Name: Class: Mark:

1. One characteristic of artificial intelligence (AI) is the collection of data and rules.

(a) Define the meaning of artificial intelligence. [1]

(b) Name **two** other characteristics of AI. [2]

2. A website is planning to make use of an expert system as part of a chat bot that will help customers.

(a) One component of the expert system will be the inference engine and interface.

State **one** other component needed for the expert system. [1]

(b) Describe the purpose of the inference engine. [2]

(c) State the purpose of the interface in the expert system. [1]

(d) Compare the use of an expert system to one that uses machine learning. [3]

[Total 10 marks]