



Complete, fold and seal
(see note 2 below)

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FORENAME(S): Sameeron

Examination Answer Books

12 Pages

Instructions to Candidates

- Please give the information requested in the boxes below.
- Enter your name in the space provided to the right, fold over and seal down (using the label provided) to hide your name.
- The answers must be legibly written. The Examiners cannot read illegible script or have it typed and the expense of typing charged to the candidate.
- Write your answers in ink.
- Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
- No part of this book is to be torn out; it must be handed in complete.
- If more books than one are used, fasten them together using the tags available from the invigilator(s).
- Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

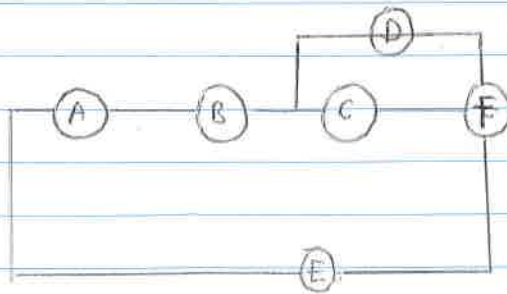
1	Student Number	2114454
2	Title of Examination Paper	Artificial Intelligence & Machine Learning
3	Module Code	ACCA6011
4	Date and Time of Examination	08/01/24
5	Examination Venue	iq building ROOM 310
6	Seat Number	13
7	Number of Answer Books handed in	

List the numbers of the questions you have attempted	Office Use
1	
a	
b	
2	
a	
b	
c	
3 a,b,c	
4 a,b,c	
Total	

Question Two

- a) Local Search is meant by going through each individual step by step to get to the destination.

E.G.



$$2a = \frac{0.5}{7}$$

$$2a = \frac{2}{7}$$

$$2b = \frac{0}{9}$$

$$2b = \frac{0}{4}$$

$$2c = \frac{4}{6}$$

$$2c = \frac{4}{6}$$

$$2d = \frac{0}{8}$$

$$2d = \frac{0}{8}$$

- c) parent 1: 1 4 3 8 5 4 1 9 = Offspring 1: 1 7 4 1 9 4 1 9
parent 2: 3 7 4 1 9 6 3 2 = Offspring 2: 3 4 3 8 5 6 3 2

Question Three:

$$Q2 = \frac{4.5}{2.5}$$

- a) Supervised Learning:

Supervised Learning categorises the data that has been inputted, so it becomes labelled data. Whenever, there is a new data being inputted, the machine will search through each categories within the labelled data to find what the data is. For example, the user inputs the data "spoon". The machine will search through utensils category to find the similar data.

Unsupervised Learning: ?

This is the opposite of supervised learning. for unsupervised learning it doesn't go through a series of categorised data to search for what it wants. The data gets inputted and it learns whilst data is being inputted, in other words the machine teaches itself from the data being inputted.

$$Q3 = \frac{2}{2.5}$$

$$b = \frac{0}{2}$$

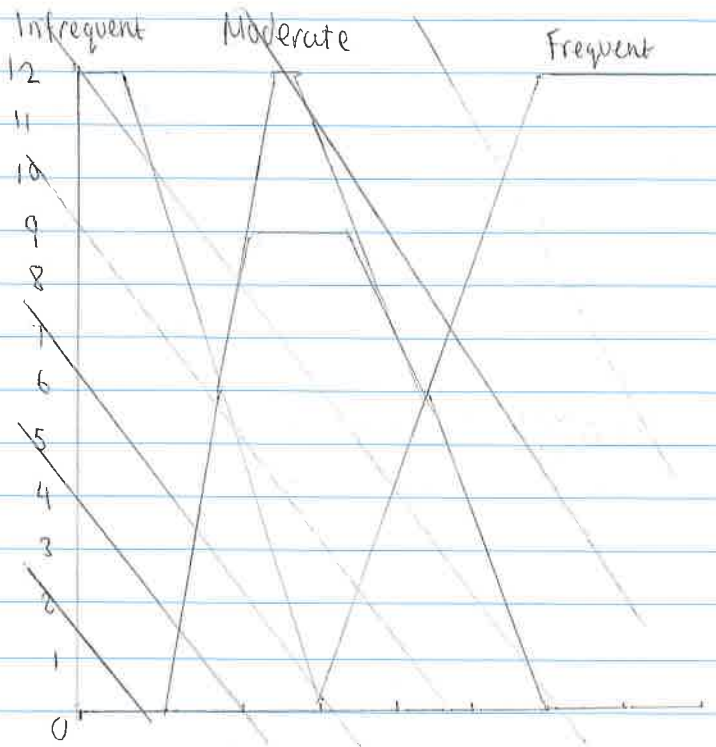
$$c = \frac{0}{10}$$

$$d = \frac{0}{6}$$

a) Crisp input $\rightarrow$ Fuzzification $\rightarrow$ Defuzzification $\rightarrow$ Crisp output

b)

c)



c)

Breathlessness =

