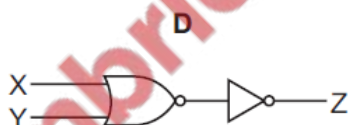
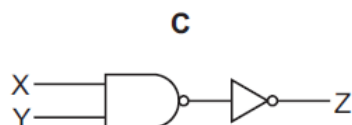
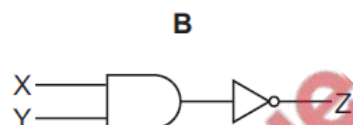
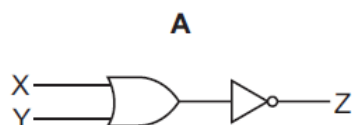


1. Nov/2020/Paper_21/No.34

Which combination of logic gates gives the truth table shown?

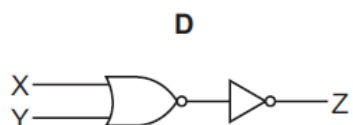
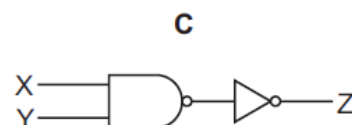
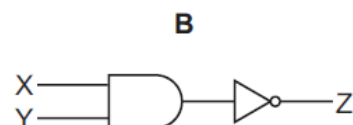
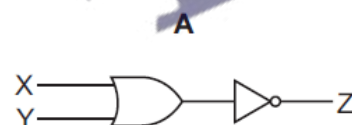
inputs		output
X	Y	Z
0	0	1
0	1	1
1	0	1
1	1	0



2. Nov/2020/Paper_22/No.33

Which combination of logic gates gives the truth table shown?

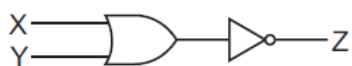
inputs		output
X	Y	Z
0	0	1
0	1	1
1	0	1
1	1	0



Which combination of logic gates gives the truth table shown?

inputs		output
X	Y	Z
0	0	1
0	1	1
1	0	1
1	1	0

A



B



C



D



(b) Fig. 8.3 shows the symbol for a logic gate.



Fig. 8.3

The truth table for this logic gate is shown in Table 8.1.

Table 8.1

input X	input Y	output Z
0	0	0
0	1	0
1	0	0
1	1	1

State the name of this logic gate.

[1]

(c) (i) A student designs the circuit shown in Fig. 8.4.

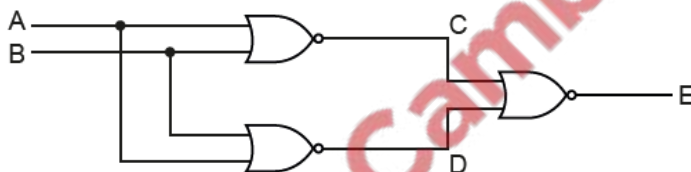


Fig. 8.4

Complete the truth table for this circuit in Table 8.2.

Table 8.2

A	B	C	D	E
0	0			
0	1			
1	0			
1	1			

[3]

(ii) A single logic gate can be used to produce output E in Fig. 8.4 with the inputs A and B shown in Table 8.2.

State the name of this logic gate.

[1]

[Total: 9]