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SECTION A.

Q1.

- Most of the solution spaces for problems can be represented in a _____
(A). Graph.

Q2.

- By getting grips on _____ that deal with searching techniques in graphs and trees, problem solving can be performed in an efficient manner.
(A). Algorithms.

Q 3.

- Every graph can be converted into a tree.
(A). True.

Q 4.

In Breadth First Search the node with the largest value of height will be at the _____ priority to be picked.

(A). Maximum.

Q 5.

- Breadth-First Search checks all paths of a given length before moving on to any longer paths.
(A). False.

Q 6.

- Breadth-first search is a good idea when you are confident that the

branching factor is

(B) Small.

Q 7.

- The foot hill problem occurs whenever there are _____ peaks.
(B) Secondary.

Q 8.

- The Plateau problem comes up when there is a mostly flat area _____
the peaks.
(A) Separating.

Q 9.

- Which one of the problem is more subtle, and consequently, is more frustrating.
(c) Ridge.

Q 10.

- The paths found by best-first search are likely to be _____ than those found with other methods.
(B) Shorter.

Q 11.

- In Basic Genetic Algorithm the term mutation refers to a small random _____.
(B) Change.

Q 12.

- Which of the following two components are closely coupled and each is intrinsically tied to the other.
(D) i&ii.

Q 13.

- Semantic networks are graphs, with nodes representing _____ and arcs

representing _____ between objects.

(A). Object , relationship.

Q 14.

- A proposition is the statement of a _____.

(A) . Fast.

Q 15.

_____ reasoning is based on forming, or inducing a 'generalization' from a limited set of observations.

(c). induction.

Q 16.

- An _____ is "A computer program designed to model the problem solving ability of a human expert.

(A). Expert System.

Q 17.

- Another expert system named _____ was developed by Digital Equipment Corporation, as a computer configuration assistant.

(A). R1/XCON.

Q 18.

- An expert system may replace the expert or assist the expert.

(A). True.

Q 19.

- Conventional programming focuses on _____, while ES programming focuses on _____

(A). Solution , Problem.

Q 20.

- In backward chaining terminology, the hypothesis to prove is called the__.

(B). Goal.

SECTION B.

Q21.

Expert system

Ans.

- It is a system that uses human expertise to make complicated decisions and a models to solving problem ability of a human expert.

Q22.

Ans.

Depth First Search.

- It is an algorithm for traversing and searching of tree or graph. In DFS is an uninformed search progress expanding of the first child node of the tree thus deeper to deeper until the goal is found.it reach the end node so it's back to parent node and stat to visited children node.
- We will use same search algorithm to implementation of DFS function
Priority (p n)=1/high (n).

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Q23.

Ans.

Applications of Genetic Algorithms

- Gaming industrial optimization.
- Composing strategies.

- Genetic programming.
- Machine Learning.
- Scheduling application.

Q24.

Ans.

- The backward chaining is like depth first strategy. in backward chaining all the terminology and hypothesis to prove that's called goal. backward changing start with the list of goals. It will be working memory so initially it check so you are done if found if not then search for goal **THEN** conclusion.
- Premise also becomes sub goals to prove if it cannot conclude by any rule when primitive is found ask user for information about it back track and use this all information to prove sub goals.

Backward chaining examples:

Rule 1.

If the patient is temperature above then 100
THEN the patient has fever.

Rule 2.

IF the patient has been sick fortnight
AND the patient has fever
THEN we suspect an Infection.

----- **THE END** -----

