

# Introduction to Agent-Based Modeling (Summer 2023)

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

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### Instructions 1

Please select the best answer.

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### Question 2

What does the causal state modeling example show that we can learn automatically?

- 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
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### Question 3

The growth of \_\_\_\_\_ 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
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### Question 4

The goal of \_\_\_\_\_ is to create a suite of models that are both generalizable and can create specific forecasts

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

### Question 5

\_\_\_\_\_ 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 pieces of NetLogo syntax is associated with procedures that are created without a name?

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

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**Question 7**

In the code, `(map [ [rev emp] --> round ((rev / emp) / 1000)] rlist elist)`, what do `rev` and `emp` refer to?

- A. elements of a list that you are iterating over
  - B. the first and second variable in the entire model
  - C. a random number multiplied by one and two respectively
  - D. they do not refer to anything
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**Question 8**

Participatory simulation allows \_\_\_\_\_ to interact with (the) \_\_\_\_\_.

- A. people, robots
  - B. people, virtual agents
  - C. doctors, patients
  - D. parts, whole
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**Question 9**

System dynamics modeling is primarily composed of what two elements?

- A. math, equations
  - B. agents, flows
  - C. stocks, flows
  - D. stocks, agents
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**Question 10**

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

- A. java file
  - B. online internet collection
  - C. shapefile
  - D. database
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**Question 11**

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

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