### 9.6 Wrapup and the Future of ABM » Unit 9 Exam

## Instructions 1

Please select the best answer.

## Question 2

What does the causal state modeling example shows how we can automatically learn?

- A. Everything we need for an agent-based model
- B. Rules for an agent-based model
- C. Patterns of behavior of aggregate systems
- D. How many agent to model


## Question 3

The growth of $\qquad$ provides us with more insight into human activity than any previous time in history.

- A. big data
- B. census data
- C. lab studies
- D. surveys


## Question 4

The goal of $\qquad$ is to create a suite of models that are both generalizeable and can create specific forecasts

- A. full spectrum modeling
- B. iterative modeling
- C. pattern-oriented modeling
- D. agent-based modeling


## Question 5

$\qquad$ is the idea that model developers and subject matter experts should communicate often.

- A. pattern-oriented modeling
- B. agent-based modeling
- C. iterative modeling
- D. full spectrum modeling


## Question 6

Which of these commands allows you to store a function as a variable?

- A. MAP
- B. REDUCE
- C. RUN

。D. TASK

## Question 7

?1 and ?2 are used in NetLogo to refer to?

- A. elements of a list that you are iterating over
- B. the first and second variable
- C. a random number multiplied by one and two respectively
- D. they are not used in NetLogo


## Question 8

Participatory simulation allows $\qquad$ to interact with (the) $\qquad$ .

- A. people, robots
- B. people, virtual agents
- C. doctors, patients
- D. parts, whole


## Question 9

System dynamics modeling is primarily composed of what two elements?

- A. math, equations
- B. agents, flows
- C. stocks, flows
- D. stocks, agents


## Question 10

The GIS extension can read data directly from ( $a / n$ ) $\qquad$ .

- A. java file
- B.online internet collection
- C. shapefile
- D. database


## Question 11

Betweenness centrality computes the node which exists on the greatest number of $\qquad$ between $\qquad$ .

- A. shortest paths, nodes
- B. nodes, nodes
- C. shortest paths, cities
- D. eigenvectors, eigenvalues

