

# Mock Test 1 ( Lessons 1-5)

15 OF 15 QUESTIONS REMAINING

## Test Content

### Question 1

1 Point

The Turing Test is a method of inquiry in artificial intelligence (AI) for determining whether a computer is capable of thinking like a human being

☐ A True

☐ B False

[Clear selection](#)

### Question 2

1 Point

Ethical issues related to AI include privacy concerns and the impact on job markets.

☐ A True

☐ B False

[Clear selection](#)

## Details & Information



### Assessment due date

No due date



### Attempts

Unlimited | 1 submitted

## Marking



Maximum points

50 points

### Question 3

1 Point

If we interpret the predicate **Spouse(x,z)** as “x is the Spouse of z”, the following FOL formula means “Everyone can be the spouse of any given person.”

$\exists x \forall y, z \text{ Spouse}(x, z) \wedge \text{Spouse}(y, z) \Rightarrow x=y$

☐ A True

☐ B False

[Clear selection](#)

### Question 4

1 Point

Ethical issues related to AI include privacy concerns and the impact on job markets.

☐ A True

☐ B False

[Clear selection](#)

### Question 5

1 Point

Move ordering has no effect on Alpha-Beta pruning

☐ A True

☐ B False

[Clear selection](#)

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### Question 6

1 Point

The minimax algorithm is only applicable to two-player, zero-sum games.

☐ A True

☐ B False

[Clear selection](#)

### Question 7

3 Points

Which among the following is not a primary characteristic of an intelligent agent?

- ☐ (A) Reactivity
- ☐ (B) Ability to play board games
- ☐ (C) Proactiveness
- ☐ (D) Autonomy

### Question 8

6 Points

What is the CNF form for the following sentence?

$(P \Rightarrow P) \Leftrightarrow Q$

- ☐ (A)  $(P \vee \neg P \vee \neg Q) \wedge (\neg P \vee Q) \wedge (P \vee Q)$
- ☐ (B)  $(\neg P \vee \neg Q) \wedge (\neg P \vee Q) \wedge (P \vee Q)$
- ☐ (C)  $(P \wedge \neg Q) \vee (\neg P \wedge Q) \vee (P \wedge Q)$
- ☐ (D)  $(P \wedge \neg P) \vee (\neg Q \wedge \neg P) \vee (Q \wedge P)$

### Question 9

4 Points

The CNF (Clausal) form of  $A \rightarrow (B \wedge C)$  is

☐ (A)  $(A \vee B) \wedge (\sim A \vee C)$

☐ (B)  $(\sim A \vee \sim B) \wedge (A \vee C)$

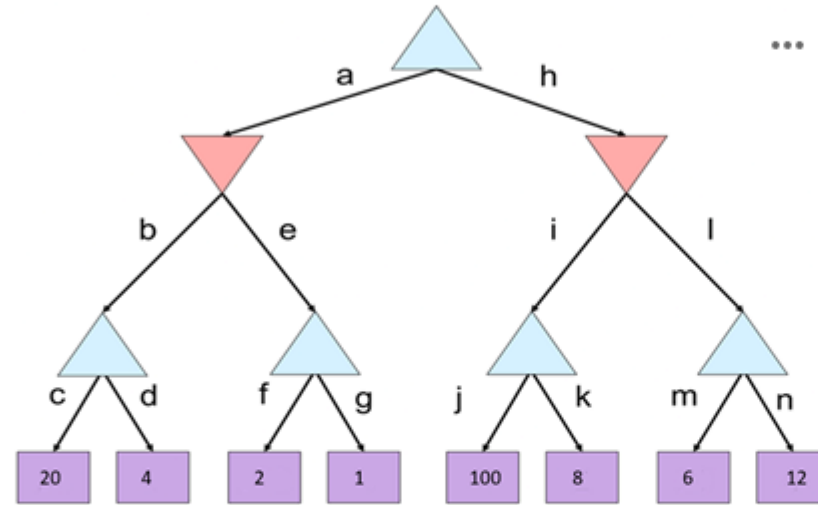
☐ (C)  $(A \vee \sim B) \wedge (A \vee \sim C)$

☐ (D)  $(\sim A \vee B) \wedge (\sim A \vee C)$

### Question 10

5 Points

The following game tree generated using the MiniMax algorithm.  
What will be the value in the root node?



(A) 100

(B) 2

(C) 12

(D) 20

### Question 11

2 Points

Which of the following is an Informed Search technique?

☐ A Breadth first search

☐ B Depth first search

☐ C Depth limited search

☐ D A\* algorithm

## Question 12

6 Points

A knowledge base has the following rules

1.  $P \rightarrow Q$  2.  $L \wedge M \rightarrow P$ , 3.  $B \wedge L \rightarrow M$ , 4.  $A \wedge B \rightarrow L$ , 5. A, 6. B

If the query Q has to be tested using backward chaining inference method, what sequence of the rule will be executed.

**(A)** 5,6,4,2,3,1

**(B)** 1,2,4,5,6,3

**(C)** 1, 5,6,2,3,4

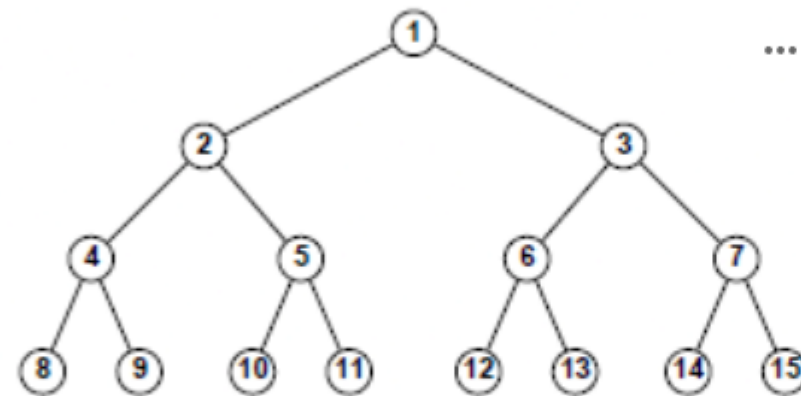
**(D)** 5,6,2,3,4,1



### Question 13

5 Points

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



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

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

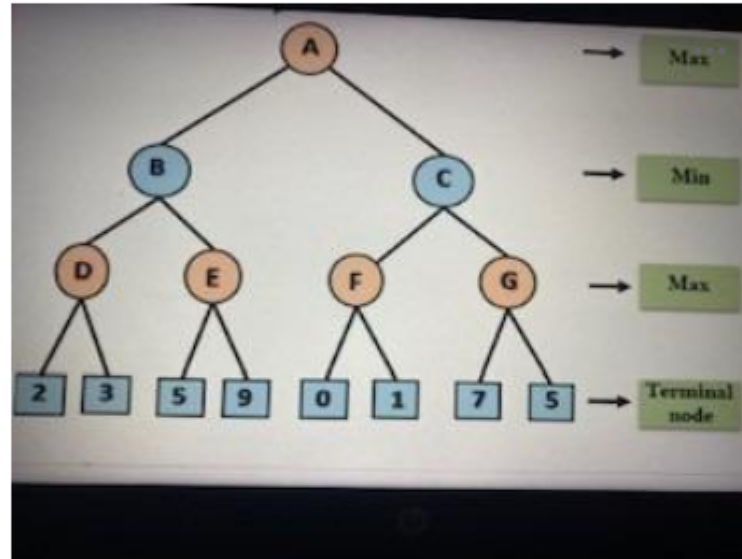
(C) 1,2,4,9,8,5,11,10,3,6,13,12,7,15,14

(D) 13,6,12,13,7,14,15,2,4,8,9,5,10,11

### Question 14

6 Points

IF alpha-beta pruning is used in the following graph, which of the following gives the alpha and beta values of node (E)



(A) 2, 5

(B) 3, 5

(C) 5, 3

(D) 3, 9

Question 15

7 Points

A\* is applied to the problem of getting from Craiova to Bucharest using the straight-line distance heuristic. What is the cost for Pitesti after the application of the evaluation function  $f(x) = g(x) + h(x)$  ?



Add your answer

Integer, decimal or E notation allowed