## SEM-5

SI.	Subject	Code	Subject Name	Credits		Total	
	Туре			L	Τ	Р	Credits
1.	CC	BBA (HM) 501	Epidemiological Transitions in Healthcare	5	1		6
2.		BBA (HM) 502	Support and Utility Services-II	5	1		6
3.	DSE 1	BBA(HM) 503 (A)	Financial Management and Risk Analysis	5	1		6
	(Any one)	BBA(HM) 503 (B)	Concepts of Digital Health				
4.	DSE 2 ( Any One)	BBA (HM) 594 (A/B) *	Minor Project/ Internship		1	5	6
Total Credit				24			

\*\* (Students have to engage in a full length project with a pre-specified Internal Guide (faculty member) throughout the semester). Industry collaboration is highly encouraged wherever possible.

(At least two-three times progress needs to be checked and evaluation needs to be done through PCA.) It will followed by a report submission and viva.)

Paper Name: Epidemiological Transitions in Healthcare Paper Code: BBA (HM) – 501 Total Credit: 6 Total hours of lectures: 60 hours

## **Course Outcome:**

After the completion of this course the students will be able to

- 1. Illustrate the knowledge of Epidemiology and Disease.
- 2. Outline the basic concepts of epidemiology its methods etc.
- 3. Demonstrate various types of dynamics of disease causation ,transmission and prevention
- 4. Examine various roles of hospitals in prevention of Epidemics.

Sl.	Topic/Module	Hour
1.	Module 1: Definition, concept, use of epidemiology,	12
	Concept of disease, Concept of disease causation, Natural History of	
	disease,	
	Ice berg phenomenon of disease	
	Mode of Intervention	
2.	Module 2 Infectious Disease Epidemiology (Epidemic, Endemic,	10
	Pandemic, Sporadic) Basic Measurements of Epidemiology (Mortality,	
	Morbidity)	
	Epidemiological Methods: Observational, Analytical, Experimental	
	(Basic knowledge only)	
	Investigation of an Epidemic	
3.	Module 3: Dynamics of disease transmission Control	10
	Prevention of disease	
	Immunizing agents its uses and roles	
4.	Module 4: Epidemiology of Communicable diseases	10

	Influenza, Encephalitis, Dengue, Malaria, Food Poisoning, Tetanus, HIV/AIDS, SARS COV 19	
5.	Module 5 : Epidemiology of Non communicable diseases	10
	Diabetes, Obesity, Cancer, Blindness ,Hyper tension	
6.	Module 6 : Screening and Surveys	8
	Investigation of an Epidemic and Role of hospital in the epidemic control	

# **Suggested Readings:**

1.: K.Park—Bhanot Data Mining Concepts & Techniques, Molgan Kaufmann Series.

2. Soumendra Mohanty: Analytics in Practice, Tata McGraw-Hill Education Private Limited.

3. Arun Pujari : Data Mining : Prentice Hall India.

4. Satish Kumar : Neural Network : Tata Mcgraw Hill.

5. Nitin R Patel & Peter C Bruce : Data Mining for Business Intelligence, Wiley, India.

6. Han & Kamber: Data Mining Concepts and Techniques, Morgan Kaufman.

Paper Name : Support and Utility Services-II Paper Code: BBA (HM) – 502 Total Credit: 6 Total hours of lectures: 60 hours

## **Course Outcome:**

After the completion of this course the students will be able to

- 1) Understand the support system studying that allows us the ability to optimize and digitize all the processes within the hospitals.
- 2) Relate the support services to improve customer service, reduce process costs
- 3) Demonstrate the different departments that are there in the hospital there work flow structure etc.
- 4) Envisage to know how the organizational hierarchy is important to properly manage the departments using the administrative point of view.

Sl.	Topic/Module	Hour	
1.	Module 1: Clinical services: Functions, location, work flow, physical		
	facilities, design & space requirement,		
	staffing, equipment, managerial issues of the following departments -		
	Ward management Intensive		
	care unit Nursing Services		
2.	Module 2: Support services: Functions, location, work flow, physical	12	
	facilities, design & space requirement,		
	staffing, equipment, managerial issues of the following departments -		
	Blood Bank Pharmacy		
	Physical medicine and rehabilitation		
3.	Module 3: Utility services: Functions, location, work flow, physical	12	
	facilities, design & space requirement,		

	W.C.I 2020-21		
	staffing, equipment, managerial issues of the following departments -		
	Transport service		
	Maintenance management Mortuary		
4.	Module 4: Disaster Management-Types ,Disaster Preparedness Plan,	12	
	Disaster cycle, Triage Fire Hazards and		
	Fire Manual Guideline-Elements of Fire-Fire Hazard-Cause of Hospital Fire-		
	Fire points and		
	Escape route		
5.	Module 5: Hospital waste management (including Biomedical Waste	12	
	Management Act, 1998)		
	Challenges and Opportunities for Hospitals in India regarding		
	Biomedical waste management.		

## **Suggested Readings:**

- 1. Hospital facilities planning & management, GD Kunders-TMH
- 2. Principles of hospital administration & planning, BM Shakharkar-JAYPEE
- 3. Hospital administration, DC Joshi & Mamta Joshi-JAYPEE
- 4. Essentials for Hospital support services and physical Infrastructure, Madhuri Sharma---JAYPEE
- 5. The hospital administrator, MA George---JAYPEE
- 6. Hospitals and Nursing homes planning, organizations and management, Syed Amin
- Tabish—
- JAYPEE
- 7. Hospital Administration, CM Francis & Mario C desouza---JAYPEE

## MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB Syllabus of BBA in Hospital Management (Effective for 2020-2021 Admission Session) Choice Based Credit System 140 Credit (3-Year UG) MAKAUT Framework w.e.f 2020-21 Paper Name: Financial Management and Risk Analysis

Paper Code: BBA (HM) 503 A

#### Total Credit: 6

#### Total hours of lectures: 60 hours

#### **Course Outcome:**

After completion of the course, the students will be able to

- 1. Outline conceptual framework on Finance Functions and objectives
- 2. Construct corporate final accounts and cash flow statements in the business growth model
- 3. Build financing and investment decisions considering discounting and nondiscounting factors
- 4. Explain the importance of working capital management and risk capital management.

SI.	Topic/Module	Hours
1.	Module 1	5
	Introduction: Concepts, Nature, Scope, Function and Objectives of Financial	
	Management, Time Value of Money, Risk and Return.	
2.	Module 2	10
	Analysis and Interpretation of Corporate Final Accounts: Preparation of Cash	
	Flow Statement as per Accounting Standard and its Analysis	
3.	Module 3	15
	Financing Decision: Capital structure, cost of capital and valuation Designing capital	
	structure. Leverage Analysis: Developing the Concept of Leverage in Finance.	
	Computation and inferences of Degree of Operating Leverage, Financial Leverage	
	and Combined Leverage.	
4.	Module 4	15
	Investment Decisions: Analysis of Risk and Uncertainty. Concept and Computation	
	of Time Value of Money, DCF and Non DCF methods of Investment Appraisal.	
	Project selection on the basis of Investment Decisions. Valuating Investment	
	Proposals for Decision Making. Capital Rationing	
5.	Module 5	8
	Management of Working Capital: Concepts, components, Determinants and need	

	of Working Capital. Computation of Working Capital for a Compa	nny.
6.	Module 6	7
	Risk Management: Option valuation, Derivatives: Managing fina	ncial Risk

## **Suggested Readings:**

- Khan, M. Y., & Jain, P. K. Financial Management: Text, Problems and Cases. McGraw-Hill Education.
- 2. IM Pandey. Financial Management- By Pearson
- 3. Chandra, P. Financial management. Tata McGraw-Hill Education.
- 4. Bhalla, V. K. Financial management. S. Chand Publishing.
- 5. Banerjee, B. Fundamentals of financial management. PHI Learning Pvt. Ltd..
- 6. Brigham, E. F., & Ehrhardt, M. C. (2019). *Financial management: Theory & practice*. Cengage Learning.

Paper Code: BBA (HM) - 503 B

#### Total Credit: 6

#### Total hours of lectures: 60 hours

#### **Course Outcome:**

After the completion of this course the students will be able to

- 1. Explain the basics and components of Digital Healthcare and the opportunities and challenges for such services.
- 2. Describe the components of the existing healthcare delivery system in India.
- 3. Enumerate the different roles that the personnel will play for delivery of digital healthcare services.
- 4. Identify examples of existing digital healthcare and telemedicine technologies and services in India and the gaps.

Sl.	Topic/Module	Hour
1.	Module 1: Introduction to Telemedicine and Digital Health	12
	Telemedicine: Definition, Need of telemedicine, Evolution of	
	Telemedicine, factors contributing the	
	development of Telemedicine, the technologies that have contributed	
	to advances in Telemedicine,	
	Components of Telemedicine, the skillsets essential for Telemedicine.	
2.	Module 2: Digital Health: Definition and components of Digital	10
	Health	
3.	Module 3: Digitalization of Healthcare	10
	Process mapping and the steps involved in Digital Health.	
	Technologies for Digital Health	
4.	Module 4: Application of Digital Health Interventions to improve	10
	health outcomes and removing inequities	
	in healthcare delivery	
	Healthcare system in India. Models of healthcare delivery:	
	Governmental, Not-for-Profit, Corporate	

5.	Module 5: Challenges and Opportunities for Digital Health in India	12
	Ways to empower people by enabling people-centric digital health	
	systems.	
	Accessibility to Digital Health and Telemedicine	

# **Suggested Reading:**

Textbooks:

1. Digital Health: Scaling Healthcare to the World Editors: Homero Rivas Katarzyna Wac.1st Edition.

SpringerPaperback ISBN: 978-3-319-87081-6eBook ISBN: 978-3-319-61446-5. 2018. DOI: https://doi.org/10.1007/978-3-319-61446-5

2. Digital Health: Mobile and Wearable Devices for Participatory Health Applications Editors: Shabbir

Syed-Abdul Xinxin Zhu Luis Fernandez-Luque 1st Edition. Elsevier Paperback ISBN: 9780128200773

eBook ISBN: 9780128200780. 2020

3. World Health Organization, Classification of Digital Health Interventions v1.0, 2018, Available from:

https://apps.who.int/iris/bitstream/handle/10665/260480/WHO-RHR-18.06-eng.pdf

4. Sarbadhikari SN, Digital Health in India – as envisaged by the National Health Policy (2017), Guest

Editorial, BLDE University Journal of Health Sciences, 2019, 4: 1-6

- 5. The Digital Health Revolution Book by Kevin Pereau 2019
- 6. Digital Marketing Strategy: An Integrated Approach to Online Marketing Simon Kingsnorth

Paper Name: Minor Project or Internship

Paper Code: BBA (HM) – 594A/B

Total Credit: 6

Total hours of lectures: 60 hours