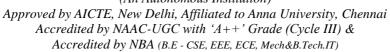


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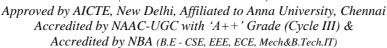


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Minimigation of Boolean Expressions
Problems
1) A+AB = A
$A + AB = A(I+B)$ $= A(I)$ $A \cdot I = A$
= A
2) A + A B + A +B
$A+\overline{A}B = A+\overline{A}B+\overline{A}B$
$= A + B \left(A + \overline{A}\right) \qquad A = A + AB$
=A+B(1) $A+A=1$
= A + B
3) (A+B) (A+c) = A+BC
(A+B) (A+C) Dis. Law
= AA+AC+BA+BG
= A+AC+BA+BC
= A (I+C) + AB+BC
= A + AB + BC $= A + AB + BC$
= A (1+B) + BC 1+B=1
= A+BC



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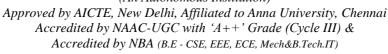




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$$Y = ABC + ABC + \overline{ABC}$$

$$= AC (\overline{B} + B) + \overline{A}BC$$

$$= AC + \overline{A}BC \qquad \overline{B} + B = 1$$

$$= C (A + \overline{A}B) \qquad A + \overline{A}B = A + \overline{B}B$$

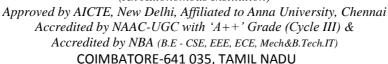
$$Y = C (A + \overline{B}B)$$

3) Complement the expression

$$\overline{AB+CD}$$



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Problems



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