

## Unit 5: Questions and Exercises

### Question 1

When designing a machine learning experiment, it is always best to do a \_\_\_\_\_ design unless we are sure the factors being considered do not interact.

### Question 2

Which of the following factors is not important to consider when choosing an algorithm for your machine learning problem?

- a. The nature of the data
- b. The accuracy required
- c. The training time available
- d. The size and quality of the data
- e. All of the above factors are important to consider

### Question 3

Which of the following programming languages commonly used for machine learning is a popular open source language used for research, scientific and numeric computing, software development, and more?

- a. C++
- b. Java
- c. Python
- d. MATLAB
- e. R

### Question 4

True or False. The following list correctly identifies the steps for designing and executing a machine learning experiment.

- A. Aim of the Study
- B. Selection of the Response Variable
- C. Choice of Factors and Levels
- D. Choice of Experimental Design
- E. Performing the Experiment
- F. Statistical Analysis of the Data
- G. Conclusions and Recommendations

### Question 5

True or False. The first step to choosing a machine learning algorithm is determining the learning method.