scope, manpower planning, utility, future direction.	12

Suggested Readings:

- 1. Community Medicine, AH Suryakantha—JAYPEE
- 2. Preventive and Social Medicine, K.Park-Bhanot
- 3. Healthcare Management and Administration, S.L Goel— Deep and Deep publication Private Limited.
- 4. Hospital Administration, CM Francis & Mario C D'Souza---JAYPEE
- 5. The Hospital Administrator, MA George ---JAYPEE
- 6. Management of Hospitals— Goel & Kumar.(Deep &Deep)

Hospital Inventory Management BBA (HM)-403 Contacts Hours/Week: 5L + 1 T Credits: 6 CO :

- 1. Comprehend the dynamics of inventory management's principles, concepts, and techniques as they relate to the entire supply chain.
- 2. To access and evaluate customer demand, distribution, and product transformation processes.
- 3. Understand various devices and approaches used by organizations to obtain the right quantities of stock or inventory,
- 4. Familiarize themselves with inventory management practices.

Module	Topics			
Ι	Inventory control: Overview, objectives, types of inventory control-			
	LIFO, FIFO, ABC/VED/SDE analysis, lead time, buffer stock-			
	reorder level, economic order quantity, types of inventory control			
	systems.			
II	Basic knowledge of hospital stores management: Location &	12		
	layout- standardization, codification & classification of			
	materials, materials accounting & physical distribution, store			
	documentation- condemnation & disposal of scrap, surplus &			
	obsolete materials, types of stores in hospital, preservation of			
	stores.			
	Strategies for hospital equipment planning and selection,	12		
IV	Hospital equipment utilization and distribution management.			
	Logistics Management -distribution of material stored in various	12		
V	departments & auxiliary services.			

Suggested Readings:

- 1. Production and Operations Management ,L.C Jhamp—Everest
- 2. Production and Materials Management, K. Sridhara Bhatt-Himalaya
- 3. Hospital Stores Management: an Integral Approach, Shakti Gupta-JAYPEE
- 4. Handbook of Healthcare Quality and Patient Safety, Girdhar J Gyani, JAYPEE

Paper: Basic Healthcare Analytics

Code: BBA (HM)-405 Credits: 2L

Course Objective:

- 1. Explain how to use health data to improve quality of an organization.
- 2. Describe the process of health care data analytics and the tools used in each step.
- **3.** Explain the general functions, purposes, and benefits of analytics in various healthcare and medical settings.
- 4. Familiarization with basic analytical techniques and visualization tools.

Module	Topic/Module	Hour
Ι	Health Care Data as an Organizational Asset: data information, knowledge	4
	and wisdom hierarchy, data information, knowledge and wisdom hierarchy,	
	sources of health care data, challenges HCO's face when using data for	
	quality and performance improvement, organizational approach for effective	
	use of data analytics, role of data governance.	
II	Working with Data: information value chain, importance of data context and	4
	relevance to business processes, common data types, basic statistical terms,	
	common patterns or distributions in statistics, charts for graphical	
	representations (using any software package(s)).	
III	Introduction to Data Analytics Tools and Techniques for Health Care: Data	4
	analytics terms, process steps of data analytics, role of the data analyst,	
	analyze and interpret healthcare data effectively, key data warehouse	
	concepts, basic introduction enterprise data architecture as seen in health	
	care organizations.	
IV.	Introduction to Data Analysis Techniques: Prediction: Regression,	8
	Classification: Logistics Regression, KNN, Naïve Bayes (using any	
	software package(s)), application of these techniques on datasets collected	
	from health care units.	

Suggested Readings:

- 1. Reddy & Aggarwal, Healthcare Data Analytics, Chapman and Hall.
- 2. Vikas Kumar, Healthcare Analytics Made Simple: Techniques in healthcare computing using machine learning and Python, Packt Publishing.
- 3. Maheshwari , Data Analytics, McGraw Hill India.
- 4. Mohammed Alfan, Data Analytics, Skills to Succeed.