Date
21/10/21

Q.1) Expand $\bar{A} + \bar{B}$ to minterms and maxterms.

Sol:- Given,

$$f(A,B) = \bar{A} + \bar{B}$$
$$= \bar{A}(B+\bar{B}) + \bar{B}(A+\bar{A})$$
$$= \bar{A}B + \bar{A}\bar{B} + A\bar{B} + \bar{A}\bar{B}$$
$$= \bar{A}B + \bar{A}\bar{B} + A\bar{B}$$
$$= \Sigma m(0,1,2) \longrightarrow \text{minterm}$$

Again,

$$f(A,B) = (\bar{A} + \bar{B})$$
$$= \bar{\Sigma} M(3) \longrightarrow \text{max term}$$

Q.2) Expand $A(\bar{A}+B)(\bar{A}+B+\bar{C})$ to maxterms and minterms

Sol:- Given,

$$f(A,B,C) = A(\bar{A}+B)(\bar{A}+B+\bar{C})$$
$$= (A\bar{A} + AB)(\bar{A}+B+\bar{C})$$
$$=$$