



LAB TEST 1

Circuit Implementation



TEACHER: MD. PEYAL (MPM)

EXAM TIME: 1 HOURS

Directions:

- Simplify the expression as much as you can or you can go through the implementation directly
- Make a truth table for the expression
- Implement the circuit in tinkercad
- Match the output with the truth table

Boolean Expression

1. $(A' \oplus B)' + C$

2. $(A' + B)' \oplus C$

3. $(A + B)' \oplus C'$

4. $(A' \oplus B)' . C$

5. $(A' \oplus B)' + C$

6. $A (B \oplus C)'$

7. $A (B' \oplus C)'$

8. $A + (B \oplus C)'$

9. $A + (B' \oplus C)'$

10. $A' (B \oplus C)'$

11. $A' + (B \oplus C)'$

12. $(A.B' \oplus C)'$

13. $(A'.B \oplus C)'$

14. $(A.B \oplus C)'$

15. $(A + B' \oplus C)'$

16. $(A' + B \oplus C)'$

17. $(A + B \oplus C)'$

18. $(A \oplus C + B)'$

19. $(A' \oplus B + C)'$

20. $(A \oplus B + C)'$

21. $(A \oplus B' + C)'$

22. $(A' \oplus B + C)'$

23. $(A \oplus B + C)'$

24. $(D' \oplus A)' + C$

25. $D (B \oplus C)'$

26. $A (D' \oplus C)'$

27. $D + (B \oplus C)'$

28. $D + (B' \oplus C)'$

29. $A' (D \oplus C)'$

30. $D' + (B \oplus C)'$

31. $(A.D' \oplus C)'$

32. $(D'.B \oplus C)'$

33. $(A.D \oplus C)'$

34. $(A + D' \oplus C)'$

35. $(D' + B \oplus C)'$

36. $(A + D \oplus C)'$

37. $(D \oplus C + B)'$

38. $(D' \oplus B + C)'$

39. $(A \oplus D + C)'$

40. $(A + D' \oplus C)'$