First and last name .....

Question 1/40

A* Search Algorithm __

A. All of the above
B. finds the shortest path through the search space using the heuristic function i.e f(n)=g(n) + h(n)
C. terminates when the goal node is not found.
D. does not expand the node which have the lowest value of f(n),

Question 2/40

Which of the following focuses on the discovery of (previously) unknown properties on the data?

A. machine learning
B. data wrangling
C. data mining
D. big data

Question 3/40

Which of the following is not a goal of AI?

A. Real Life Problem Solving
B. To rule over humans
C. Thinking humanly
D. Adapting to the environment and situations

Question 4/40

Which of the following intelligent agent is of simplest type that takes action on the basis of current state only?

A. utility based agent
B. goal based agent
C. Reflex agent
D. model based agent

Question 5/40

Which of the following is considered as the most powerful AI agent?

A. Goal based agent
B. Model based reflex agent
C. Simple based reflex agent
D. Utility based agent

Question 6/40

DFS is _____ efficient and BFS is _____ efficient.

A. time,space
B. space,time
C. space, space
D. time,time

Question 7/40

The term used for being able to manipulate information in various ways.

A. Reasoning
B. Explaining
C. learning
D. Understanding

Question 8/40

The _____ is a touring problem in which each city must be visited exactly once. The aim is to find the shortest tour.

A. Travelling Salesman problem
B. Depth first search traversal on a given map represented as a graph
C. Finding shortest path between a source and a destination
D. Map coloring problem

Question 9/40

What is true about Iterative Deepening DFS?

A. It's a Depth First Search, but it does it one level at a time, gradually increasing the limit, until a goal is found.
B. It is the preferred informed search method
C. It does not perform DFS in a BFS fashion.
D. Is a depth-first search with a fixed depth limit l

Question 10/40

Of the Following Examples, Which would you address using an supervised learning Algorithm?

A. given a database of customer data, automatically discover market segments and group customers into different market segments.
B. given a set of news articles found on the web, group them into set of articles about the same story.
C. find the patterns in market basket analysis
D. given email labeled as spam or not spam, learn a spam filter

Question 11/40

What was originally called the 'IMITATION GAME' by its creator?

A. LISP
B. Sudoku
C. Turing test
D. Anagrams

Question 12/40

Which of the following searching technique takes less memory?

A. Linear Search
B. Breadth-First Search
C. Optimal search
D. Depth-First Search

Question 13/40

In which agent does the problem generator is present?

A. None of the mentioned
B. Observing agent
C. Reflex agent
D. Learning agent

Question 14/40

Which agent deals with happy and unhappy states?

A. Utility based agent
B. Simple reflex agent
C. Model based agent
D. Learning agent

Question 15/40

_____ search algorithms iteratively improve from a starting state, moving one step at a time through neighboring solutions in the state space until they can't improve the solution any further.

A. Heuristics
B. blind
C. local
D. Global

Question 16/40

What kind of environment is crossword puzzle?

A. dynamic
B. semi-dynamic
C. none of these
D. static

Question 17/40

What is the time complexity in Bidirectional search algorithm?

A. $O(b^d)$
B. $O(b^{d/2})$
C. O(bd/2)
D. O(bm)

Question 18/40

. In the Wumpus World Problem, the reason for the uncertainty is that the agent's sensor gives only__

A. Full & Global information
B. Partial & Global Information
C. Partial & local Information
D. Full & local information

Question 19/40

State whether the following statements about defining the problem are True or False.
i) A problem will define a state space that contains all the possible configurations of relevant objects.
ii) A problem will specify a set of rules that describe the actions available.

A. i-False, ii-True
B. i-True, ii-True
C. i- False, ii-False
D. i-True, ii-False

Question 20/40

Which of the following is not the characteristics of Breadth First Search Algorithm?

A. blind search
B. optimal space requirement
C. complete
D. optimal

Question 21/40

In what type of learning labelled training data is used

A. active learning
B. Supervised learning
C. Unsupervised learning
D. Reinforcement learning

Question 22/40

A _____ is an educated guess about a solution, such as a rule of thumb that points to the direction of a desired outcome but can't tell exactly how to reach it.

A. Learning
B. Knowledge
C. Heuritics
D. Explanation

Question 23/40

A _____ begins at the graph root and then explores every node from that root down a single path to the end.

A. A* algorithm
B. Hill climbing
C. Depth-First Search
D. Breadth-First Search

Question 24/40

What are the properties of task environment involved in chess with clock?

A. Fully observable, Static,Discrete, Multi Agent
B. Fully observable, Dynamic ,Discrete, Multi Agent
C. Partially observable, Static, Discrete, Multi Agent
D. Fully observable, Static,Discrete, Single Agent

Question 25/40

The ---------- is a way of combining the advantage of both depth-first and breadth-first search into a single method

A. Best First Search
B. Iterative Deepening Depth First search
C. Hill climbing Search
D. Bidirectional Search

Question 26/40

You are given reviews of few netflix series marked as positive, negative and neutral. Classifying reviews of a new netflix series is an example of

A. Semi-Supervised learning
B. Supervised learning
C. Reinforcement Learning
D. UnSupervised learning

Question 27/40

Which search method takes less memory?

A. Bidirectional search
B. Depth-First Search
C. linear search
D. Breadth-First Search

Question 28/40

Satellite Image Analysis System is (Choose the one that is not applicable).

A. Episodic
B. Single agent
C. Partially Observable
D. Semi-Static

Question 29/40

Which of the following is not a component for defining a problem?

A. Actions
B. Intermediate states
C. Initial State
D. Transition mode

Question 30/40

Real-Time decisions, Game AI, Learning Tasks, Skill Aquisition, and Robot Navigation are applications of which of the folowing

A. Supervised Learning: Classification
B. Unsupervised Learning: Regression
C. Reinforcement Learning
D. Unsupervised Learning: Clustering

Question 31/40

What of the following is considered to be a pivotal event in the history of AI.

A. 1950, Computing Machinery and Intelligence.
B. 1961, Computer and Computer Sense.
C. 1949, Donald O, The organization of Behavior.
D. 1956, Dartmouth University Conference Organized by John McCarthy

Question 32/40

Which of the following is an example of single agent environment?

A. none of these
B. Sudoku puzzle
C. intelligent agent laying the road
D. Chess playing

Question 33/40

LIFO is _____ where as FIFO is _____

A. stack, priority queue
B. priority queue,stack
C. stack, queue
D. queue, stack

Question 34/40

… does not guarantee to find a solution and backtracking is required if the wrong path is selected.

A. heuristic search techniques
B. iterative deepening search techniques
C. depth-first search techniques
D. breadth-first search techniques

Question 35/40

What is the advantage of artificial intelligence in autonomous vehicle?

A. Reduces driver error
B. All of the above
C. Reduced travel time and transportation cost
D. Reduced traffic congestion

Question 36/40

An AI technique that allows computers to understand associations and relationships between objects and events is called:

A. heuristic processing
B. cognitive science
C. relative symbolism
D. pattern matching

Question 37/40

State whether the following statements about the uninformed search control strategy are True or False.
i) It does not have additional information about states beyond problem definition.
ii) In an uninformed search control strategy, the total search space is looked for a solution.
iii) Best first search and problem decomposition are examples of uninformed search control strategies.

A. i-True, ii-False, iii-True
B. i- False, ii-False, iii-False
C. i-False, ii-True, iii-True
D. i-True, ii-True, iii-False

Question 38/40

Which of the following does not represent a Goal based agent?

A. Reaching the initial state again after reaching the goal state
B. None of the above
C. Reaching the goal in minimal cost
D. Reaching the goal in minimal amount of time

Question 39/40

Which of the following definitions correctly defines the State-space in an AI system?

A. A state space is the total space available for the agent in the state
B. A state space can be defined as the collection of all the problem states
C. All of the above
D. A state space is a state which exists in environment which is in outer space

Question 40/40

The _____ is a set of instructions that tell the system how to manipulate the conditions based on Boolean logic set of operators such as AND, OR, NOT.

A. Mechanical ENGINE
B. Inference Engine
C. Analytical engine
D. REPORTING ENgiNE