NOIDA INSTITUTE OF ENGG. & TECHNOLOGY, GREATER NOIDA, GAUTAM BUDDH NAGAR

(AN AUTONOMOUS INSTITUTE)

Affiliated to

DR. A.P.J. ABDUL KALAM TECHNICAL UNIVERSITY UTTAR PRADESH, LUCKNOW

Evaluation Scheme & Syllabus

For

Master of Computer Applications
MCA
First Year-Lateral Entry (B.Sc./B.A./B.Com.)

(Effective from the Session: 2024-25)

NOIDA INSTITUTE OF ENGG. & TECHNOLOGY, GREATER NOIDA, GAUTAM BUDDH NAGAR
(AN AUTONOMOUS INSTITUTE)

Bridge Courses for Lateral Entry Students Admitted Through (B.Sc./B.A./B.Com.)

Master of Computer Applications

MCA

EVALUATION SCHEME

SEMESTER-I

Sl. No.	Subject Codes	Subject Name	Types of Subjects	Periods			Evaluation Scheme				End Semester		Total	Credit
				L	T	P	CT	TA	TOTAL	PS	TE	PE		
WEEKS COMPULSORY INDUCTION PROGRAM														
1	BMCABC0101	Computers Concepts & Emerging Technologies	Compulsory Audit	2	0	0	30	20	50		50		100	
		GRAND TOTAL											**100**	

All the students must clear the above-mentioned subject along with first year (Semester-I).

All Bridge Courses (**Compulsory Audit Courses**) a qualifying exam has no credit.
Total and obtained marks are not added in the Grand Total.

Course Code	**BMCABC0101**	**L T P**	**Credit**
Course Title	Computers Concepts & Emerging Technologies	**2 0 0**	**0**

Course Outcome (CO)	**Bloom's Knowledge Level (KL)**
At the end of course , the student will be able to	
CO 1	Demonstrate the knowledge of the basic structure, components, Features and generations of computers. — K_1, K_2
CO 2	Compare and contrast features, functioning & types of operating system and computer networks. — K_4
CO 3	Demonstrate architecture, functioning & services of the Internet and basics of multimedia. — K_2
CO 4	Implement the working concepts of MS-Office — K_2
CO 5	Illustrate the emerging trends and technologies in the field of Information Technology. — K_1, K_2

DETAILED SYLLABUS

Unit I

Introduction to Computer: Definition, Computer Hardware & Computer Software

Components: Hardware – Introduction, Input devices, Output devices, Central Processing Unit Memory – Primary and Secondary Software – Introduction, Types– System and Application.

Computer Languages: Introduction, Concept of Compiler, Interpreter & Assembler

Problem solving concept: Algorithms – Introduction, Definition, Characteristics, Limitations, Conditions in pseudo-code, Loops in pseudo code.

Unit II

Operating system: Definition, Functions, Types, Classification, Elements of command based and GUI based operating system. Windows Operating System Commands

Computer Network: Overview, Standalone, Types (LAN, WAN and MAN), Data communication, topologies.

Unit III

Internet: Overview, Architecture, Functioning, Basic services like WWW, FTP, Telnet, Gopher etc., Search engines, E-mail, Web Browsers.

Internet of Things (IoT): Definition, Sensors, their types and features, Smart Cities, Industrial Internet of Things.

Unit IV

MS-Office: Basic Concepts, Features, Applications and handling of MS-Word, MS-PowerPoint and MS-Excel

Unit V

Emerging Technologies: Introduction, overview, features, limitations and application areas of Cloud Computing, Big data , Grid Computing, Artificial Intelligence and Virtual Reality

Text Books:

1. Raja Raman V., "Fundamentals of Computers", Prentice-Hall ofIndia.
2. Norton P., "Introduction to Computers", McGraw HillEducation.
3. Goel A., "Computer Fundamentals",Pearson.

Reference :

1. BalagurusamyE.,"FundamentalsofComputers", McGraw-Hill
2. TharejaR., "FundamentalsofComputers", OxfordUniversityPress.
3. BindraJ.,"TheTechWhisperer-onDigitalTransformationandtheTechnologiesthatEnableit",Penguin

Links

https://www.youtube.com/watch?v=eEo_aacpwCw

https://www.youtube.com/watch?v=WJ-UaAaumNA

https://www.youtube.com/watch?v=cNwEVYkx2Kk

https://www.youtube.com/watch?v=W3yttwGE-C0

https://www.youtube.com/watch?v=yCVy5Kw0l8s