

Program: BE Information Technology

Curriculum Scheme: Revised 2016

Examination: Final Year Semester VII

Course Code: **ITC 703** and Course Name: **Artificial Intelligence**

Time: 1 hour

Max. Marks: 50

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

Q1.	What is the action of task environment in artificial intelligence?
Option A:	Problem
Option B:	Solution
Option C:	Agent
Option D:	Observation
Q2.	Which component tells what things are surrounding the agent.
Option A:	Performance
Option B:	Environment
Option C:	Actuator
Option D:	Sensor
Q3.	Greedy search strategy chooses the node for expansion in _____
Option A:	Shallowest
Option B:	Deepest
Option C:	The one closest to the goal node
Option D:	Minimum heuristic cost
Q4.	Which search is implemented with an empty first-in-first-out queue?
Option A:	Depth-first search
Option B:	Breadth-first search
Option C:	Bidirectional search

Option D:	Simple reflex search
Q5.	Depth-first search always expands the _____ node in the current fringe of the search tree.
Option A:	Shallowest
Option B:	Child node
Option C:	Deepest
Option D:	Minimum cost
Q6.	Breadth-first search always expands the _____ node in the current fringe of the search tree.
Option A:	Shallowest
Option B:	Child node
Option C:	Deepest
Option D:	Minimum cost
Q7.	Following is/are the components of the partial order planning.
Option A:	Bindings
Option B:	Goal
Option C:	Causal Links
Option D:	All of the mentioned
Q8.	Standard planning algorithms assumes environment to be _____
Option A:	Deterministic
Option B:	Fully observable
Option C:	Single agent
Option D:	Stochastic
Q9.	To eliminate the inaccuracy problem in planning problem or partial order planning problem we can use _____ data structure/s.
Option A:	Stack

Option B:	Queue
Option C:	BST (Binary Search Tree)
Option D:	Planning Graphs
Q10.	What is the other name for forward state-space search?
Option A:	Progression planning
Option B:	Regression planning
Option C:	Test planning
Option D:	State planning
Q11.	What is the main advantage of backward state-space search?
Option A:	Cost
Option B:	Actions
Option C:	Relevant actions
Option D:	Step cost
Q12.	Standard planning algorithms assumes environment to be _____
Option A:	Deterministic
Option B:	Fully observable
Option C:	Single agent
Option D:	Stochastic
Q13.	How the Bayesian network can be used to answer any query?
Option A:	Full distribution
Option B:	Joint distribution
Option C:	Partial distribution
Option D:	All of the mentioned
Q14.	Which is not Familiar Connectives in First Order Logic?

Option A:	and
Option B:	if
Option C:	or
Option D:	not
Q15.	Inference algorithm is complete only if _____
Option A:	It can derive any sentence
Option B:	It can derive any sentence that is an entailed version
Option C:	It is truth preserving
Option D:	It can derive any sentence that is an entailed version & It is truth preserving
Q16.	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 Ponem
Q17.	A constructive approach in which no commitment is made unless it is necessary to do so is _____
Option A:	Least commitment approach
Option B:	Most commitment approach
Option C:	Nonlinear planning
Option D:	Opportunistic planning
Q18.	What is Coreference Resolution?
Option A:	Anaphora Resolution
Option B:	Given a sentence or larger chunk of text, determine which words (“mentions”) refer to the same objects (“entities”)
Option C:	All of the mentioned
Option D:	None of the mentioned

Q19.	The more general task of coreference resolution also includes identifying so-called “bridging relationships” involving referring expressions.
Option A:	TRUE
Option B:	FALSE
Option C:	NA
Option D:	NA
Q20.	Given a sound clip of a person or people speaking, determine the textual representation of the speech.
Option A:	Text-to-speech
Option B:	Speech-to-text
Option C:	Speech
Option D:	Text
Q21.	Speech Segmentation is a subtask of _____
Option A:	Text Recognition
Option B:	Image Recognition
Option C:	Speech Recognition
Option D:	Image and Text Recognition Recognition
Q22.	In linguistic morphology _____ is the process for reducing inflected words to their root form.
Option A:	Rooting
Option B:	Stemming
Option C:	Text-Proofing
Option D:	Both Rooting & Stemming
Q23.	OCR (Optical Character Recognition) uses _____
Option A:	NLP

Option B:	Text-Proofing
Option C:	Stemming
Option D:	Both Rooting & Stemming
Q24.	Which algorithm will work backward from the goal to solve a problem?
Option A:	Forward chaining
Option B:	Backward chaining
Option C:	Hill-climb algorithm
Option D:	Minimax Algorithm
Q25.	Which algorithm are in more similar to backward chaining algorithm?
Option A:	Depth-first search algorithm
Option B:	Breadth-first search algorithm
Option C:	Hill-climbing search algorithm
Option D:	Minimax Algorithm