Program: BE Information Technology
Curriculum Scheme: Rev2016
Examination: Fourth Year Semester VII
Course Code: ITC703 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 rule of simple reflex agent?
Option A:	Condition-action rule
Option B:	Simple-action rule
Option C:	left hand thumb rule
Option D:	Right hand thumb rule
Q2.	The set of actions for a problem in a state space is formulated by a _____ .
Option A:	Intermediate states
Option B:	Initial state
Option C:	Successor function, which takes current action and returns next immediate state
Option D:	Goal States
Q3.	Which approach is called the Turing test approach?
Option A:	Thinking rationally
Option B:	Acting rationally
Option C:	Acting Humanly
Option D:	Thinking Humanly
Q4.	_____function is a function that assigns a cost to a path.
Option A:	Distance
Option B:	Path Cost
Option C:	Length
Option D:	Goal-Test
Q5.	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:	Best-First Search
Q6.	How many types of informed search method are in artificial intelligence?
Option A:	1
Option B:	2
Option C:	3
Option D:	4
Q7.	_____are mathematical problems defined as a set of objects whose state must satisfy a number of constraints or limitations.
Option A:	Constraint Satisfaction problem

Option B:	Uninformed search problem
Option C:	Local search problems
Option D:	Informed search problem
Q8.	Which is not the property of Hill Climbing?
Option A:	Does not look ahead of the immediate neighbors of current state
Option B:	Chooses randomly among the best of successors
Option C:	Terminated when the pick is reached
Option D:	Does backtrack
Q9.	A constraint is _____.
Option A:	a restriction on what values the variables in the problem can take
Option B:	something that prevents an algorithm from solving a problem
Option C:	limitation of problem solving approach
Option D:	its limit on depth of tree
Q10.	What is meant by compositional semantics?
Option A:	Determining the meaning
Option B:	Logical connectives
Option C:	Semantics
Option D:	Reference
Q11.	Which is created by using single propositional symbol?
Option A:	Complex sentences
Option B:	Composition sentences
Option C:	Atomic sentences
Option D:	Flowchart
Q12.	Which is not a knowledge representation language?
Option A:	first order predicate logic
Option B:	hard logic
Option C:	propositional logic
Option D:	temporal logic
Q13.	Which one of the following is the most appropriate logical formula to represent the statement? "Gold and silver ornaments are precious". The following notations are used: G(x): x is a gold ornament S(x): x is a silver ornament P(x): x is precious
Option A:	$\forall x((G(x) \vee S(x)) \rightarrow P(x))$
Option B:	$\forall x(P(x) \rightarrow (G(x) \wedge S(x)))$
Option C:	$\exists x((G(x) \wedge S(x)) \rightarrow P(x)$
Option D:	$\forall x((G(x) \wedge S(x)) \rightarrow P(x))$
Q14.	Which is also called single inference rule?
Option A:	Reference
Option B:	Reform

Option C:	Resolution
Option D:	Forward Chaining
Q15.	Uncertainty arises in WUMPUS works because agent sensor give only ?
Option A:	Full and global information
Option B:	partial and local information
Option C:	full and local information
Option D:	partial and global information
Q16.	Which of the following search belongs to total ordered plan search?
Option A:	Breadth
Option B:	Depth
Option C:	Forward State
Option D:	Hill
Q17.	Which algorithm places two actions into a plan without specifying which should come first?
Option A:	Partial -order planner
Option B:	Full -order planner
Option C:	Total -order planner
Option D:	Semi -order planner
Q18.	A Hybrid Bayesian network contains _____
Option A:	Both discrete and continuous variables
Option B:	Only Discrete variables
Option C:	Only Discontinuous variable
Option D:	Both Discrete and Discontinuous variable
Q19.	If a hypothesis says it should be positive, but in fact it is negative, we call it _____
Option A:	A consistent hypothesis
Option B:	A false negative hypothesis
Option C:	A false positive hypothesis
Option D:	A specialized hypothesis
Q20.	How the Bayesian network can be used to answer any query?
Option A:	Full distribution
Option B:	Partial distribution
Option C:	conditional distribution
Option D:	Joint distribution
Q21.	How many Components of NLP are there?
Option A:	2
Option B:	3
Option C:	4
Option D:	5

Q22.	Which of the following is used to mapping sentence plan into sentence structure?
Option A:	Text planning
Option B:	Text Realization
Option C:	Semantic Planning
Option D:	Sentence planning
Q23.	Morphemes that cannot stand alone and are typically attached to another to become a meaningful word is called,
Option A:	Lexical morphemes
Option B:	Free morphemes
Option C:	Derived morphemes
Option D:	Bound morphemes
Q24.	Which of the text parsing techniques can be used for noun phrase detection, verb phrase detection, subject detection, and object detection in NLP?
Option A:	Dependency Parsing and Constituency Parsing
Option B:	Part of speech tagging
Option C:	Skip Gram and N-Gram extraction
Option D:	Continuous Bag of Words
Q25.	Natural language processing is divided into the two subfields of
Option A:	algorithmic and heuristic
Option B:	symbolic and numeric
Option C:	time and motion
Option D:	understanding and generation

University of Mumbai
Examination 2020 under cluster 4 (PCE)

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Question	Correct Option (Enter either 'A' or 'B' or 'C' or 'D')
Q1.	A
Q2.	C
Q3.	C
Q4	B
Q5	B
Q6	D
Q7	A
Q8.	D
Q9.	A
Q10.	A
Q11.	C
Q12.	B
Q13.	A
Q14.	C
Q15.	B
Q16.	C
Q17.	A
Q18.	A
Q19.	C
Q20.	D
Q21.	A
Q22.	B
Q23.	D
Q24.	A
Q25.	D