SRM Institute of Science and Technology
College of Engineering and Technology
School of Computing

Mode of Exam
OFFLINE
SET A – B2

DEPARTMENT OF COMPUTING TECHNOLOGIES

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

Academic Year: 2022-2023 (EVEN)

Test: CLAT-1
Course Code & Title: 18CSC305 & AI
Year & Sem: III & VI

Date: 22.02.2023
Duration: 50 mins
Max. Marks: 25

Course Articulation Matrix:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	M	M	M	M	H	-	-	-	M	L	-	H
CO2	M	H	H	H	H	-	-	-	M	L	-	H
CO3	M	H	H	M	H	-	-	-	M	L	-	H
CO4	M	H	M	H	H	-	-	-	M	L	-	H
CO5	M	H	H	H	H	-	-	-	M	L	-	H
CO6	L	H	M	M	H	-	-	-	H	L	-	H

Evaluation Sheet:

Q.No.	Max Marks	Marks Obtained	Q.No.	Max Marks
1			11	
2			12	
3			13	
4			14	
5				
6				
7				
8				
9				
10				
TOTAL			TOTAL	

Part - A
(10 x 1 = 10 Marks)

Instructions: Answer all

Q. No	Question	Marks	BL	CO	PO	PI Code
1	**Identify the problem that has the possibility of more than one answer and even a particular situation decides the correctness of the answer.** a. Non-Linear b. Well Structured c. Ill-Structured d. Unstructured	1	1	1	2	2.1.1
2	**What is the term used for describing the judgmental or common-sense part of problem solving** a. Value based b. Critical c. Analytical d. Heuristic	1	1	1	1	1.2.1
3	**Knowledge and reasoning also play a crucial role in dealing with environment.** a. Completely Observable b. Partially Observable c. Neither Completely nor Partially Observable d. Only Completely and Partially Observable	1	1	1	2	2.1.1

4	**Which of the following mentioned problems are CSP (Constraint Satisfactory Problems)?** **1. N queens Problem** **2. Crypt- arithmetic problem** **3. Map coloring problem** **4. Sudoku** a. 1 only b. 2 and 3 c. 1 and 4 d. 1, 2, 3 and 4	1	1	1	1	1.2.1
5	**Which one of the following doesn't depend upon rationality of agent** a. Action b. Reaction c. Percept Sequence d. Performance measures	1	1	1	1	1.2.1
6	**Which agent deals with degree of happiness?** a. Simple reflex agent b. Model based agent c. Learning agent d. Utility based agent	1	1	1	1	1.2.1
7	**A fully observable problem belongs to the category of** a. Multi-state problem b. Two-state problem c. Single-state problem d. Not determined	1	1	1	2	2.1.1
8	**When an agent is responsible for making improvements. Then it is called as** a. Goal agents b. Performance agents c. Learning agent d. Simple agent	1	1	1	1	1.2.1
9	**Ten teams are playing in a cricket tournament. The winning team of each match progresses to the next round and the loosing team is out of the game. In the 2nd round, each team plays with the other teams, after which a final round is played. How many matches will be played?** a. 15 b. 12 c. 11 d. 16	1	1	1	2	2.1.1
10	**Consider a scenario, where a student has a set of queries to be resolved. Among the staff members available in the college, he approaches specific staff members who are able to solve and assist him in resolving the queries. In such a case, the staff member selection would more appropriately mapped to be** a. Table-driven agent b. Utility based agent c. Simple reflex agent d. Utility and simple reflex agents	1	1	1	2	2.1.1
	Part – B **(3 x 5 = 15 Marks)**					
Instructions: Answer any 3						
11	Describe the types of intelligent agents. Explain any two agents with example.	5	1	1	2	2.1.1
12	What is Constraint Satisfaction Problem. Solve Crypt Arithmetic Puzzle for the given words. SOME + TIME = SPENT.	5	1	1	2	2.2.3
13	Explain the steps involved in simple problem-solving technique.	5	1	1	2	2.1.1
14	Discuss about different types of AI model.	5	1	1	2	2.1.1

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SET B – B2

DEPARTMENT OF COMPUTING TECHNOLOGIES

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamilnadu

Academic Year: 2022-2023 EVEN

Test: CLAT-1
Course Code & Title: 18CSC305J - Artificial Intelligence
Year & Sem: III/VI

Date: 22.02.2023
Duration: 50 mins
Max. Marks: 25 marks

Course Articulation Matrix:

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	M	M	M	M	H	-	-	-	M	L	-	H
CO2	M	H	H	H	H	-	-	-	M	L	-	H
CO3	M	H	H	M	H	-	-	-	M	L	-	H
CO4	M	H	M	H	H	-	-	-	M	L	-	H
CO5	M	H	H	H	H	-	-	-	M	L	-	H
CO6	L	H	M	M	H	-	-	-	H	L	-	H

Evaluation Sheet:

Q.No.	Max Marks	Marks Obtained	Q.No.	Max Marks
1			11	
2			12	
3			13	
4			14	
5				
6				
7				
8				
9				
10				
TOTAL			TOTAL	

Part – A
(10 x 1 = 10 Marks)

Instructions: Answer all

Q. No	Question	Marks	BL	CO	PO	PI Code
1	Agent runs in the cycle of _____ a) Thinking, acting and perceiving b) Perceiving, collecting, and acting c) Collecting and thinking d) Thinking and Acting	1	1	1	2	2.1.1
2	Dependent variable based problems are called as _____ a) Structured Problems b) Unstructured problems c) Linear problems d) Non linear problems	1	1	1	2	2.1.1
3	Which of the following is not a type of agent in Artificial intelligence a) Target based agents b) Table driven agents c) Model based Agents d) Simple reflex Agents	1	1	1	1	1.2.1

4	Which one of the following doesn't depend upon rationality of agent a) Action b) Reaction c) Percept Sequence d) Performance measures	1	1	1	1	1.2.1
5	Forward Search Problems are called as_____ a) Goal directed problems b) Data directed problems c) Path directed problems d) None of the above	1	1	1	2	2.1.1
6	State space is _____ a) Representing your problem with variable and parameter b) Problem you design c) Designing variable and parameter d) Constructing the problem with parameters	1	1	1	2	2.1.2
7	An agent is composed of _____ a) Architecture and Program b) Perception and Sequence c) Function and architecture d) Architecture and perception	1	1	1	2	2.1.1
8	The Set of actions for a problem in a state space is formulated by a_____. a) Intermediate states b) Initial state c) Successor function d) Previous state	1	1	1	1	1.2.1
9	A process that is repeated, evaluated, and refined is called a) Diagnostic b) Descriptive c) Interpretive d) iterative	1	1	1	1	1.1.1
10	Which instruments are used for perceiving and acting upon the environment? a) Sensors and Actuators b) Sensors c) Perceiver d) Perceiver and Sensor	1	1	1	1	1.1.2
	Part – B **(3 x 5 = 15 Marks)** **Instructions: Answer any 3**					
11	Explain the categories of problems in AI with suitable illustrations.	5	1	1	2	2.1.1
12	Generate state space tree for the following water jug problem. Given: Jug 1 – 4 liters of water Jug 2 – 3 liters of water Goal state: Jug 1/Jug 2 – 2 liters of water	5	1	1	2	2.4.1
13	Discuss all the 7 problem characteristics with suitable example.	5	1	1	2	2.1.1
14	Solve the following crypt arithmetic problem. FORTY+TEN+TEN=SIXTY	5	1	1	2	2.2.3