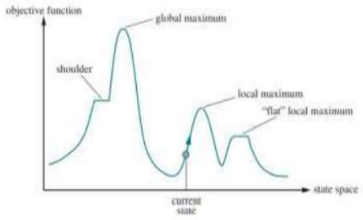
Sheet 7

Local search algorithms can solve…….
a) Any problems
b) optimization problems
c) algorithm

2. what is the name of algorithm that figure refer to?
a) compile
b) Hill-climbing search
c) Optimal search
d) D F S



4. Hill climbing is sometimes called.
a) Local maxima
b) Greedy local search
c) Optimal solution

5. Which statement is true?
a) The local beam search algorithm keeps track of k states rather than just one.
b) problem-solving agent is not type of agents.
c) Ai agents must not think like human.
d) Humans is more intelligent than AI agents.

6. ……. algorithms operate by searching from a start state to neighboring states, without keeping track of the paths, nor the set of states that have been reached
a) Local search.
b) problem-solving.
c) Search
d) Execution.

8. Another name for highest peak
a) Problem formulation.
b) Local maximum
c) Search
d) Global maximum

9. Another name to lowest valley
a) Global minimum
b) problem-solving.
c) Search
d) Local minimum.

10. Aim is to find the lowest valley called……
a) Gradient descent.
b) Global minimum
c) Goal states

d) Actions

11. Hill climbing search sometimes called…….
a) Gradient descent
b) greedy local search
c) goal states
d) algorithm

12. …….is a peak that is higher than each of its neighboring states but lower than the global maximum.
a) State
b) global maximum
c) Local maxima
d) Actions

13.. …….is a flat area of the state-space landscape
a) State
b) Transition model
c) Goal states
d) Plateau

14. …… implements hill climbing by generating successors randomly until one is generated that is better than the current state
a) State
b) Stochastic hill climbing
c) random-restart hill climbing
d) First-choice hill climbing

15. …… chooses at random from among the uphill moves.
a) state
b) Stochastic hill climbing
c) random-restart hill climbing
d) First-choice hill climbing

16. …… which adopts the adage, "If at first you don't succeed, try, try Again
a) state
b) Stochastic hill climbing
c) random-restart hill climbing
d) First-choice hill climbing

17.A Local search algorithm operate by searching from a start state to neighboring states, without keeping track of the paths,
a) True
b) False

2. 8-queens problem use hill climbing search
a) True
b) False

3. Hill climbing is sometimes called optimal solution
a) True
b) False

4. Local maxima: A local maximum is a peak that is higher than each of its neighboring states
a) True
b) False

5. Local maxima can be greater than the global maximum
a) True
b) False

6. Local search is not type of algorithms.
a) True
b) False

7.Local search aim is to find the highest peak
a) True
b) False

9. highest peak called gradient descent
c) True
d) False

10. Global minimum called lowest valley
a) True
b) False

11. gradient descent aim is to find the lowest valley.
a) True
b) False

12. Hill climbing is sometimes called greedy local search
a) True
b) False

13. A plateau is a flat area of the state-space landscape.
a) True
b) False

14.Stochastic hill climbing chooses at deterministic from among the uphill moves
a) True
b) False

15. First-choice hill climbing implements hill climbing by generating successors randomly until one is generated that is better than the current state.
a) True
b) False