

Program: BE Computer Engineering

Curriculum Scheme: Revised 2012

Examination: Final Year Semester VII

Course Code: CPC703 and Course Name: Artificial Intelligence

Time: 1 hour

Max. Marks: 50

Note to the students:- All the Questions are compulsory and carry equal marks .

Q1.	Wumpus World is a classic problem, best example of _____
Option A:	Single player Game
Option B:	Two player Game
Option C:	Reasoning with Knowledge
Option D:	Knowledge based Game
Q2.	A) Knowledge base (KB) is consists of set of statements. B) Inference is deriving a new sentence from the KB. Choose the correct option.
Option A:	A is true, B is true
Option B:	A is false, B is false
Option C:	A is true, B is false
Option D:	A is false, B is true
Q3.	Knowledge and reasoning also play a crucial role in dealing with _____ environment.
Option A:	Completely Observable
Option B:	Partially Observable
Option C:	Neither Completely nor Partially Observable
Option D:	Only Completely and Partially Observable
Q4.	Which of the following is not the style of inference?
Option A:	Forward Chaining
Option B:	Backward Chaining
Option C:	Resolution Refutation
Option D:	Modus Ponem
Q5.	Which among the following could the Existential instantiation of $\exists x \text{Crown}(x) \wedge \text{OnHead}(x, \text{Johnny})$ ?
Option A:	$\text{Crown}(\text{John}) \wedge \text{OnHead}(\text{John}, \text{Jonny})$
Option B:	$\text{Crown}(y) \wedge \text{OnHead}(y, y, x)$
Option C:	$\text{Crown}(x) \wedge \text{OnHead}(x, \text{Jonny})$
Option D:	None of the mentioned

Q6.	An omniscient agent knows the _____ outcome of its actions
Option A:	Actual
Option B:	Approximate
Option C:	Supposed
Option D:	Imagined
Q7.	Forward chaining systems are _____ where as backward chaining systems are _____
Option A:	Goal-driven, goal-driven
Option B:	Goal-driven, data-driven
Option C:	Data-driven, goal-driven
Option D:	Data-driven, data-driven
Q8.	Which search implements stack operation for searching the states?
Option A:	Depth-limited search
Option B:	Depth-first search
Option C:	Breadth-first search
Option D:	None of the mentioned
Q9.	Bayesian classifiers is
Option A:	A class of learning algorithm that tries to find an optimum classification of a set of examples using the probabilistic theory.
Option B:	Any mechanism employed by a learning system to constrain the search space of a hypothesis
Option C:	An approach to the design of learning algorithms that is inspired by the fact that when people encounter new situations, they often explain them by reference to familiar experiences, adapting the explanations to fit the new situation.
Option D:	Simple form of Neural network
Q10.	Lifted inference rules require finding substitutions that make different logical expressions looks identical.
Option A:	Existential Instantiation
Option B:	Universal Instantiation
Option C:	Unification
Option D:	Modus Ponon
Q11.	Which of the following is not Planning Algorithm
Option A:	Conditional Order
Option B:	Partial Order
Option C:	Hierarchical Order
Option D:	Simulated annealing
Q12.	In unification, if two expressions are identical then the result is
Option A:	Nil
Option B:	Same
Option C:	Square of the expression
Option D:	New expression

Q13.	The first step in Resolution is
Option A:	Perform Unification
Option B:	Convert everything to CNF
Option C:	Start solving the problem
Option D:	Perform Diversification
Q14.	The unification of Knows (John , x) and (x, OJ) is
Option A:	(John, OJ)
Option B:	(x, x)
Option C:	(John, OJ) and (x, x)
Option D:	Fails
Q15.	Which of the following connectives are not part of the propositional logic
Option A:	$\wedge$
Option B:	$\vee$
Option C:	$\rightarrow$
Option D:	$\Sigma$
Q16.	Forward Chaining starts with _____ sentences in the KB
Option A:	Quantifiable
Option B:	Non-Quantifiable
Option C:	Atomic
Option D:	Open ended
Q17.	Which of the following is not the Inference Method
Option A:	Unification
Option B:	Forward Chaining
Option C:	Resolution
Option D:	Nested quantifiers
Q18.	Which of the following is a quantifier in First order Predicate Logic
Option A:	Limited
Option B:	Existential
Option C:	Global
Option D:	Partial
Q19.	Hill climbing sometimes called _____ because it grabs a good neighbour state without thinking ahead about where to go next.
Option A:	Needy local search
Option B:	Heuristic local search
Option C:	Greedy local search
Option D:	Optimal local search
Q20.	A goal directed hill-climbing agent has failed to locate the highest point, having instead become stuck on a lower hill in the vicinity of

	its home base. This is the `_____` problem'.
Option A:	Global optimum
Option B:	Global surface
Option C:	Local optimum
Option D:	Local surface
Q21.	In Problem Solving Agents what type of mechanism is followed
Option A:	formulate, search, execute
Option B:	search, formulate, execute
Option C:	execute, formulate, search
Option D:	formulate, execute, search
Q22.	Which of the following is not an example of Uninformed Search Methods?
Option A:	Breadth First Search
Option B:	Depth First Iterative Deepening
Option C:	Depth Limited Search
Option D:	A* Search
Q23.	A Chess game is the example of _____ multiagent.
Option A:	Competitive
Option B:	Cooperative
Option C:	Challenging
Option D:	Simple
Q24.	The learning element does not use feedback from the _____ on how the agent is doing
Option A:	Critic
Option B:	Code
Option C:	Sensors
Option D:	Actuators
Q25.	Which of the following is not the Type of Agents
Option A:	Goal-based agents
Option B:	Simple reflex agents
Option C:	Utility-based agents
Option D:	Environment-based agent