5 This truth table represents a logic circuit.

INPUT				OUTPUT
A	**B**	**C**	**D**	**Z**
0	0	0	0	1
0	0	0	1	0
0	0	1	0	0
0	0	1	1	0
0	1	0	0	0
0	1	0	1	1
0	1	1	0	0
0	1	1	1	1
1	0	0	0	1
1	0	0	1	0
1	0	1	0	0
1	0	1	1	0
1	1	0	0	0
1	1	0	1	1
1	1	1	0	0
1	1	1	1	1

(a) Write the Boolean logic expression that corresponds to the given truth table as the sum-of-products.

Z = ...

..... [2]

(iii) Write the Boolean logic expression from your answer to part **(b)(ii)** as the simplified sum-of-products.

Z = ...

..... [2]