QP Code: D133784	Total Pages: 1	Name:
		Register No.

THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(CUFYUGP)

BCA3CJ204/ BCA3MN202 Foundations of Artificial Intelligence

2024 Admission onwards

Maximum Time :2 Hours | **Maximum Marks :70**

Section A

All Question can be answered. Each Question carries 3 marks (Ceiling : 24 Marks)

1	List four subfields that contributed to AI.
2	What is rationality in intelligent agents?
3	Define a problem-solving agent.
4	Give two examples each of toy problems and real-world problems.
5	What is greedy best-first search?
6	Write a short note on path consistency.
7	Define ontology in AI.
8	State the difference between syntax and semantics in logic.
9	What is strong AI?
10	Mention two applications of AI in finance and marketing.

Section B

All Question can be answered. Each Question carries 6 marks (Ceiling : 36 Marks)

11	Write a short note on the history of AI.
12	Explain the structure of agent programs with examples.
13	Explain uniform-cost search with an example.
14	Explain how AI is applied in the field of healthcare.
15	Describe job-shop scheduling as a CSP example.
16	Explain quantifiers in first-order logic with examples.
17	Discuss how uncertainty is represented in AI.
18	What are the risks if AI succeeds beyond human control?

Section C

Answer any ONE. Each Question carries 10 marks (1x10=10 Marks)

19	Explain the working of the A* search algorithm with an example.
20	Explain the concept of an intelligent agent. Discuss the different types of agents with examples.