

DIGITAL ELECTRONICS ASSIGNMENT

Q1. WHAT IS DIGITAL SIGNAL?

Q2. CONVERT (200) DECIMAL NO. INTO OCTAL, BINARY, HEXADECIMAL

Q3. CONVERT (2003.21) DECIMAL NO. INTO HEXADECIMAL

Q4. CONVERT (436) OCTAL INTO HEXADECIMAL

Q5. EXPLAIN BINARY ADDITION AND BINARY SUBTRACTION

Q6. EXPLAIN HALF ADDER AND FULL ADDER

Q7. EXPLAIN FULL SUBTRACTOR AND HALF SUBTRACTOR

Q8. SOLVE $A+B$ WHEN $A=10111$ AND $B=10011$

Q9. EXPLAIN 1S AND 2S COMPLEMENT

Q10. CONVERT 654 INTO 9S COMPLEMENT

Q11. EXPLAIN AND, OR AND NOT GATE WITH TRUTH TABLE AND EQUATION

Q12. EXPLAIN UNIVERSAL GATES NAND, NOR

Q13. CONVERT (10) INTO BCD NUMBER

Q14. PERFORM BCD ADDITION OF 569 & 637

Q15. WHAT IS EXCESS-3 CODE?

Q16. CONVERT 1110 INTO GRAY CODE

Q17. SOLVE $AB' + A'B + AB + A'B'$

Q18. EXTRACT AND, OR, NOT GATE USING NAND & NOR GATE

Q19. $Y=m(1,3,5,9,11,13)$ using K-map

Q20. $Y=m(0,1,5,9,13,14,15) + d(3,4,7,10,11)$ using K-map

Q21. $Y=m(0,1,2,8,10,11,14,15)$ using Quine mc cluskey method

Q22. $Y=m(2,3,5,7,12,14) + d(10,11)$ using K-map

Q23. $Y=m(1,5,6,7,11,12,13,15)$ using K-map

Q24. $Y=m(0,2,5,6,7,8,13,15)$ using K-map

Q25. $Y=m(1,3,7,11,15) + d(0,2,5)$ using K-map

Q26. $Y=m(0,2,5,6,7,8,13,15)$ using VEM method

Q27. PERFORM BCD ADDITION OF 57 & 26

Q28. CONVERT 546 INTO 10S COMPLEMENT

Q29. $Y=m(2,3,5,7,12,14) + d(10,11)$ using VEM method