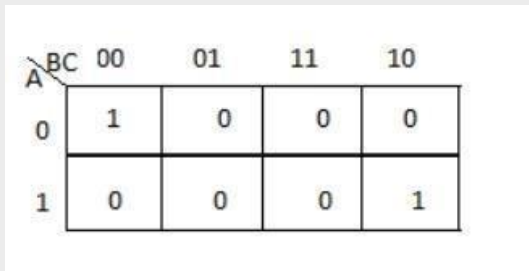


UNIT-II:

S.NO	SHORT ANSWER QUESTIONS	Blooms Taxonomy Level	CO-PO Mapping
1.	Write a table stating all the postulates and theorems of Boolean Algebra that are required for logic minimization?	Understand	2
2.	Explain how do you convert AOI logic to NAND logic?	Understand	2
3.	Convert $f(x) = x + y'z$ into canonical form?	Understand	2
4.	Define K-map? Name its advantages and disadvantages?	Knowledge	2
5.	Summarize the Boolean function $x'yz + x'yz' + xy'z' + xy'z$ using K-map?	Understand	2
6.	Summarize the Boolean function $x'yz + x'yz' + xy'z' + xy'z$ without using K-map?	Understand	2
7.	Explain the properties of EX-OR gate?	Understand	2
8.	Solve the function of fig with AND-OR INVERT implementations? 	Apply	2
9.	Sketch the following logic function using k-map and implement it using logic gates? $Y(A, B, C, D) = \sum m(0, 1, 2, 3, 4, 7, 8, 9, 10, 11, 12, 14)$	Apply	2
Long Answer Questions			
1.	Using Karnaugh map. Solve $F(A, B, C, D) = \sum(0, 1, 2, 5, 6, 7, 8, 9, 10, 13, 14, 15)$.	Knowledge	2
2.	Summarize the Boolean function $F(w, x, y, z) = \sum(1, 3, 7, 11, 15) + d(w, x, y, z) = \sum(0, 2, 5)$	Understand	2

3.	Summarize the following Boolean expressions using K-map and implement them using NOR gates: (a) $F(A, B, C, D) = AB'C' + AC + A'CD'$ (b) $F(W, X, Y, Z) = W'X'Y'Z' + WXY'Z' + W'X'YZ + WXYZ.$	Understand	2
4.	Implement the Boolean function $F = AB + CD + E$ using NAND gates only?	Understand	2
5.	Implement the INVERTER gate, OR gate and AND gate using NAND gate, NOR gate?	Understand	2
6.	Summarize the following Boolean expressions using K-map and implement them using NOR gates: (a) $F(A, B, C, D) = AB'C' + AC + A'CD'$ (b) $F(W, X, Y, Z) = W'X'Y'Z' + WXY'Z' + W'X'YZ + WXYZ.$	Understand	2