$\varphi(A,B,C,D,E) = m_0+m_2+m_4+m_6+m_9+m_{10}+m_{13}+m_{14}+m_{15}+m_{16}+m_{17}+m_{21}+m_{26}+m_{28}+m_{30}+m_{31}$

Classifying and setting min terms:

min terms	patterns
m_0	00000
m_2	00010
m_4	00100
m_6	00110
m_9	01001
m_{10}	01010
m_{13}	01101
m_{14}	01110
m_{15}	01111
m_{16}	10000
m_{17}	10001
m_{21}	10101
m_{26}	11010
m_{28}	11100
m_{30}	11110
m_{31}	11111

Now classifying them:

min terms	patterns	used	Min term	pattern	used	Min term	pattern	used
m_0	00000	✓	$m_{0,2}$ $m_{0,4}$ $m_{0,16}$	000_0 00_00 _0000	✓	$m_{0,2,4,6}$	00__0	✗
m_2	00010	✓			✓			
m_4	00100	✓			✗			
m_6	00110	✓	$m_{2,6}$ $m_{2,10}$ $m_{4,6}$ $m_{16,17}$	00_10 0_010 001_0 1000_	✓	$m_{2,6,10,14}$	0__10	✗
m_9	01001	✓			✓			
m_{10}	01010	✓			✓			
m_{13}	01101	✓			✗			
m_{14}	01110	✓	$m_{6,14}$ $m_{9,13}$ $m_{10,14}$ $m_{10,26}$ $m_{17,21}$	0_110 01_01 01_10 _1010 10_01	✓	$m_{10,14,26,30}$	_1_10	✗
m_{15}	01111	✓			✗			
m_{16}	10000	✓			✓			
m_{17}	10001	✓			✓			
m_{21}	10101	✓			✗			
m_{26}	11010	✓	$m_{13,15}$ $m_{14,15}$ $m_{14,30}$ $m_{28,30}$ $m_{26,30}$	011_1 0111_ _1110 111_0 11_10	✗	$m_{14,15,30,31}$	_111_	✗
m_{28}	11100	✓			✓			
m_{30}	11110	✓			✓ ✗ ✓			
m_{31}	11111	✓	$m_{15,31}$ $m_{30,31}$	_1111 1111_	✓ ✓			

From the table we can conclude 10 prime implicants

$m_{0,16}$ = (¬B ^ ¬C ^ ¬D ^ ¬E)

$m_{16,17}$ = (A ^ ¬B ^ ¬C ^ ¬D)

$m_{9,13}$ = (¬A ^ B ^ ¬D ^ E)

$m_{17,21}$ = (A ^ ¬B ^ ¬D ^ E)

$m_{13,15}$ = (¬A ^ B ^ C ^ E)

$m_{28,30}$ = (A ^ B ^ C ^ ¬E)

$m_{0,2,4,6}$ = (¬A ^ ¬B ^ ¬E)

$m_{2,6,10,14}$ = (¬A ^ D ^ ¬E)

$m_{10,14,26,30}$ = (B ^ D ^ ¬E)

$m_{14,15,30,34}$ = (B ^ C ^ D)

MINTERMS	m_0	m_2	m_4	m_6	m_9	m_{10}	m_{13}	m_{14}	m_{15}	m_{16}	m_{17}	m_{21}	m_{26}	m_{28}	m_{30}	m_{31}	E
$m_{0,16}$	✓									✓							
$m_{16,17}$										✓	✓						
$m_{9,13}$					✓		✓										✓
$m_{17,21}$											✓	✓					✓
$m_{13,15}$							✓		✓								
$m_{28,30}$														✓	✓		✓
$m_{0,2,4,6}$	✓	✓	✓	✓													✓
$m_{2,6,10,14}$		✓		✓		✓		✓									
$m_{10,14,26,30}$						✓		✓					✓		✓		✓
$m_{14,15,30,34}$											✓	✓					✓
	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

Essential prime implicants are:

($m_{9,13}$, $m_{17,21}$, $m_{28,30}$, $m_{0,2,4,6}$, $m_{10,14,26,30}$, $m_{14,15,30,34}$) and ($m_{0,16}$ or $m_{16,17}$)

c) solution:

$$\varphi = (\neg B \wedge \neg C \wedge \neg D \wedge \neg E) \wedge (\neg A \wedge B \wedge \neg D \wedge E) \wedge (A \wedge \neg B \wedge \neg D \wedge E) \wedge (A \wedge B \wedge C \wedge \neg E)$$

$$\wedge (\neg A \wedge \neg B \wedge \neg E) \wedge (B \wedge D \wedge \neg E) \wedge (B \wedge C \wedge D)$$

OR

$$\varphi = (A \wedge \neg B \wedge \neg C \wedge \neg D) \wedge (\neg A \wedge B \wedge \neg D \wedge E) \wedge (A \wedge \neg B \wedge \neg D \wedge E) \wedge (A \wedge B \wedge C \wedge \neg E)$$

$$\wedge (\neg A \wedge \neg B \wedge \neg E) \wedge (B \wedge D \wedge \neg E) \wedge (B \wedge C \wedge D)$$