.

Printed Page:-3 **Subject Code:- CMCABC0101**

Roll. No:

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
MCA
SEM: I - THEORY EXAMINATION (2025- 2026)
Subject: Computers Concepts & Emerging Technologies

Time: 2 Hours **Max. Marks: 50**

General Instructions:

IMP: *Verify that you have received the question paper with the correct course, code, branch etc.*

1. *This Question paper comprises of* ***three Sections -A, B, & C.*** *It consists of Multiple Choice Questions (MCQ's) & Subjective type questions.*

2. *Maximum marks for each question are indicated on right -hand side of each question.*

3. *Illustrate your answers with neat sketches wherever necessary.*

4. *Assume suitable data if necessary.*

5. *Preferably, write the answers in sequential order.*

6. *No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.*

SECTION-A 15

1. Attempt all parts:-

1-a. Compiler is used to: (CO1, K2) 1

(a) Translate high level language
(b) Execute program
(c) Edit text
(d) Debug program

1-b. In a ring topology, data travels:(CO2, K2) 1

(a) Circular path
(b) Random path
(c) Star path
(d) Point-to-point path

1-c. Smart homes are an example of: (CO3, K1) 1

(a) IoT application
(b) LAN
(c) WAN
(d) Cloud computing

1-d. Shortcut to start a slideshow in PowerPoint is: (CO4, K1) 1

(a) F1
(b) F5
(c) F7
(d) F12

1-e. A limitation of Cloud Computing is: (CO5, K1) 1

(a) Scalability
(b) Security and privacy issues
(c) Flexibility
(d) On-demand service

2. Attempt all parts:-

2.a.	State the function of ALU and Control Unit. (CO1, K2)	2
2.b.	Define WAN and list any one application. (CO2, K2)	2
2.c.	State the basic components of Internet architecture. (CO3, K2)	2
2.d.	List any two features of MS-PowerPoint. (CO4, K1)	2
2.e.	List any two application areas of Artificial Intelligence. (CO5, K3)	2

SECTION-B 15

3. Attempt all parts:-

3.a. Answer any one of the following:-

3.a.(i)	Describe computer languages and explain their classification with suitable examples. (CO1, K2)	3
3.a.(ii)	Describe conditional statements used in pseudo-code with suitable examples. (CO1, K3)	3

3.b. Answer any one of the following:-

3.b.(i)	Describe file management system of windows operating system. (CO2, K2)	3
3.b.(ii)	Explain client–server network model with advantages and limitations. (CO2, K2)	3

3.c. Answer any one of the following:-

3.c.(i)	Explain FTP service and describe its advantages and limitations. (CO3, K2)	3
3.c.(ii)	Define Industrial Internet of Things and explain its architecture. (CO3, K2)	3

3.d. Answer any one of the following:-

3.d.(i)	Explain slide creation, layout, and design options in MS-PowerPoint. (CO4, K2)	3
3.d.(ii)	Differentiate between MS-Excel and MS-PowerPoint with suitable points. (CO4, K2)	3

3.e. Answer any one of the following:-

3.e.(i)	Explain deployment models of cloud computing with suitable examples. (CO5, K2)	3
3.e.(ii)	Explain grid computing and discuss its architecture, features, and working mechanism. (CO5, K2)	3

SECTION-C 20

4. Answer any one of the following:-

4-a.	Explain RAM and ROM along with their characteristics. (CO1, K1)	4
4-b.	Differentiate between system software and application software in detail. (CO1, K2)	4

5. Answer any one of the following:-

5-a.	Explain types of operating systems with suitable examples. (CO2, K2)	4
5-b.	Explain internal and external commands of Windows with examples. (CO2, K2)	4

6. Answer any one of the following:-

6-a.	Describe World Wide Web and explain its components. (CO3, K2)	4

.

6-b.	Define Internet of Things and give five uses in real world. (CO3, K3)	4
7. Answer any one of the following:-		
7-a.	Explain the importance of MS-Office in office automation and education. (CO4, K2)	4
7-b.	Explain handling of presentations in MS-PowerPoint such as creating, editing, and running slideshows. (CO4, K2)	4
8. Answer any one of the following:-		
8-a.	Define emerging technologies and explain their significance in modern computing. (CO5, K2)	4
8-b.	Explain limitations and challenges associated with big data. (CO5, K2)	4