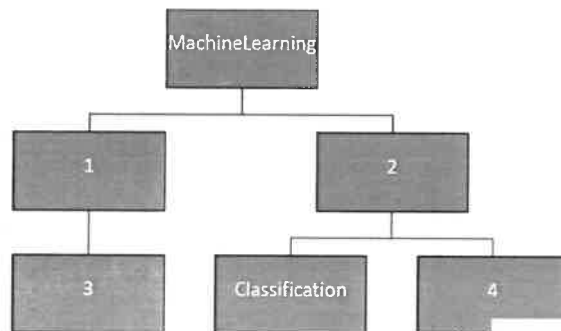**QUESTION 1 [15 marks]**

Write down the numbers 1.1 to 1.15 and next to each write down only the alphabet of the choice you have selected.

1.1   What type of learning needs to be applied to the following problem statement?

"You want to train a machine to help you predict how long it will take you to drive home from your workplace."

A) Unsupervised Learning with Clustering
B) Supervised Learning with Regression
C) Supervised Learning with Classification
D) Reinforcement Learning with Agents

1.2   The diagram below represents an overview of the types of machine learning. Study this diagram and then select the correct option by matching the numbers in the diagram with the corresponding type of learning.

A) 1: Supervised; 2: Unsupervised; 3: Regression; 4: Clustering
B) 1: Unsupervised; 2: Supervised; 3: Clustering; 4: Regression
C) 1: Supervised; 2: Unsupervised; 3: Clustering; 4: Regression
D) 1: Unsupervised; 2: Supervised; 3: Regression; 4: Clustering

1.3   What best describes the model function illustrated below?