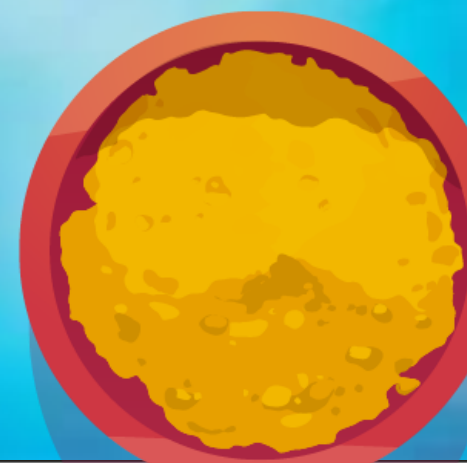
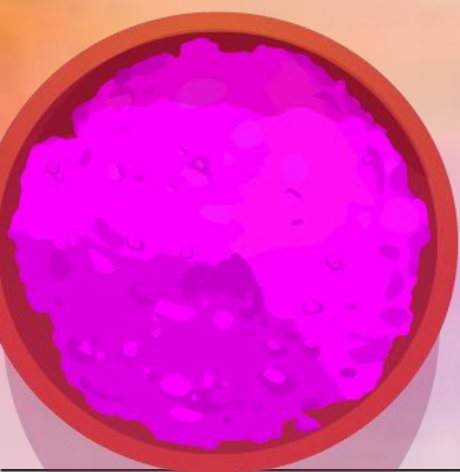




Lingaya's Lalita Devi Institute of Management and Sciences

Department of Computer Application

**Newsletter
March 2025**



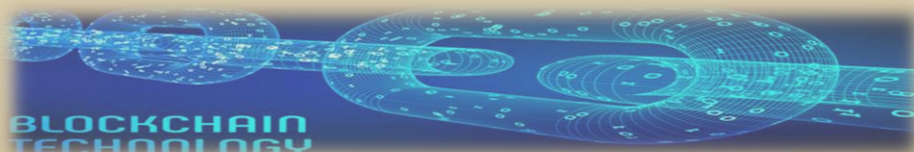


Pushpendra Pal
BCA(AI)
4th semester

Blockchain



A blockchain is a distributed ledger with growing lists of records (*blocks*) that are securely linked together via cryptographic hashes. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a Merkle tree, where data nodes are represented by leaves). Since each block contains information about the previous block, they effectively form a *chain* (compare linked list data structure), with each additional block linking to the ones before it. Consequently, blockchain transactions are resistant to alteration because, once recorded, the data in any given block cannot be changed retroactively without altering all subsequent blocks and obtaining network consensus to accept these changes.



Harsh Gupta
BCA(AI)
4th semester

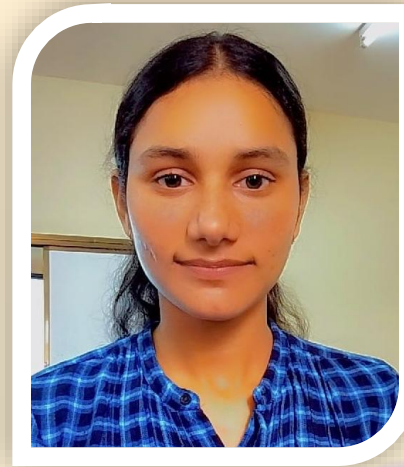
Augmented Reality (AR) and Virtual Reality (VR)

Augmented Reality (AR) and Virtual Reality (VR): The Future is Here Imagine trying on clothes without stepping into a store or exploring a new city from your living room. That's the magic of Augmented Reality (AR) and Virtual Reality (VR)—they're not just futuristic concepts but everyday game-changers. AR brings digital elements into the real world, making things more interactive. Whether it's fun filters on social media, real-time navigation, or virtual furniture placement, AR makes life easier and more exciting. It's also helping doctors practice surgeries and students learn in a whole new way. VR on the other hand, takes you somewhere completely new.





Shravani Maity
BCA(AI)
4th semester



Ashi Sharma
BCA(AI)
4th semester

Women's Day

International Women's Day is celebrated on March 8 every year. It is a special day to honor women and their achievements in different fields like education, business, and healthcare. This day also reminds us to support gender equality and respect women's rights. Many countries organize events, speeches, and activities to appreciate the hard work and contributions of women. On this day, people give gifts, flowers, and kind messages to the women in their lives. Schools and offices hold programs to spread awareness about women's empowerment.



Holi

Holi, known as the Festival of colors is a vibrant Hindu festival that celebrates the arrival of spring the victory of good over evil, the spirit of unity and in 2025 holi is celebrated on 14th March. It is rooted in several mythological stories, most notably the legend of Prahlad and Holika where the demoness. Holika is defeated by fire, symbolizing the triumph of good. The festival is also linked to the playful exploits of Lord Krishna, who is said to have celebrated with his consort Radha and his friends, spreading colors as a way to unite and bring joy. Holi is celebrated over two days: Holika Dahan and Rangwali Holi.





Mehtab Alam
BCA(AI)
4th semester



Ramadan

Ramadan, the ninth month of the Islamic lunar calendar, is a time of profound spiritual reflection and communal unity for over 1.8 billion Muslims worldwide. This sacred period commemorates the first revelation of the Quran to Prophet Muhammad, marking a cornerstone of Islamic faith. Fasting from dawn to sunset, known as Sawm, is one of the Five Pillars of Islam observed during Ramadan. This practice fosters self-discipline, empathy for the less fortunate, and a deeper connection to the divine. The daily fast begins with a pre-dawn meal called Suhoor and concludes with Iftar, the evening meal where families and communities gather to break their fast, often starting with dates and water, emulating the Prophet's tradition. The month culminates in Eid al-Fitr, a joyous festival marking the end of fasting. This celebration involves communal prayers, feasting, and acts of charity, emphasizing gratitude and the importance of community. In essence, Ramadan is a period of deep introspection, cultural richness, and communal harmony, offering a unique opportunity for spiritual renewal and global unity.



Movie Screening



The much-anticipated screening of *The Age of Artificial intelligence* drawing with audience of tech enthusiasts, students, and AI professionals. The event was organized by [BCA department] and provided an insightful glimpse into the ever-evolving world of artificial intelligence (AI) and its impact on society.

The Age of Artificial Intelligence is a thought-provoking documentary that explores the history, present, and future of AI. the film delves into the groundbreaking advancements in machine learning, automation, and robotics. Through expert interviews and real-world case studies, the movie highlights both the opportunities and challenges posed by AI in industries such as healthcare, finance, and education.



Volleyball Tournament



The volleyball match between BCA 1st year and BCA 2nd year was an intense and thrilling competition. Both teams displayed great teamwork, coordination, and enthusiasm

The players showcased their best skills powerful spikes, strategic blocks, and impressive dives. The energy on the court was electrifying, with students cheering for their respective teams. Every point scored was met with excitement



The match was neck-to-neck, with each team fighting hard for victory. Every rally kept the audience on the edge of their seats, and the spirit of sportsmanship was visible throughout. Whether it was a stunning spike, a well-timed block, or a perfectly placed set, the game had everything

E-sports tournament



Our college recently hosted an electrifying **PUBG Mobile Tournament**, bringing together gaming enthusiasts for an intense battle of strategy and skill.

The atmosphere was filled with excitement as players dropped into the battleground, looted weapons, and engaged in thrilling combats. Each match kept the audience on edge, cheering for their favorite teams.



The event witnessed fierce competition, with squads displaying their teamwork, survival instincts, and sharp shooting skills.

Poster making competition



Our college organized a **Poster Making Competition** to celebrate **World Wetlands Day 2025**, highlighting the importance of wetlands in sustaining biodiversity and combating climate change.

Students showcased their creativity through vibrant and thought-provoking posters, depicting the beauty of wetlands, their ecological significance, and the urgent need for conservation



March 2025

MON	TUE	WED	THU	FRI	SAT	SUN
					1	2
3	4	5	6	Holi Celebration	8 Women's day	9
10	11	12	13 Holika Dahan	14 Holi	15	16
17	18	19	20	NSS Activity	22	23
24	25	26	27	Trending Job Oriented Course Roadmap	29	30
31 Id-ul-Fitr						

2nd Semester Syllabus to be Covered this month

Subject: DBMS

UNIT -III

Relational Data Models: Relational model terminology domains, Attributes, Tuples, Relations, characteristics of relations, relational constraints domain constraints, key constraints and constraints on null, relational DB schema. Codd's Rules

Relational algebra: Basic operations selection and projection,

Set Theoretic operations: Union, Intersection, set difference and division

Join operations: Inner, Outer, Left outer, Right outer, and full outer join

ER to relational mapping: Steps to map ER diagram to relational schema

Data Normalization: Functional dependencies, Armstrong's inference rule, & Normalization (Upto BCNF)

Subject: Object Oriented Programming Using
JAVA

UNIT - III

Using I/O: Elementary concepts of Input/Output, using the byte streams, reading and writing using byte streams, automatically closing a file, using the character-based streams, File I/O using character streams (using a File Writer and using a File Reader)

Subject: Data Structure and Algorithm

UNIT - III

Abstract Data Types:

Stacks: Introduction, Static and Dynamic Implementation, Operations, Applications-Evaluation and Conversion between Polish and Reverse Polish Notations.

Queues: Introduction, Static and Dynamic Implementation, Operations, Types-Linear Queue, Circular Queue, Doubly Ended Queue

Subject: Software Engineering

UNIT - III

Software Design: Cohesion & Coupling, Classification of Cohesiveness & Coupling,

Quality management: Quality concept, software quality assurance, Total Quality Management (TQM), software review, software inspection

Software Implementation: Structured coding techniques, coding style, Standards and guidelines, documentation guidelines. Reverse Engineering, Software Re-engineering, Configuration Management.

Subject: Soft Skill
UNIT-III

Professional Skills Development:

Group Discussion: Introduction, Definitions,
Purpose and Types of Group Discussions
Characteristics of Effective Group Discussions
Dos and Don'ts of participating in Group
Discussion

Interview Skills: Interview Concept and
Definition, Purpose/Objective of Interview,
Types of Interviews Guidelines for Successful
Interview Preparation and Execution

Presentation Skills Importance of Effective
Presentations, Essentials for Successful
Presentations, Utilizing PowerPoint for
Impactful Presentations

Subject: EVS
UNIT- IV

Biodiversity and Conservation

Definition of Biodiversity; Levels of biological
diversity: genetic, species and ecosystem diversity
India as a mega-biodiversity nation; Biogeographic
zones of India; Biodiversity hotspots; Endemic and
endangered species of India; IUCN Red list criteria
and categories

Value of biodiversity: Ecological, economic, social,
ethical, aesthetic, and informational values of
biodiversity with examples.

Threats to biodiversity: Habitat loss, degradation,
and fragmentation; Poaching of wildlife; Man-
wildlife conflicts; Biological invasion with emphasis
on Indian biodiversity; Current mass extinction crisis

Applicable from Batch Admitted in Academic
Session 2024-25 onwards

Biodiversity conservation strategies: in-situ and ex-
situ methods of conservation (National Parks,
Wildlife Sanctuaries, and Biosphere reserves.

Case studies: Contemporary Indian wildlife and
biodiversity issues, movements, and projects

4th Semester Syllabus to be covered this month

Subject: Java Programming **UNIT – III**

Using I/O: Elementary concepts of Input/Output, using the byte streams, reading and writing using byte streams, automatically closing a file, using the character-based streams, File I/O using character streams (using a File Writer and using a File Reader)

Multi-threaded programming: Multithreading fundamentals, Thread class, and Runnable interface, the life cycle of thread, creation of single and multiple threads, implementation of Thread methods, Synchronization (using Synchronized methods, synchronized statement)

Software Engineering **UNIT – III**

Software Design: Cohesion & Coupling, Classification of Cohesiveness & Coupling,

Quality management: Quality concept, software quality assurance, Total Quality Management (TQM), software review, software inspection

Software Implementation: Structured coding techniques, coding style, Standards and guidelines, documentation guidelines. Reverse Engineering, Software Re-engineering, Configuration Management

**Subject: Introduction to Management
and Entrepreneurship Development**

UNIT–III

Role of an Entrepreneur: The Entrepreneur's role in the context of contribution to society; Examples from industry; the role of changing the mindset and the development of out of box thinking. Introduction to Design Thinking. Entrepreneurs as role models, mentors and influencers. Entrepreneurial success stories.

Historical Perspective, Global Indian Entrepreneurs, Institutions, Modern Entrepreneurs

Introduction to Data Science

UNIT–III

Why Python? - Essential Python libraries
Introduction to NumPy: NumPy Basics: Arrays and Vectorized Computation- The NumPy ndarray- Creating ndarrays- Data Types for ndarrays - Arithmetic with NumPy Arrays- Basic Indexing and Slicing
Data handling using Pandas in python: Series (creation from ndarray, dictionary; mathematical operations; Head and Tail functions), DataFrames (creation from dictionary of series, operations on rows and columns).

Digital Marketing

UNIT – II

No. of Hours: 11 Chapter/Book

Reference: TB1 [Chapter –3, 4, 5, 6, 7, 8], TB2 [Chapter – 4], TB3 [Chapter – 8]

Social Media Marketing – Introduction, Social Media marketing strategies, Overview of Social media platforms – Instagram, Snapchat, Facebook, Mobile, Twitter, Content Planning and Strategy, Influential marketing, Content marketing, Digital Marketing campaign

Personality Development Skills

UNIT- III

Confidence Building Skills
Self-Introduction, Self-Awareness, Mock Interviews, Extempore, Group Discussion

6th Semester Syllabus to be covered this month

Data Ware Housing and Data Mining

UNIT – III

Data mining and data pre-processing:

Data mining: Introduction, What kind of data can be mined, What kind of patterns to be mined, Which technologies are used, What kinds of applications are targeted, Major issues in data mining.

Data pre-processing: Overview of Data pre-processing, data cleaning, data integration, data reduction, data transformation and data discretization, exploring data using IRIS datasets. Introduction to apriori algorithm for association mining rule.

E-Commerce

UNIT III

Electronic Payment Systems-

Overview of Electronics payments, electronic Fund Transfer, Digital Token based Electronics payment System, Smart Cards, Credit Cards, Debit Cards, Emerging financial Instruments Smartphone wallet, Social / Mobile Peer to Peer Payment systems, Digital Cash and Virtual Currencies, Online Banking, Payment Gateway, Electronic Billing Presentment and Payment

Internet of Things

UNIT–III

Network & Communication Aspects in IoT:

Wireless medium access issues, MAC protocol survey, Survey routing protocols, Sensor deployment & Node discovery, Data aggregation & dissemination

Programming the Arduino: Arduino platform boards anatomy, Arduino IDE, Coding using emulator, Using libraries, Additions in Arduino, Programming the Arduino for IoT

Data Visualization & Analytics

UNIT–III

Data Visualization: Graphs in Python: Line Graph, Bar charts, Pie-charts, Scatter plots, multiple plots, Subplots, Legends, Changing figure Size, Styling plots using Matplotlib Library. Functions like relplot(), displot() and catplot ().

Seaborn Library: Introduction, Line plot, Dist plot, Lmplot, Count plot, Color palettes

Ms. Mansi Sharma

Newsletter Coordinator

Dr. SALEEM JAVED

HoD

Dr. PRANAV MISHRA

Director LLDIMS