



Sardar Vallabhbhai National Institute of Technology, Surat

ECED Department

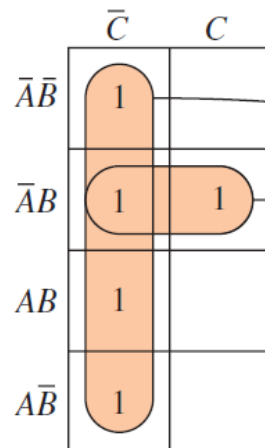
Subject: Digital Electronics & Logic Design (EC-207)

B.Tech Computer, Sem-III, Div - (A&B)

Date: 03-11-2020

Tutorial – 7 Hints/Solutions

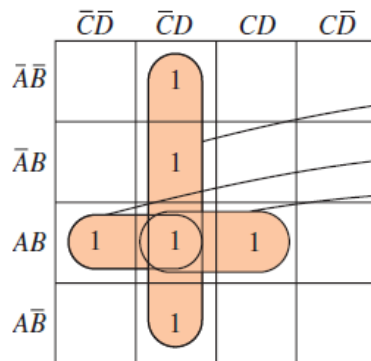
1



$$X = \bar{A}\bar{B} + \bar{C} \quad \text{Answer}$$

2

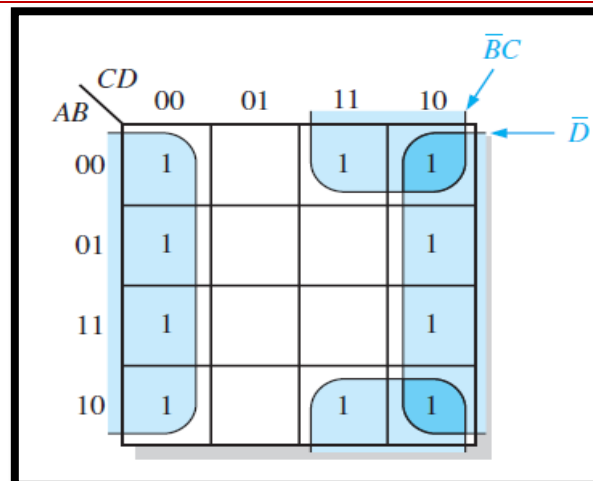
2



$$X = ABD + ABC\bar{C} + \bar{C}D \quad \text{Answer}$$

3

3



$$\bar{D} + \bar{B}C$$

3

4	Type: Asynchronous 5-Bit Down Counter Modulus – 32 Counter	2																								
5	<div>Modulus - 12</div> <div>Valid States</div> <table><tr><td>1</td><td>0000</td></tr><tr><td>2</td><td>0001</td></tr><tr><td>3</td><td>0010</td></tr><tr><td>4</td><td>0011</td></tr><tr><td>5</td><td>0100</td></tr><tr><td>6</td><td>0101</td></tr><tr><td>7</td><td>0110</td></tr><tr><td>8</td><td>0111</td></tr><tr><td>9</td><td>1000</td></tr><tr><td>10</td><td>1001</td></tr><tr><td>11</td><td>1010</td></tr><tr><td>12</td><td>1011</td></tr></table>	1	0000	2	0001	3	0010	4	0011	5	0100	6	0101	7	0110	8	0111	9	1000	10	1001	11	1010	12	1011	2
1	0000																									
2	0001																									
3	0010																									
4	0011																									
5	0100																									
6	0101																									
7	0110																									
8	0111																									
9	1000																									
10	1001																									
11	1010																									
12	1011																									
6	a. 1536 and 175 Hz b. 1400 and 192 Hz	3																								