

Course Code: 24BC3T09

**BONAMVENKATACHALAMAYYAINSTITUTE OF TECHNOLOGY & SCIENCE
(AUTONOMOUS)**

**II-BCA I-Semester Model Paper (BR24), JAN-2026
ARTIFICIAL INTELLIGENCE (BCA)**

Time: 3 hours

Max.Marks:70

*Question Paper consists of Part-A and Part-B
Answer ALL the question in Part-A and Part-B*

PART-A(10X2 =20M)

		Marks	CO	BL
1.a)	Define Artificial Intelligence?	(2M)	CO1	BL1
b)	What is rationality?	(2M)	CO1	BL1
c)	What is heuristic search?	(2M)	CO2	BL2
d)	What is A* algorithm?	(2M)	CO2	BL1
e)	Define inheritance frame	(2M)	CO3	BL1
f)	What is rule-based knowledge	(2M)	CO3	BL2
g)	Define forward chaining	(2M)	CO4	BL1
h)	What is unification?	(2M)	CO4	BL1
i)	What is resolution	(2M)	CO5	BL1
j)	Define decision tree.	(2M)	CO5	BL1

PART-B(5X10=50M)

2a.	Describe the History of AI.	(5M)	CO1	BL2
b.	Explain about Agents and Environments.	(5M)		
(OR)				
3a.	Explain about problem solving agents.	(10M)	CO1	BL3

4a.	Explain Breadth first search.	(5M)	CO2	BL2
b.	Explain depth first search.	(5M)		
(OR)				
5a.	Explain AO algorithm	(10M)	CO2	BL3

6a	Explain the frame Representation Explain inheritance in frames	(10M)	CO3	BL3
(OR)				
7a.	Illustrate Rule Based Systems with Examples.	(10M)	CO3	BL

8	Explain in First-Order Logic(FOL) with Example.	(10M)	CO4	BL3
(OR)				
9.	Explain Unification with suitable example.	(10M)	CO4	BL2

10a.	Illustrate Resolution method in detail.	(10M)	CO5	BL4
(OR)				
11a.	Explain Statistical Learning Methods.	(10M)	CO5	BL3
