

(D)

AB \ CD	00	01	11	10
00	1	1		
01	1	1	1	1
11				
10		1	1	

Sop expression: $\bar{A}\bar{C} + \bar{A}B + A\bar{B}D$

(D)

AB \ CD	00	01	11	10
00	1			1
01	1	1	1	
11	1	1	1	
10	1		1	1

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

SOP: $\bar{D} + \bar{B}\bar{C} + \bar{A}\bar{B}C$

	C	0	1
AB			
00			
01			
11			
10			

$$\overline{A}\overline{B}C + \overline{A}B\overline{C} + \overline{A}\overline{B}\overline{C} + \overline{A}\overline{B}C + \overline{A}\overline{B}\overline{C}$$

$$\overline{B} + \overline{A}C$$

$$\begin{aligned} & (\overline{A}\overline{B}\overline{C}D + \overline{A}\overline{B}C\overline{D} + \overline{A}B\overline{C}D + \overline{A}B\overline{C}\overline{D} \\ & + \overline{A}\overline{B}CD + \overline{A}B\overline{C}D + \overline{A}B\overline{C}\overline{D} + \overline{A}B\overline{C}D \\ & + \overline{A}B\overline{C}D + \overline{A}B\overline{C}\overline{D} + \overline{A}B\overline{C}D + \overline{A}B\overline{C}\overline{D} \end{aligned}$$

AB \ CD	00	01	11	10
00	1		1	1
01	1			1
11	1			1
10	1		1	1

$$\begin{aligned} & 000 + 0100 + 1100 + 0011 + 1011 + 0010 + 0110 \\ & + 1010 + 1000 \end{aligned}$$

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