

Dipindai dengan CamScanner





Masukkan ke pernyataan b. kedua :

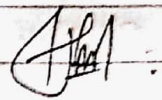
- 1.) if T then  $(T \wedge T)$  else  $((\text{not } T) \wedge T)) = \text{True} \rightarrow$  Karena True
- 2.) if T then  $(T \wedge T)$  else  $((\text{not } T) \wedge F)) =$  dan tidak
- 3.) if T then  $(T \wedge F)$  else  $((\text{not } T) \wedge T)) =$  per terjadi
- 4.) if T then  $(T \wedge F)$  else  $((\text{not } T) \wedge F)) =$  kontradiksi (F)

Pengant demikian pernyataan 1 dan 2 (a, b)  
maka  $T \vee F = \text{True}$ .

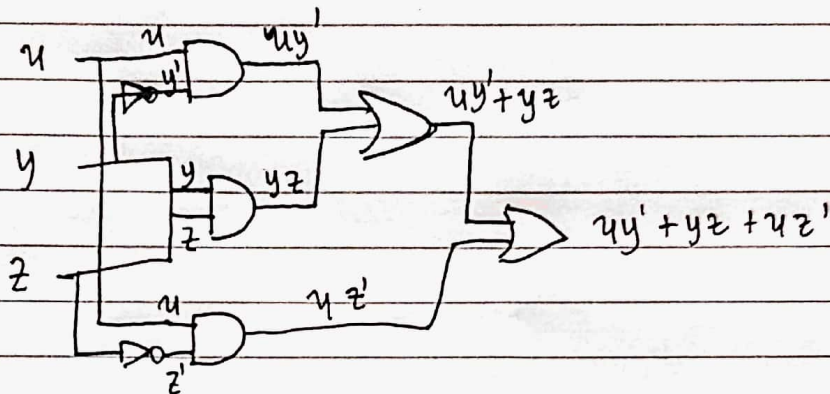
Pernyataan harus dibalik dan harus diingat.  
sehingga. pernyataan tersebut VALID.

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2. b.)  $uy' + yz + uz'$  :



$$\begin{aligned} \text{a.) } uy' + yz + uz' &= uy' + uz' + yz \\ &= u(y' + z') + yz && \rightarrow \text{Hk. Distributif} \\ &= u.(yz)' + yz && \rightarrow \text{Hk. De Morgan} \\ &= u.(yz)' + yz(u + u') && \rightarrow \text{Hk. Komplement} \\ &= u(yz)' + yzu + yz(u') && \rightarrow \text{Hk. Distributif} \\ &= u(yz)' + yz(u') + yzu && \rightarrow \text{Hk. Komutatif} \\ &= u(yz)' + (u')yz + uyz && \rightarrow \text{---} \\ &= 1 + uyz = uyz + 1 && \rightarrow \text{Hk. Komplement} \\ &= 1 && \rightarrow \text{Hk. Dominansi} \end{aligned}$$





Date

③  $f(w, u, y, z) = \sum m(0, 2, 4, 5, 6, 7, 8, 10, 13, 15)$

a.) SOP :

$$f(w, u, y, z) = w'u'y'z' + w'u'yz' + w'u'y'z + w'u'yz + w'u'yz' + w'u'yz + w'u'yz' + w'u'yz + w'u'yz' + w'u'yz + w'u'yz'$$

b.) Peta Karnaugh :

$wu \backslash yz$	00	01	11	10
00	1	0	0	1
01	1	1	1	1
11	0	1	1	0
10	1	0	0	1

c.) K-Map :

Hasil minimisasi : ~~wuz~~ + wuz' + uyz + wu'z'