

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(MID SEMESTER EXAMINATION MO/SP20**)

CLASS: BTECH/BARCH
BRANCH: BT/CHEMICAL/MECH/EEE/BARCH

SEMESTER : VI
SESSION : SP/2023

SUBJECT: CS363 ARTIFICIAL INTELLIGENCE FUNDAMENTALS
TIME: 02 Hours

FULL MARKS: 25

INSTRUCTIONS:

1. The question paper contains 5 questions each of 5 marks and total 25 marks.
 2. Attempt all questions.
 3. The missing data, if any, may be assumed suitably.
 4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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Q.1(a)	Define Artificial Intelligence. Explain nature of problems that are referred as AI problems.	[2]	CO1	BL1
Q.1(b)	Elaborate Tic-Tac-Toe problem.	[3]	CO2	BL1
Q.2(a)	Describe an agent. How does it interact with environment?	[2]	CO1	BL4
Q.2(b)	What are basic kinds of agent? Elaborate any two.	[3]	CO1	BL1
Q.3(a)	Write down the steps of problem solving by searching.	[2]	CO1	BL7
Q.3(b)	What are different components of problems stated in Artificial Intelligence? Explain with examples.	[3]	CO2	BL1
Q.4(a)	Differentiate between Brute force search and Greedy search.	[2]	CO2	BL1
Q.4(b)	Elaborate the methodology for measuring any search techniques.	[3]	CO2	BL8
Q.5(a)	Illustrate the working of Breadth First Search.	[2]	CO2	BL4
Q.5(b)	Evaluate between A* and AO* search techniques.	[3]	CO2	BL9

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