

#### UNIVERSITY OF CALICUT

#### <u>Abstract</u>

General and Academic IV-Faculty of Humanities - Syllabus of the Multi Disciplinary Courses in Library and Information Science in tune with CUFYUGP regulations 2024 with effect from 2024 admission onwards -Approved -By exercising the powers of the Academic Council -Implemented -Orders issued.

#### G & A - IV - B

U.O.No. 18102/2024/Admn

Dated, Calicut University.P.O, 04.12.2024

*Read:*-1.U.O.No. 3103/2024/Admn dated 22.02.2024.

2.U.O.No. 10062/2024/Admn dated 26.06.2024.

3.Item No 2 of the minutes of the meeting of the Board of Studies in Library and Information Science held on 13.11.2024.

4. Remarks of the Dean, Faculty of Humanities dated 28.11.2024.

#### <u>ORDER</u>

- The Regulations of the Calicut University Four Year UG Programmes (CUFYUGP Regulations 2024) for Affiliated Colleges, was implemented with effect from 2024 admission onwards, vide paper read as (1) above and the same has been modified vide paper read as (2) above.
- 2. The meeting of the Board of Studies in Library and Information Science SB held on 13.11.2024, vide paper read (3) above, has approved the syllabus of the following Multi Disciplinary Courses in Library and Information Science in tune with CUFYUGP Regulations 2024 w.e.f 2024 admission onwards.
  - LIS1FM105 Information Resources and Learning Platforms
  - LIS2FM106 Library Technologies
- 3. The Dean Faculty of Humanities, vide paper read (4) above, has approved the above recommendation of the Board of Studies in Library and Information Science held on 13.11.2024.
- 4. Considering the urgency the Vice Chancellor has approved the item no 2 of the minutes of the meeting of the Board of Studies in Library and Information Science SB held on 13.11.2024, by exercising the powers of the Academic Council conferred under section 10.13 of the Calicut University Act 1975 and accorded sanction to implement the Multi Disciplinary Courses in Library and Information Science w.e.f 2024 admission onwards.
- 5. The syllabus of the following Multi Disciplinary Courses in Library and Information Science in tune with CUFYUGP Regulations 2024 are therefore implemented w.e.f 2024 admission

onwards.

- LIS1FM105 Information Resources and Learning Platforms
- LIS2FM106 Library Technologies
- 6. Orders are issued accordingly.( Syllabus appended)

Ajayakumar T.K

Assistant Registrar

То

The Principals of all Affiliated Colleges

Copy to: PS to VC/PA to PVC/ PA to Registrar/PA to CE/JCE I/JCE II/JCE VIII/DoA/EX and EG Sections/GA I F/CHMK Library/Information Centres, Suvega/SF/DF/FC

Forwarded / By Order

Section Officer



# CALICUT UNIVERSITY FOUR-YEAR UNDERGRADUATE PROGRAMME (CUFYUGP)

MULTI-DISCIPLINARY COURSE

Semester 1

# LIS1FM105 Information Resources and Learning Platforms

## **Course Description**

This course equips students with essential skills for identifying information resources, evaluating them, and ethically use information to achieve academic and research objectives. Emphasizing the critical role of library and information literacy in modern academia, the course addresses the evolving needs of information seekers.

Programme	Library and Information Science								
Course Code	LIS1FM105	LIS1FM105							
Course Title	Information R	nformation Resources and Learning Platforms							
Type of Course	Multi-Disciplina	Aulti-Disciplinary Course							
Semester	1								
Academic Level	100-19	100-199							
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours				
	3	3	Nil	-	45				

Learning Approach (Hours/ Week)			Mark Distribution			Distributio n of ESE (Hours)
Lecture	Practical	Tutorial	CE	ESE	Total	
45 Hours	-	-	25	50	75	3

# COURSE OUTCOMES (CO):

со	CO Statement	Cognitive Level*	Knowledge Category#	Evaluation Tools used			
CO1	Explain key concepts related to libraries and the process of information management	U	С	Written Exam, Assignment			
CO2	To give an understanding of the core functions of library operations like classification, cataloguing and to know the different access points of information.	An	Ρ	Practical Tests, Assignment			
CO3	Identify and locate appropriate information sources such as books, journals, and e-resources for academic work.	E	Р	Case Studies, Group			
CO4	Determine credibility, relevance, and suitability of information sources using criteria such as authority, currency, audience, etc.	Ар	Р	Practical Tests, Case study			
CO5	To provide an awareness about different e-learning platforms and academically useful databases.	Ар	Р	Practical Tests			
*Remember(R),Understand(U),Apply(Ap),Analyse(An),Evaluate(E), Create (C)							
# Factual Knowledge (F) Conceptual Knowledge (C) Procedural Knowledge (P) Meta cognitive Knowledge (M)							

# Syllabus of Multi-Disciplinary Course LIS1FM105 Information Resources and Learning Platforms

Module	Unit	Content	Hrs 45	Marks 50			
	Informat	ion and Society		10			
	1.1	Data, Information, Knowledge, Wisdom Knowledge Society, Knowledge Economy Need for Knowledge Organization	2				
Module -1	1.2	Data in the contemporary society Big Data, Open Data, Open Access, Open Science	2				
	1.3	Information Transfer Cycle and Generation	1				
	1.4	Information Storage and Retrieval	2				
	1.5	Information Search Techniques	2				
		Total	9				
	Knowledge Organization						
	2.1	Library: conceptual change Types of libraries: their distinguishing features and functions	2				
	2.2	Library Classification: Concept, definition, need and functions. Different Classification schemes.	2				
Module -II	2.3	Knowledge organization in DDC Class Number, Book Number, Collection Number and Call Number.	2				
	2.4	Shelf Arrangement	1				
	2.5	Library Catalogue: Concept, definition and functions, OPAC, Web-OPAC	2				
		Total	9				
	Information Resources						
	3.1	Documentary Sources Primary, Secondary and Tertiary sources	1				
Module -III	3.2	Reference Sources: Dictionary, Thesaurus, Encyclopedia, Yearbook, Biographical, Geographical and Statistical Sources	2				

		E-resources: E-books, E-journals,		
	3.3	Databases, ETDs, E-zines:	2	
		Subject gateways	-	
		oubjeet gateways		
	3.4	Non Documentary sources	1	
	3.5	Evaluation of Information Sources Misinformation, Disinformation, Fake news Identification and precautions; Fact checking in media.	2	
		Total	8	
	E-Learn	ing Platforms		10
	4.1	Learning Management Systems: Moodle	2	
	4.2	E-Learning platforms: SWAYAM, NPTEL, Coursera, EDX, e-PGPathshala.	2	
	4.3	Databases: Scopus, Web of Science, PubMed, ERIC, JSTOR.	2	
Module -IV	4.4	INFLIBNET Services: N-LIST, Shodhganga, Shodhgangothri, E-ShodhSindhu	2	
	4.5	National Digital Library of India (NDLI)	1	
		Total	9	
Module - V		Explore to the scope to practical applications of the information resources and other applications	10	

#### References

- 1. Baker, D., & Evans, W. (2011). Libraries and society: role, responsibility and future in an age of change. Chandos Publishing.
- 2. Bates, A. W. & Poole, G. (2003). Effective teaching with technology in higher education: Foundations for success. Indianapolis, IN: Jossey-Bass.
- 3. Bawden, David and Robinson, Lyn. (2012) Introduction to Information Science. London: Facet Publishing
- 4. Chan, L. M. (2007). Cataloging and classification: An introduction (3<sup>rd</sup> ed.). New York: Scarecrow Press.
- 5. Foulonneau, M., & Riley, J. (2014). Metadata for Digital Resources: Implementation, Systems Design and Interoperability. Elsevier Science.
- 6. Gurdev Singh. (2013), Information Sources, Services and Systems. New Delhi: PHI Learning.
- 7. Penny, D., Beard, J., & Holland, M. (eds.). (2017). University Libraries and digital learning environments. Routledge.
- 8. Ranganathan, S. R. (2006). Prolegomena to library classification. Sarada Ranganathan Endowment.
- 9. Roblyer, M.D. (2006). Integrating educational technology into teaching. (4th ed.). Upper Saddle River, NJ: Pearson Education, Merrill.
- 10. Satija, M. P. (2013). The theory and practice of the Dewey Decimal Classification system. Chandos Publication.

# Mapping of COs with PSO and POs:

	PS O 1	PS O 2	PS O 3	PSO4	P S O 5	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1						3	-	1	-	-	-	2
CO 2						2	-	2	1	-	-	3
CO 3						-	-	2	-	1	3	3
CO 4						-	-	2	-	-	-	2
CO5						1	-	1	3	-	-	3

## **Correlation Levels:**

Level	Correlation
-	Nil
1	Slightly/Low
2	Moderate/Medium
3	Substantial/High

# **Assessment Rubrics**

Final Exam	50 Marks
Total	: 25 Marks
Open-ended module	: 5
Assignment	: 4
Seminar/Viva/Quiz	: 6
Test paper / Mid-semester exam	: 10

## LIS1FM105 Information Resources and Learning Platforms

Time: 1.5 hrs

Maximum Marks : 50

#### PART A - Answer all questions. Each question carries 2 marks.

(Ceiling 16 marks)

- 1. Knowledge organization
- 2. Non-documentary sources of information
- 3. WebOPAC
- 4. Secondary sources of information
- 5. NDLI
- 6. UGC-CARE list
- 7. ETD
- 8. Database
- 9. Boolean Operators
- 10. Call number

#### PART B - Answer all questions. Each question carries 6 marks.

(Ceiling 24 marks)

11. Explain the different information search techniques

12. Describe the major differences between data, information, and knowledge

13. Describe the characteristics of the different types of libraries

14. Discuss the factors to be considered while evaluating an information source

15. Briefly discuss about the databases provided by INFLIBNET center to the higher education sector.

#### PART C - Answer any One question. Each question carries 10 marks.

 $(1 \times 10 = 10)$ 

Define e-resources. Describe the different types of e-resources in detail.
Define e-learning. Evaluate the significance of MOOC platforms in higher education.



# CALICUT UNIVERSITY FOUR-YEAR UNDERGRADUATE PROGRAMME (CUFYUGP)

MULTI-DISCIPLINARY COURSE Semester 2

# LIS2FM106 Library Technologies

#### Course Description

This course provides a comprehensive understanding of modern library automation systems, the design and implementation of digital libraries, institutional repositories and the software for library automation (e.g.Koha). Additionally, the course delves into software tools for information management, including reference management systems (e.g., Zotero/ Mendeley), plagiarism detection tools (e.g., Turnitin/DrillBit), and digital preservation systems (e.g., DSpace). By the end of the course, students will attain practical skills in using and managing library automation systems and also in developing digital libraries which enable them for performing their roles in modern information centers and libraries.

Programme	Library and Information Science								
Course Code	LIS2FM106	LIS2FM106							
Course Title	Library Tech	Library Technologies							
Type of Course	Multi-Disciplina	Aulti-Disciplinary Course							
Semester	2								
Academic Level	100-199								
Course Details	Credit	Lecture per week	Tutorial per week	Practical per week	Total Hours				
	3	3	-	-	45				

Learning Ap	Mark	s Distrib	Duration of ESE			
Lecture	Practical	Tutorial	CE	ESE	Total	(nours)
45 Hours	-	-	25	50	75	3

# Course Outcomes (CO):

со	CO Statement	Cognitive Level*	Knowledge Category#	Evaluation Tools used				
CO1	Attain a basic understanding of library automation, digital libraries their design, and organization.	U	С	Written Exam, Assignment				
CO2	Apply principles of digital library creation, including digitization and metadata development.	Ар	Р	Practical Tests, Assignment				
CO3	Familiarize software's used for information management, particularly Koha and DSpace	Ар	Р	Case Studies, Group				
CO4	Basic understanding about the role of emerging technologies in modern libraries	U	F	Practical Tests				
CO5	Develop academic content effectively, including assignments, articles, and project proposals, using appropriate referencing styles and software like Zotero / Mendeley, Turnitin/DrillBit.	С	Ρ	Practical Tests				
*Rei	*Remember(R),Understand(U),Apply(Ap),Analyse(An),Evaluate(E), Create (C)							
# Factual Knowledge (F) Conceptual Knowledge (C) Procedural Knowledge (P) Meta cognitive Knowledge (M)								

# Syllabus of Multi-Disciplinary Course LIS2FM106 Library Technologies

Module	Unit	Content	Hrs 45	Marks 50		
	Library Auto	omation		15		
	1.1 I	Libraries and their role in knowledge organization	2			
Module -1	1.2 á	_ibrary automation: Need for library automation, planning and mplementation.	2			
	1.3	Automated library housekeeping operations	1			
	1.4 I	Library automation software - Koha	2			
	1.5	Adoption of RFID in library automation	2			
		9				
	Digital Library					
	2.1 <sup>[</sup>	Digital Library: definition, scope and characteristics.	1			
	2.2 [ i	Design and organization of digital ibraries: Architecture, user interfaces and pre- requisites.	2			
Module -II	2.3	Digitization – Scanning, OCR and Conversion to PDF.	2			
	2.4 0	Digital library creation: Metadata development, digital preservation and conservation - archiving, security and migration issues.	2			
	2.5	Greenstone Digital Library Software (GSDL)	2			
		Total	9			

		10		
	3.1	Institutional repositories-concepts, characteristics and purpose	1	
Module-III	3.2	Design and architecture of institutional repositories	1	
	3.3	Contents and standards of institutional repositories- Metadata	2	
	3.4	Institutional repository software – DSpace	2	
	3.5	Research Data Management (RDM)	2	
		8		
	Emerging		10	
Module-IV	4.1	Artificial Intelligence and Machine Learning in Libraries	2	
	4.2	Internet of Things (IoT) in libraries	2	
	4.3	Augmented Reality and Virtual Reality in libraries	2	
	4.4	Cloud computing in libraries	2	
	4.5	Smart Libraries	1	
	Total			
Medicy	Demonstrate practical skills required for software based Information management			
Module-V Open ended Module	Koha, GSDL, DSpace, Zotero, Mendeley, Turnitin, DrillBit			

#### References

- 1. Andrew, C. (2010). Introduction to digital library management. London: Facet Publishing.
- 2. Bilal, D., & Breeding, M. (2014). Library automation: Core concepts and practical systems analysis (3rd ed.). Libraries Unlimited Inc.
- 3. Chowdhury, G. G., & Schubert, F. (2018). Digital libraries and information access: Research perspectives. Facet Publishing.
- 4. Dickson, G. W., & DeSanctis, G. (2000). Information technology and the future enterprise: New models for managers. Prentice Hall.
- 5. Hennig, N. (2017). Keeping up with emerging technologies: Best practices for information professionals. Santa Barbara, CA: Libraries Unlimited.
- 6. Hussain, A., & Fatima , N. (2017). Emerging Trends in Information Technology in Modern Libraries. Manakin Press.
- 7. Joiner, I. A. (2018). Emerging library technologies: It's not just for Geeks. Chandos Publishing.
- 8. Kamal, R. (2022). Internet of things. McGraw Hill.
- 9. Kumar, R., & Singh, A. (2019). Plagiarism detection software: Trends and practices. Springer India.
- 10. Mishra, V. K. (2016). Basics of library automation, Koha library management software and data migration: Challenges with case studies. Ess Ess Publications.
- 11. Pandey, R., & Pandey, P. (2017). Digital library development: Issues and challenges. Ess Ess Publications.
- 12. Surianarayanan, C., & Chelliah, P. R. (2019). Essentials of cloud computing: A holistic perspective (1st ed.). Springer Nature Switzerland AG.
- 13. Tripathi, M. (2015). Reference management software: A practical guide. Cyber Tech Publications.
- 14. Williams, Brian K., & Sawyer, Stacey C. (2014). Using information technology: A practical introduction to computers & communications (11th ed.). McGraw-Hill.
- 15. Witten, I.H., & Bainbridge, D. (2005). How to build a digital library. Amsterdam: Morgan Kaufmann.

# Mapping of COs with POs

	PS O 1	PS O 2	PS O 3	PSO4	P S O 5	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO 1						2	-	-	3	-	-	2
CO 2						-	-	-	3	3	2	2
CO 3						-	-	-	3	1	3	3
CO 4						1	-	3	3	-	-	3
CO 5		-				-	1	2	3	-	-	3

# **Correlation Levels:**

Level	Correlation			
-	Nil			
1	Slightly/Low			
2	Moderate/Medium			
3	Substantial/High			

## **Assessment Rubrics**

Final Exam	50 Marks
Total	: 25 Marks
Open-ended module	: 5
Assignment	: 4
Seminar/Viva/Quiz	: 6
Test paper / Mid-semester exam	: 10

Semester 2

# LIS2FM106 Library Technologies

Model Question Paper

Time : 1.5 hrs

Maximum Marks : 50

## PART A - Answer all questions. Each question carries 2 marks.

(Ceiling 16 marks)

- 1. Library automation
- 2. Copy Cataloguing
- 3. Integrated Library Management Software
- 4. Born digital documents
- 5. Institutional Repository
- 6. Open Access
- 7. Dublin Core
- 8. RFID
- 9. Cloud computing
- 10. MARC

# Part B: Answer all questions. Each question carries 6 marks.

(Ceiling 24 marks)

- 11. Describe the importance of automated library housekeeping operations
- 12. Explain the concept of Research Data Management (RDM)
- 13. Describe the process of content development in digital libraries
- 14. Discuss the ethical issues related to rights management in digital libraries.
- 15. Explain the role of metadata in digital libraries

# PART C - Answer any One Question. Each question carries 10 marks.

 $(1 \times 10 = 10)$ 

- 16. Discuss the design and organization of digital libraries, focusing on user interfaces and standards.
- 17. Discuss the adoption of emerging artificial intelligence based technologies in libraries