

2. Using Quine-McCluskey Tabular Method simplify the following Boolean Functions

$$(i) f(W, X, Y, Z) = \Sigma m (0, 4, 5, 7, 8, 11, 12, 15)$$

$$(ii) f(A, B, C, D) = \Sigma m (0, 1, 2, 3, 5, 7, 8, 10, 12, 13, 15)$$

$$(iii) f(A, B, C, D) = \Sigma m (3, 7, 11, 12, 13, 14, 15)$$

ANSWERS

$$1. (i) \bar{x} \bar{y} + xz$$

$$(ii) \bar{x}z + yz$$

$$(iii) \bar{x}y\bar{w} + yz + w$$

$$(iv) x y + \bar{x} \bar{y} z$$

$$(v) x y + y z + x z$$

$$(vi) \bar{z}w + x y \bar{z} + x y \bar{w} + \bar{x} \bar{y} z.$$

$$2. (i) Y'Z' + WYZ + W'XZ$$

$$(ii) B'D' + BD + A'B' + AC'D'$$

$$(iii) AB + CD (A' + B')$$