



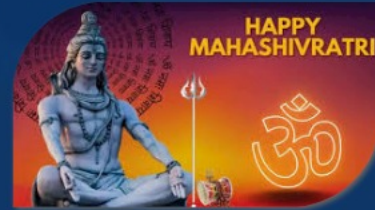
# Lingaya's Lalita Devi Institute of Management and Sciences

Department of Computer Applications

**Newsletter**  
**March 2026**



**Priyanka Shashmal**  
BCA(AI)  
5<sup>th</sup> semester



## Maha Shivratri

Maha Shivratri, meaning “The Great Night of Lord Shiva,” is one of the most important festivals in Hinduism. It is dedicated to the worship of Lord Shiva, one of the principal deities of the Hindu trinity. Devotees celebrate the festival with fasting, prayers, meditation, and night-long worship in Shiva temples across India and many parts of the world

In 2026, Maha Shivratri was observed on Sunday, 15 February 2026, according to the Hindu lunar calendar on the Chaturdashi (14th day) of Krishna Paksha in the month of Phalguna.

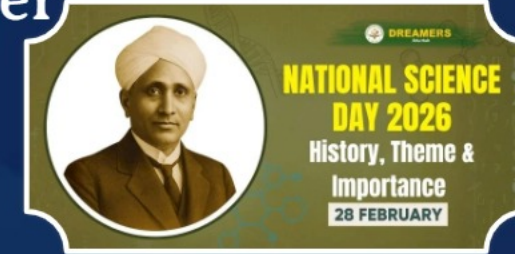
Maha Shivratri holds deep spiritual and religious importance for Hindus. It symbolizes spiritual awakening, self-discipline, and devotion to Lord Shiva. Many scriptures describe this night as a time when divine energies are especially strong, making it ideal for meditation and prayer.

Several legends explain the significance of the festival:

**Divine Marriage:** It is believed to commemorate the sacred union of Lord Shiva and Goddess Parvati, symbolizing the balance of consciousness and energy.



**Hitesh Kumar**  
BCA(AI)  
5<sup>th</sup> Semester



## National Science Day

National Science Day is celebrated every year in India on 28 February to honor the discovery of the Raman Effect by the Indian physicist Sir C. V. Raman in 1928. This discovery was a major milestone in the field of physics and earned Raman the Nobel Prize in Physics in 1930.

The Government of India declared 28 February as National Science Day in 1986 to promote scientific awareness and encourage people, especially students, to develop an interest in science and technology.

### Significance of National Science Day

National Science Day highlights the importance of scientific research and innovation in national development. It encourages people to appreciate the role of science in everyday life and inspires young minds to pursue careers in scientific fields.

The day reminds citizens that scientific thinking and curiosity are essential for solving global challenges such as climate change, health issues, and technological advancement.

### Celebrations and Activities

National Science Day is celebrated across schools, colleges, universities, and research institutions throughout India.



**Pushpendra**  
BCA(AI)  
5<sup>th</sup> Semester



## Shivaji Maharaj Jayanti

Shivaji Maharaj Jayanti is celebrated every year to honor the birth anniversary of the great Maratha ruler Chhatrapati Shivaji Maharaj. He was one of the bravest and most respected kings in Indian history. The day is celebrated with great enthusiasm, especially in the state of Maharashtra.

**Shivaji Maharaj Jayanti** is generally observed on 19 February, marking the birth of Shivaji Maharaj in 1630 at the Shivneri Fort in present-day Maharashtra.

### Early Life

**Shivaji Maharaj** was the son of Shahaji Bhonsle and Jijabai. His mother played a very important role in shaping his character and teaching him values such as courage, justice, and respect for all religions.

From a young age, Shivaji showed great leadership skills and a strong desire to establish a kingdom where people could live with dignity and freedom.

### Achievements

**Shivaji Maharaj** founded the Maratha Empire and became its first Chhatrapati (king). He was known for his brilliant military strategies and his ability to organize a strong army and navy.



**Shravani**  
BCA(AI)  
5<sup>th</sup> Semester



## 6G and Future Communication Technology

Communication technology has developed rapidly over the past few decades. From 2G and 3G to the modern **5G networks**, each generation has improved internet speed and connectivity. The next generation, known as **6G (Sixth Generation) technology**, is expected to bring revolutionary changes in communication systems and digital services. Although still under development, 6G is predicted to transform the way people connect and interact with technology.

### What is 6G Technology?

6G is the **sixth generation of wireless communication technology** that will succeed 5G networks. It is expected to provide extremely high internet speeds, ultra-low latency, and advanced connectivity for billions of devices. Researchers believe 6G could deliver speeds up to **1 terabit per second**, which is much faster than current 5G technology.

Some important features expected in 6G communication systems include:

**Ultra-high speed internet:** Much faster data transfer than previous generations.

**Low latency:** Almost instant communication with minimal delay.

# Training Program

The BCA Department of LLDIMS is organized a Technical Training Program on Data Structures & Algorithms and Internet of Things (IoT) in collaboration with Imarticus Learning.



# Cybersecurity Awareness

A Cyber Security Awareness Session was organized by Lingaya's Lalita Devi Institute of Management & Sciences to educate students about the importance of protecting digital information and staying safe online. The session was conducted by the Department of Computer Application and the Department of Commerce to spread awareness about cyber threats and digital security practices.

## Guest Speaker

The session was delivered by Naman Sethi, a cybersecurity expert and the founder of CyberHackz. He shared valuable knowledge about modern cyber threats, hacking techniques, and ways to protect personal and professional data.



# International Webinar on Design-Led AI

An International Webinar on “Design-Led AI: Using Design Thinking to Identify ML/AI Opportunities” was organized by Lingaya’s Lalita Devi Institute of Management & Sciences. The event was conducted by the Department of Commerce and the Department of Computer Application with the aim of helping students understand how design thinking can be used to identify opportunities in Artificial Intelligence (AI) and Machine Learning (ML).

## Guest Speaker

The webinar featured Shreya Gupta, who works as a Senior Product and UX Designer at Exact Software (US). She shared valuable insights on how AI solutions can be developed by combining technology with creative design thinking.



## 2<sup>nd</sup> Semester Syllabus

## 4<sup>th</sup> Semester Syllabus

## 6<sup>th</sup> Semester Syllabus

### Subject Discrete Mathematics

#### UNIT – II

PARTIAL ORDER RELATIONS AND LATTICES: Partial Order Sets, Totally ordered set, Representation of POSETS using Hasse diagram, Chains, Maximal and Minimal elements, Greatest lower bound, Least upper bound, Lattices and Algebraic Structure, Principle of Duality, Elementary Properties of Lattices, Atoms, Sublattices, Bounded lattice, Distributed & Complemented Lattices, Isomorphic lattices. Boolean lattice.

### Subject - Python Programming

#### UNIT – II

Object Oriented Programming: Classes, Objects, Attributes and Methods, Access Specifiers, Constructors, Static Methods, Data Hiding, Encapsulation, Inheritance, Polymorphism.  
NumPy Library: Introduction to NumPy, Creation of One-Dimensional Arrays, Reshaping of an Array, Element-wise Operations, Aggregate Operations.  
Introduction to Matplotlib: Bar Graphs and Pie Chart

### Subject - Data Visualization & Analytics

#### UNIT - II

Statistical Hypothesis Testing, p-Values, Confidence Intervals. Correlation, Simpson's Paradox, Some Other Correlational Caveats, Correlation and Causation, Correlation Statistics-ANOVA.

### Subject- Programming Using 'C' Language

#### UNIT - II

C Functions: Functions: declaration, definition & scope, recursion, call by value, call by reference. Preprocessor directive: #define, macros with arguments, nested macros, # and ## operators, conditional compilation. Storage Classes: automatic, external (global), static & registers. Arrays: Arrays (1D, 2D), strings, pointers, array & pointer relationship, pointer arithmetic, dynamic memory allocation, pointer to arrays, array of pointers, pointers to functions, array of pointers to functions.

### Subject - Dynamic Web Designing

#### UNIT - II

PHP Database Connectivity: Using PHP to Access a Database, Relational Databases and SQL, PHP Data Objects, MySQLi Object Interface  
Introduction to MySQL, Creating database and other operations on database, Querying a MySQL database with PHP database, connecting to a database, Parsing of the query results, Database querying using prepared statements, Checking data errors.  
PHP with Ajax: Introduction, Create an PHP Ajax application.

### Subject - Deep Learning with Python

#### UNIT – II

What is Deep Learning? Deep vs Shallow Networks, Convolution Neural Networks (CNN) Convolution Layers, Pooling Layer, Flattening, Fully Connected Layers, Softmax and Cross Entropy, Building a CNN in Python, Fully Connected CNN, CNN Architectures – LeNet, AlexNet, ZFNet, GoogLeNet, VGGNet, ResNet, DenseNet, Training a Convnet: weights initialization, batch normalization, hyperparameter optimization

### Subject Fundamentals of Computers and IT

#### UNIT – II

Computer Software: System software: Assemblers, Compilers, Interpreters, linkers, loaders. Application Software: Introduction to MS Office (MS-Word, MS Power point, MS-Excel). Operating Systems: Elementary Operating System concepts, Different types of Operating Systems. DOS: Booting sequence; Concepts of File and Directory, Types of DOS commands. Computer Languages: Introduction to Low-Level Languages and High-Level Languages.

### Subject - Computer Organization and Architecture

#### UNIT – II

Input-Output Organization: Peripheral Devices, Input-Output Interfaces, Asynchronous Data Transfer, Modes of Transfer, Priority Interrupt, Direct Memory Access (DMA).  
Memory Organization: Main Memory, Auxiliary Memory, Associative Memory, Cache Memory, Virtual Memory.

### Subject : IT Act and Cyber Laws

#### UNIT – II

Introduction to Cyber Law, Need for Cyber Law Evolution of the IT Act, Genesis and Necessity - Salient features of the IT Act, 2000, Various authorities under IT Act and their powers, Penalties & Offences, Amendments. Impact on other related Acts (Amendments) - Amendments to Indian Penal Code, Indian Evidence Act, Bankers Book Evidence Act, Reserve Bank of India Act - Cyberspace Jurisdiction. Online Safety for all with special reference for women and children, Misuse of individual information. Violation of privacy, Trafficking of Information and Data

### Subject - Web Technologies

#### UNIT – II

Cascading Style Sheet: Types of Style Sheets – Internal, inline and External style sheets, creating styles, link tag, CSS Properties, CSS Styling, Style Selector- Id, class name and Pseudo Class. Bootstrap Basics: Introduction to Bootstrap, Responsive web design, Linking with Bootstrap, container class, grids, tables, images, buttons, typography classes, jumbotron, glyphicons,

### Subject - Discrete Mathematics

#### UNIT - II

GRAPHS: Introduction, undirected graph, directed graph, Degree of a vertex, isolated vertex, pendant vertex, in degree, out-degree, Handshaking Theorem  
Types of Graphs- Simple graph, null graph, complete graph, regular graph, bipartite graph (complete), Sub graph, Isomorphic graphs, complement of a graph, Matrix representation of a graph: adjacent and incidence matrices.

### Subject Mobile Application Development

#### UNIT – II

User Interface in Android: Adaptive and responsive user interfaces, User Input Controls, Menus, Screen Navigation, RecyclerView, Drawables, Themes and Styles, Fragments Fragment Life Cycle, Introduction to Material Design. Android Application Components: App Widgets, Processes and Threads, User Interface Components, Views and layouts, Input controls, Input Events, Settings, Dialogs, Menus, Notifications, Toasts, Testing the user interface.

### Subject - Technical Communication

#### UNIT - II

Oral Communication: Principles of effective oral communication, Introduction of Self and others, Greetings, Handling Telephone Calls Interviews: Meaning & Purpose, Art of interviewing, Types of interview, Interview styles, Essential, Techniques of interviewing, Guidelines for Interviewer, Guidelines for interviewee. Meetings: Definition, Kind of meetings, Agenda, Minutes of the Meeting, Advantages and disadvantages of meetings/committees, Planning and organization of meetings.

### Subject – Principles of Management & Organizational Behaviour

#### UNIT - II

Managing People: Meaning and Need of Understanding Human Behaviour in Organization; Models of OB; Major Concepts in OB (elementary) - Personality, Learning, Perception, Attitude and Leadership; Leadership Styles

### Subject : Web Security

#### UNIT – IV

Web services overview, Honeytoken, XML security, AJAX attack trends and common attacks, REST security, Content Security Policy Serialization security, Clickjacking, DNS rebinding, HTML5 security, Logging collection and analysis for web apps, Security testing, IPv6 impact on web security

### Subject - Human Values and Ethics

#### UNIT - II

Introduction to Ethics, Definition of Ethics, Distinction between Ethics and Morality, Importance of Ethics in human conduct, Ethical Relationship vs. Universal Ethics, Sources of Ethical Principles (Law, Religion, Philosophy, Conscience, Culture), Ethical Theories (brief introduction to Utilitarianism, Deontology/Duty-based ethics, Virtue Ethics), Ethical Decision-Making Process (Identifying the ethical problem, Gathering information, Evaluating alternatives, Making a

### Subject – Human Value and Ethics

#### UNIT -II

Indian Ethos in Organizational Culture and Practice: Ethos of Vedanta; Application of Indian Ethos in Organizations; Relevance of Ethics and Values in organizations in current times; Case Studies and Role-Playing Exercises for inculcating values in personal and professional life.

### Subject - Web Development with Java & JSP

#### UNIT – IV

Java Beans, Java Web Frameworks: Spring MVC: Java Beans, Spring Introduction, Spring Architecture, Spring MVC Module, Bean life cycle, Spring API. Hibernate and Struts: Java Beans, Introduction to Hibernate, Hibernate Architecture, Hibernate Mapping Types, Introduction to Struts, core components, architecture, Interceptors, validation. Advance Networking: Networking Basics,

# March 2026

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3 HOLI	4 HOLI	5	6	7
8	9	10	11	12	13	14
15	16 Internal exam	17 Internal exam	18 Internal exam	19 Internal exam	20 Internal exam	21
22	23 Internal exam	24 Internal exam	25	26	27	28
29	30 webinar by iSTEP on data science	31				

**Pushpendra Pal**  
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