Instructions 1

Please select the best answer.

Question 2

The Game of Life has the ability to create _____ .

- A. real robots

- B. self-reproducing automata

- C. fully mobile agents with network connections

- D. patterns of behavior that don't exist in ABM

Question 3

One common feature between ABM and CA is:

- A. the timestep-based scheduler

- B. mobile agents

- C. experimental tools

- D. a fixed set of binary rules

Question 4

In many ways, the desire to build economic models that can handle modern complexities, at least partially, led to the development of one of the first ABM toolkits.

- A. Repast

- B. MASON

- C. Swarm

- D. NetLogo

Question 5

Because Genetic Algorithms use a population of solutions, it is possible to _____ good solutions to create better ones.

- A. modify

- B. recombine

- C. mutate

- D. delete

Question 6

Body syntonic reasoning is employed in agent-based modeling in that:

- A. agents and humans can participate together

- B.agents can reason about their own bodies

- C. agents are similar to bodies

- D. stakeholders identify with agents to reason and understand their behavior

Question 7

The main difference between NetLogo and Logo is that NetLogo can handle _____.

- A. thousands of agents

- B. one agent

- C. graphical displays

- D. modern computational structures

Question 8

Object-oriented programming and agent-based model share similarities in that:

- A. OO was created to model complex systems phenomena

- B. agents can be viewed as objects in the OO paradigm

- C. they do not share similarities

- D. agent-based modeling is a programming language

Question 9

The Actor paradigm and ABM both place an emphasis on:

- A. local interactions

- B. path dependence

- C. participatory simulation

- D. experimental design

Question 10

Parallel computing requires the creation of special languages because:

- A. serial machines run slower

- B. different processors behave differently

- C. standard computing architectures assume that every element can access the full data of the program at all times

- D. communication between processes takes a long time

Question 11

_____ is the field of studying computational models of natural life.

- A. machine learning

- B. evolutionary computation

- C. system dynamics modeling

- D. artificial life