

Day : Wednesday

Date : 03/06/2026

S-26138-2026

Time : 10:00 AM-01:00 PM

Max. Marks : 60

N.B.

- 1) Section I - Attempt **ANY FIVE** questions. Each question carries 08 Marks.
- 2) Section II - Attempt **ANY TWO** questions. Each question carries 10 Marks
- 3) Figures to the **RIGHT** indicate **FULL** marks.
- 4) Answers to both the sections should be written in **SAME** answer book.
- 5) Draw neat and labeled diagram **WHEREVER** necessary.

SECTION – I**40 Marks**

		Co	BL
Q1	Define Information Security and explain its key characteristics. Why is it important in business organizations? Give one example.	(8) CO1	1-2
Q2	Discuss how a Network Security Policy helps in safeguarding organizational resources.	(8) CO2	2,3
Q3	Identify and analyze various threats to business continuity arising from information system failures or accidents.	(8) CO2	4
Q4	An IT firm experiences multiple login failures. Analyze how effective key management and monitoring of information security events could prevent a major security incident.	(8) CO3, CO4	4
Q5	Differentiate between encryption and decryption, and between encoding and decoding. Illustrate one practical example of each.	(8) CO3 CO4	2-3
Q6	Write Short Notes on ANY TWO	(8)	
	a) Levels of Organization	CO1	1,2
	b) Types of Networks in Operating Systems	CO2	1,2
	c) Cyber-Attack	CO2	1,2

SECTION – II**20 Marks**

Q7	Evaluate the importance of classifying information assets. A company plans to digitize all its records. Analyze and justify why it should classify its information, physical, and software assets before applying security controls	(10) CO5	5
Q8	Propose an IT Security Policy Framework integrating incident management, online safety, and cyber law compliance for protecting online business information assets.	(10) CO6	6
Q9	A newly established IT company faces frequent malware infections. Design an Information Security Policy that includes security control regulations and virus infection prevention measures.	(10) CO6	6

MASTER OF COMPUTER APPLICATIONS (CBCS - 2022 COURSE)
M.C.A. Sem-III : SUMMER : 2026
SUBJECT: ARTIFICIAL INTELLIGENCE

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Date : 04/06/2026

S-26137-2026

Time : 10:00 AM-01:00 PM
Max. Marks : 60

NB :

1. Figures to the right indicate FULL marks.
2. Answer to both the sections should be written in the SAME answer book.
3. Section – II- Question 7 is COMPULSORY, it carries 10 marks. Attempt any ONE question from rest of the TWO questions in Section II, it carries 10 marks.
4. Section- I – Attempt any FIVE questions. Each question carries 08 marks.

SECTION - I

- | | | |
|------|--|-------|
| Q. 1 | What is Artificial Intelligence. Describe the State of Art in AI. | (8) |
| Q. 2 | What is State Space Search in Artificial Intelligence? Explain its types. | (8) |
| Q. 3 | What is Means-Ends Analysis in Artificial Intelligence? Explain with an example. | (8) |
| Q. 4 | How Knowledge Representation is performed in AI? | (8) |
| Q. 5 | Discuss Fuzzy Logic in detail. How it differs from Binary Logic. | (8) |
| Q. 6 | Attempt ANY TWO of the following: (Short Answer)
a) Indexing in NumPy array.
b) Connectionist AI and Symbolic AI
c) Lambda Function | (4x2) |

SECTION - II

- | | | |
|------|--|------|
| Q. 7 | Solve following Crypt arithmetic
LOGIC
+
LOGIC

PROLOG | (10) |
| Q. 8 | Explain the "Generate and Test" search algorithm in Artificial Intelligence. | (10) |
| Q. 9 | Create a DataFrame with student names and marks.
i) Calculates the average marks for each student.
ii) Prints the DataFrame before and after adding the average. | (10) |
