Introduction to Agent-Based Modeling (Summer 2023) 4.6 Unit 4 Overview » Unit 4 Test

Question 1

What are the two core ideas of the ABM Design Principle?

- A. Focus on the question at hand and realism
- B. Simplicity and Focus on the Question at hand
- C. Simplicity and realism
- D. Realism and any elements desired by the stakeholders

Question 2

What are the two major forces in the Bas model?

- · A. innovation and imitation
- · B. imitation and social networks
- C. innovation and advertising
- D. advertising and creativity

Question 3

Which of these is not a design choice of agent-based modeling?

- A. Determining agent types
- · B. Determining agent properties
- C. Determining inputs to a model
- D. All of these are design choices for agent-based models

Question 4

In the diffusion model, what are the behaviors of the agents?

- A. determine the optimal behavior of diffusion
- B. move, eat, reproduce
- $\circ~$ C. decide whether or not to adopt the information / innovation
- D. decide who to talk to

Question 5

Nearly every SETUP procedure in NetLogo starts with what command?

- A. CLEAR-ALL
- B. RESET-TICKS
- 。 C. TICK
- D. END

Question 6

What is the basic command used to plot the number of adopters over time?

- A. PLOT COUNT TURTLES WITH [ADOPTED?]
- B. PLOT COUNT TURTLES
- C. PLOT COUNT ADOPTED
- D. PLOT TURTLES WITH [ADOPTED?]

Question 7

In what kind of environment do agents operate in the DIFFUSION model?

- A. a social network
- B. a GIS network
- C. a lattice
- D. a featurespace

Question 8

What is the extension that we use in this model?

- A. nw
- B. small-world
- C. preferential-attachment
- D. networkx

Question 9

Why do we run each model multiple times in agent-based modeling?

- A. the models are often deterministic, and multiple runs help us determine their behavior
- B. the models are often stochastic, and multiple runs help us understand the variance
- C. you do not need multiple runs
- D. BehaviorSpace requires multiple runs

Question 10

What command in R is used to read the output of BehaviorSpace?

- A. read.netlogo
- B. read.data
- C. import.csv
- D. read.csv