

Mock Test

⌚ 90 minutes remaining ⏳

10 OF 10 QUESTIONS REMAINING

Test Content

Question 1

5 Points

The convolution operation between which filter (choice) and the image below results in the given feature map?

1	1	1	0	0
0	1	1	1	0
0	0	1	1	1
0	0	1	1	0
0	1	1	0	0

Image

3	5	3
2	4	5
2	4	3

Feature map

...

- (A) 1 0 0
1 1 1
0 1 0
- (B) 1 0 1
1 1 1
0 1 0
- (C) 0 1 0
1 1 1
0 1 0
- (D) 1 0 1
1 0 1
0 1 0

Details & Information

Assessment due date

14/12/2022, 00:00 (GMT)

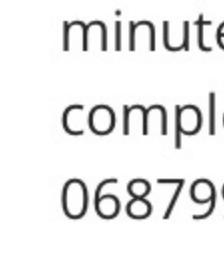
Time limit

90 minutes | Automatic submission

Attempts

Unlimited

Marking



Maximum points

31 points

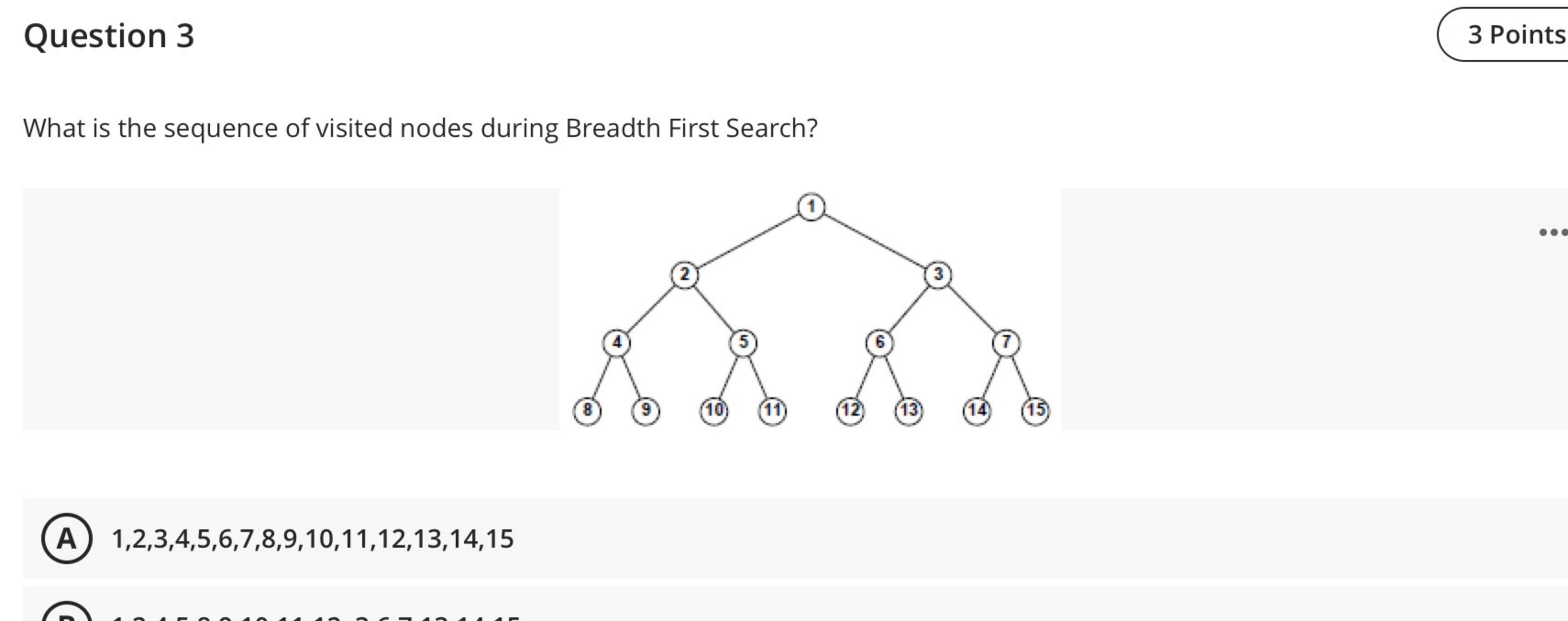
Description

This Mock Test is intended to show you the format of the questions that you will receive in the full test. Please note that each question will have marks allocated based on the difficulty of the question. The full test will consist of 10 T/F questions, and 20 Multiple choice and enter a value questions. You will have 90 minutes, plus any reasonable adjustments, to complete the full test. Enter the Access Code to start: 068799

Question 2

6 Points

What is the output y of the following perceptron:

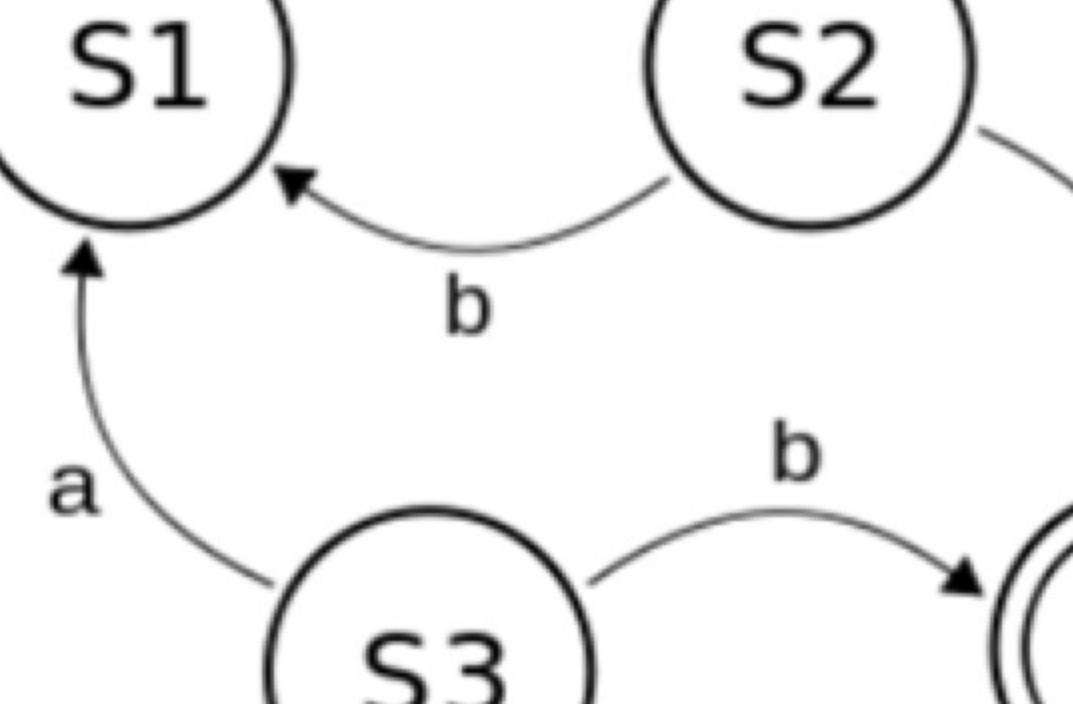


Add your answer

Question 3

3 Points

What is the sequence of visited nodes during Breadth First Search?



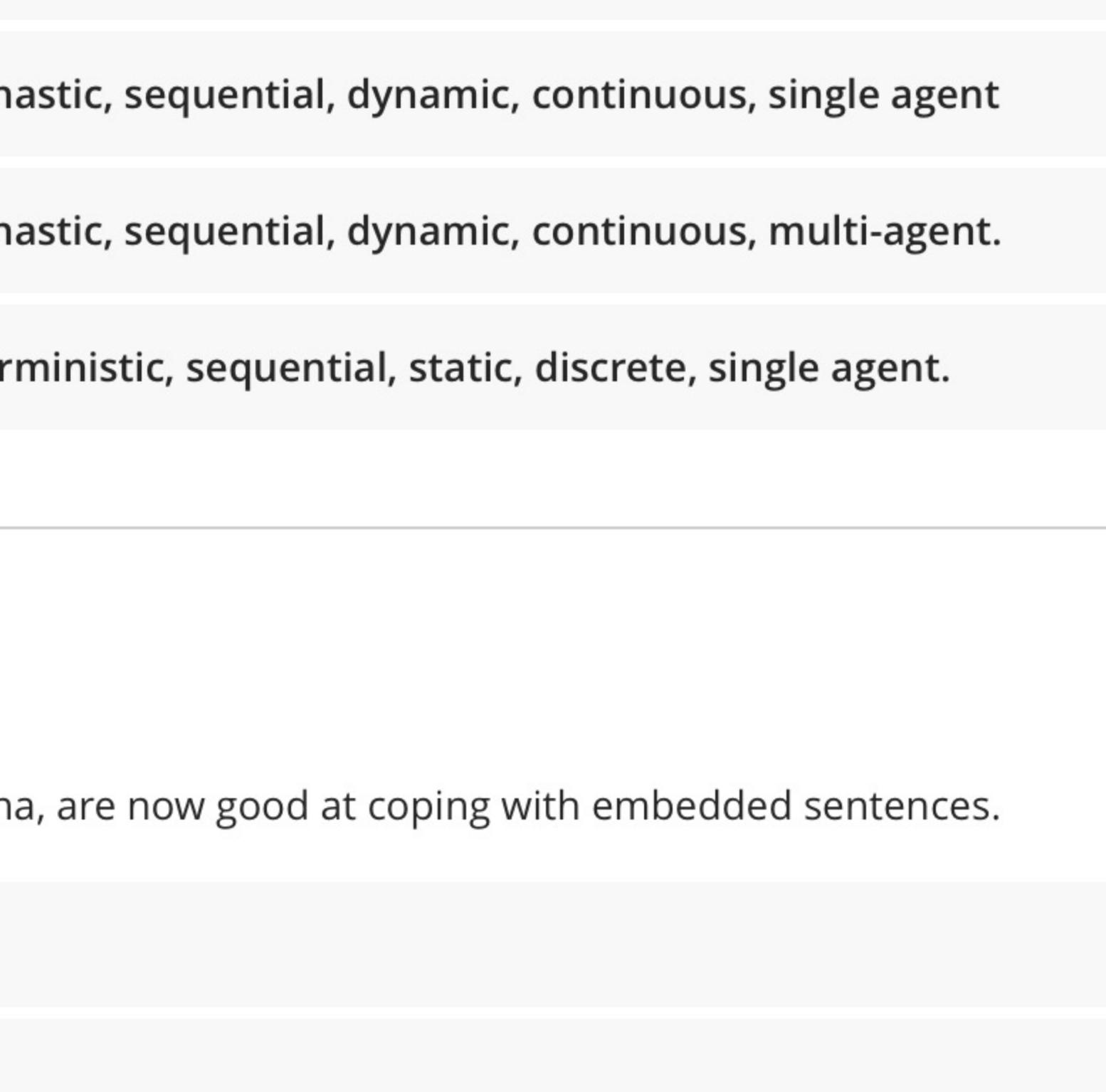
...

- (A) 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15
- (B) 1,2,4,5,8,9,10,11,12,3,6,7,13,14,15
- (C) 1,2,4,8,9,3,6,12,13,5,10,7,14,11,15
- (D) 1,2,4,8,9,5,10,11,3,6,12,13,7,14,15

Question 4

3 Points

Which of the strings is not accepted by this FSM?



...

- (A) ababacdaac
- (B) aaaacdaab
- (C) aacdbdb
- (D) ababacdbdb

Question 5

3 Points

Which Agent task environment description best characterises playing a game of tennis.

- (A) Fully observable, stochastic, episodic (every point is separate), dynamic, continuous, multi-agent.
- (B) Partially observable, stochastic, sequential, dynamic, continuous, single agent
- (C) Partially observable, stochastic, sequential, dynamic, continuous, multi-agent.
- (D) Partially observable, deterministic, sequential, static, discrete, single agent.

Question 6

1 Point

Voice assistants such as Siri, Corona, are now good at coping with embedded sentences.

- (A) True

- (B) False

Question 7

1 Point

A typical Automatic Feature extraction and Classification system consists of Input Layer, Convolution and Pooling layers, and finally fully connected output layer.

- (A) True

- (B) False

Question 8

1 Point

A perceptron can model any logical function.

- (A) True

- (B) False

Question 9

1 Point

A rational agent chooses whichever action maximizes the expected value of the performance measure given the percept sequence to date.

- (A) True

- (B) False

Question 10

7 Points

Consider a state space where the start state is number 1 and each state k has three successors: numbers $4k$, $4k + 1$ and $4k + 2$. So, the successors to state 1 are 4, 5 and 6, the successors to state 4 are 16, 17 and 18, and so on. Which of the following describes the order of nodes visited using breadth first search to a depth of 2? (Hint: draw a graph)

- (A) 1,4,16,5,20,6,24,17,18,21,22,25,26

- (B) 1,4,16,17,18,5,20,21,22,6,24,25,26

- (C) 1,4,5,6,16,20,24,17,21,25,18,22,26

- (D) 1,4,5,6,16,17,18,20,21,22,24,25,26