**AI and ML Definitions**

1. What is a good definition of AI?

Making computers smarter than humans.

Replacing human decision making with computers.

Getting machines to think for themselves

Simulation of human intelligence in computers.

1. What is a good definition of machine learning?

Supplying lots of rules to the computer.

A definite, known answer based on the data you give the computer.

Getting the machine to learn from characteristcs of the data you give to it.

Magical Results based on complex mathematics.

**Deep Learning**

1. Which of the following is true about Deep Learning?

It is loosely based on how the brain works.

Hidden layers add complexity

Output layers reflect a learned inference

(Select all)

**Module 1: Introduction to Artificial Intelligence**

1. Input data for a supervised machine learning model includes:

a set of training data

a set of test data

a label

(Select all)

1. Unsupervised machine learning tasks try to

find unkown relationships in an unlabelled dataset.

infer a real number that an input belongs to.

find unkonwn relationships in a labelled data set.

infer a caetgory that an input belongs to.

1. Python

Is interpreted

Requires you to specified variable types

Is extensible

Is object-oriented

1. A python list

is not indexable.

is mutable.

is immutable.

can only contain elements of the same data type.

1. {firstname:'Joe',lastname:'Smith'} is an example of

a dictionary.

.a tuple

a class.

A list

1. Which of the following represents the correct way to build a numpy ndarray?

Numpy.array([1,2,3,'hello'])

Numpy elements have to be of the same type.

Numpy.ndarray([1,2,3,45])

Numpy.array(["one","two","three","four","five"])

1. Which of the following data abstractions are included in the Pandas package?

A series

A dataframe

An ndarray

1. Scikit-learn provides

algorithms that implement deep neural nets

libraries that include algorithms for unsupervised machine learning tasks

libraries that include algorithms for supervised machine learning task

1. All of these libraries implement deep neural nets, EXCEPT

Keras

Tensorflow

Pytorch

Scikit-learn

1. Which of the following is NOT a benefit of using Jupyter notebooks?

markdown

collaboration

visualization

debugging