

EXERCISE 2(d)

1. Use the Karnaugh map representation to find a minimal sum of the product expression of the following Boolean function

(i) $F(x, y, z) = \sum m(0, 1, 5, 7)$

(ii) $F(x, y, z) = \sum m(1, 2, 3, 6, 7)$

(iii) $F(x, y, z, w) = \sum m(4, 6, 7, 15)$

(iv) $F(x, y, z, w) = \sum m(2, 3, 12, 13, 14, 15)$

(v) $F(x, y, z) = \sum m(3, 5, 6, 7)$

(vi) $F(x, y, z, w) = \sum m(1, 3, 5, 9, 12, 13, 14)$