

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. Heuristics
- 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 following

- 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