

# Quiz 5: Simulation Results for Liangrui Lu

❗ Correct answers are hidden.

Score for this attempt: **10** out of 10

Submitted Dec 13, 2021 at 1:47pm

This attempt took 9 minutes.

## Question 1

1 / 1 pts

In order to generate random numbers in Excel® from a discrete distribution with a finite number of possible values and corresponding probabilities, we can use:

- ☐ only the RAND function
- ☐ only the VLOOKUP function
- ☐ only the VLOOKDOWN function
- ☒ the RAND function along with a VLOOKUP function

## Question 2

1 / 1 pts

The *flaw of averages* is the reason deterministic models can be very misleading.

- ☒ True
- ☐ False

**Question 3****1 / 1 pts**

Data tables in spreadsheet simulations are useful for taking a “prototype” simulation and replicating its key results a desired number of times.

- ☒ True
- ☐ False

**Question 4****1 / 1 pts**

The built-in functions in Excel®, along with the RAND function, can be used to generate random numbers from many different types of probability distributions.

- ☒ True
- ☐ False

**Question 5****1 / 1 pts**

The deterministic (non-simulation) approach, using best guesses for the uncertain inputs, is:

- ☐ better to use in complicated real world applications
- ☐ a good estimate of what the answer will be using a simulation approach
- ☒ generally not the appropriate model



the preferred approach when there is correlation between input variables

### Question 6

1 / 1 pts

The “building blocks” of all spreadsheet simulation models are:



deterministic inputs



random numbers between 0 and 1



decision variables



probability distributions for uncertain input variables

### Question 7

1 / 1 pts

A primary difference between standard spreadsheet models and simulation models is that at least one of the input variable cells in a simulation model contains *random numbers*.



True



False

### Question 8

1 / 1 pts

The RAND() function in Excel® models which of the following probability distributions?

- ☐ Normal(0,1)
- ☒ Uniform(0,1)
- ☐ Normal(-1,1)
- ☐ Uniform(-1,1).

### Question 9

1 / 1 pts

Each different set of values obtained for the uncertain quantities in a simulation model can be considered to be:

- ☐ the mean of the probability distribution
- ☒ a scenario
- ☐ a best guess
- ☐ all of these choices

### Question 10

1 / 1 pts

@RISK introduces uncertainty explicitly into a spreadsheet model by allowing several inputs to have probability distributions and then enabling the simulation of random values from these inputs.

☒ True

☐ False

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