

Q1: Write the mantissa (in Hexadecimal) for the decimal number: 6.91390061
2795379

- A. 5d3eac
- B. 5D3eac
- C. 5d3e7c
- D. 5d3e6c

Q2: Write the mantissa (in Hexadecimal) for the decimal number: 4.99299012
7608806

- A. 1Dc693
- B. 1f8693
- C. 1fc693
- D. 1f5693

Q3: The POS for the given minterms - [5] is?

- A. $(\sim A + \sim B + C) \cdot (\sim A + B + \sim C) \cdot (A + B + \sim C) \cdot (A + B + C)$
- B. $(\sim A + \sim B + C) \cdot (\sim A + B + \sim C) \cdot (\sim A + B + C) \cdot (A + B + \sim C) \cdot (A + B + C)$
- C. $(\sim A + \sim B + \sim C) \cdot (\sim A + \sim B + C) \cdot (\sim A + B + \sim C) \cdot (\sim A + B + C) \cdot (A + \sim B + \sim C) \cdot (A + B + \sim C) \cdot (A + B + C)$
- D. $(\sim A + \sim B + \sim C) \cdot (\sim A + \sim B + C) \cdot (\sim A + B + \sim C) \cdot (A + \sim B + \sim C) \cdot (A + B + \sim C) \cdot (A + B + C)$

Q4: The POS for the given minterms - [2, 4, 6, 7] is?

- A. $(\sim A + \sim B + \sim C) \cdot (\sim A + \sim B + C) \cdot (\sim A + B + C) \cdot (A + \sim B + C)$
- B. $(\sim A + \sim B + \sim C) \cdot (\sim A + \sim B + C) \cdot (\sim A + B + C) \cdot (A + \sim B + C) \cdot (A + B + \sim C)$
- C. $(\sim A + B + C)$
- D. $(\sim A + \sim B + \sim C) \cdot (\sim A + \sim B + C) \cdot (\sim A + B + \sim C) \cdot (\sim A + B + C) \cdot (A + \sim B + C)$

Q5: Minimize the given expression - Minterms: [0, 5, 7]

- A. $F = AB + B'C + BC'$
- B. $F = B'C' + B'C$
- C. $F = A'C' + AC$
- D. $F = A'C' + A'BC'$
- E. $F = AC + A'B'C'$

Q6: Convert the expression $(\sim A + \sim B + C) \cdot (\sim A + B + \sim C) \cdot (\sim A + B + C) \cdot (A + \sim B + \sim C) \cdot (A + \sim B + C) \cdot (A + B + C)$ to SOP form

- A. $(A \cdot B \cdot \sim C)$
- B. $(\sim A \cdot \sim B \cdot \sim C) + (\sim A \cdot B \cdot \sim C) + (A \cdot \sim B \cdot \sim C) + (A \cdot \sim B \cdot C) + (A \cdot B \cdot C)$
- C. $(\sim A \cdot \sim B \cdot \sim C) + (A \cdot B \cdot \sim C)$
- D. $(\sim A \cdot \sim B \cdot \sim C) + (\sim A \cdot B \cdot \sim C) + (\sim A \cdot B \cdot C)$

Q7: What is the binary representation of 64 (in hexadecimal)?

- A. 1101100
- B. 1100100
- C. 0100100
- D. 1000100

Q8: What are the minterms for the given pos expression: $(\sim A + B + \sim C) \cdot (A + \sim B + C)$

- A. [5]
- B. [2]
- C. [2]
- D. [0, 1, 3, 4, 6, 7]

Q9: What is the decimal representation of 303 (in octal)?

- A. 195
- B. 199
- C. 191
- D. 995

Q10: What are the minterms for the given sop expression: $(\sim A \cdot \sim B \cdot C) + (\sim A \cdot B \cdot \sim C) + (\sim A \cdot B \cdot C) + (A \cdot \sim B \cdot \sim C) + (A \cdot B \cdot C)$

- A. [6]
- B. [6]
- C. [1, 2, 3, 4, 7]
- D. [5]

Q11: What is the decimal representation of 94 (in hexadecimal)?

- A. 138
- B. 148
- C. 145
- D. 248

Q12: Minimize the given expression - $(\sim A + \sim B + \sim C) \cdot (\sim A + B + \sim C) \cdot (A + \sim B + \sim C) \cdot (A + B + \sim C) \cdot (A + B + C)$

- A. $F = B'C + AC'$
- B. $F = A'C$
- C. $F = AC$
- D. $F = B'C + A'C$
- E. $F = AB' + C$

Q13: Minimize the given expression - Minterms: [1, 2, 3, 4, 5, 6, 7]

- A. $F = B' + A + C$
- B. $F = AB + A'B' + C$
- C. $F = B + C$
- D. $F = B + A + C$
- E. $F = BC' + A$

Q14: What is the decimal representation of 10001001 (in binary)?

- A. 137
- B. 127
- C. 134
- D. 131

Q15: Minimize the given expression - Minterms: [0, 1, 3, 5, 7]

- A. $F = AB + C$
- B. $F = B'C + A'B'C'$
- C. $F = A'B' + C$
- D. $F = AB'C + A'B'C'$
- E. $F = B' + C$