(b)   *Award [4 max]*.   **[4]**

Bus is defined as a system that transfers data between hardware
components/data bus and address bus enable a processor to communicate with
the primary memory;
When the computer processor needs to fetch an instruction from the memory it
uses the address bus to specify the (physical) address (of the memory block it
needs to access);
It will get the data from (the specific) memory (block) (after checking the address
bus to get the read address);
And then it will place this data on to the data bus/data bus carries the data;
When the processor wants to store results of execution to the memory it will set
the write address on the address bus;
And put the data/results/to be written to memory on to the data bus (to carry this
data);

(c)   (i)   *Award [1 max]*.

5E;   **[1]**

(ii)   *Award [1 max]*.

2^8/256;   **[1]**

(iii)   *Award [1] for identifying why this byte could not be used to represent
        characters such as those in Chinese and [1] for an expansion up to
        [2 max]*.

The characters must be represented as numbers so that computer can deal
with them;
One byte (gives us the ability to represent only 256 characters) is enough
to hold every possible character in a language which uses a limited set of
text symbols, punctuation marks and special characters (for example,
English, Spanish, *etc*);
Chinese exceeds the 256 character limit and therefore requires more bytes
to represent all of the characters in this language;   **[2]**

(d)   *Award [2 max]*.

Award [1] for all four input combinations (A,B).
Award [1] for all four correct output values (C).
Note*: 1 == True, 0 == False.*

A	B	C
0	0	1
0	1	0
1	0	0
1	1	1

[2]