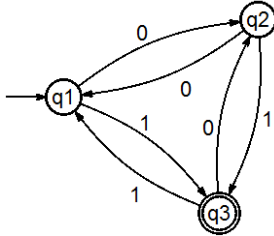


(해설)

1. 각 1점 (2개 이상의 식이 틀리면 0점)

(해설) DFA



1-(a).  $R_{11}^{(0)} = \epsilon, R_{12}^{(0)} = 0, R_{13}^{(0)} = 1$

$R_{21}^{(0)} = 0, R_{22}^{(0)} = \epsilon, R_{23}^{(0)} = 1$

$R_{31}^{(0)} = 1, R_{32}^{(0)} = 0, R_{33}^{(0)} = \epsilon$

1-(b).  $R_{11}^{(1)} = \epsilon, R_{12}^{(1)} = 0, R_{13}^{(1)} = 1$

$R_{21}^{(1)} = 0, R_{22}^{(1)} = 00 + \epsilon, R_{23}^{(1)} = 01 + 1$

$R_{31}^{(1)} = 1, R_{32}^{(1)} = 10 + 0, R_{33}^{(1)} = 11 + \epsilon$

1-(c).  $R_{11}^{(2)} = 0(00)^*0 + \epsilon = (00)^*$

$R_{12}^{(2)} = 0(00)^*00 + 0(00)^* = 0(00)^*$

$R_{13}^{(2)} = 0(00)^*(01 + 1) + 1 = (0 + \epsilon)(00)^*1 = 0^*1$

$R_{21}^{(2)} = 00(00)^*0 + (00)^*0 = (00)^*0$

$R_{22}^{(2)} = 00(00)^*00 + 00(00)^* + (00)^* + \epsilon = (00)^*$

$R_{23}^{(2)} = 00(00)^*(01 + 1) + (00)^*(01 + 1) = (00)^*(01 + 1) = 0^*1$

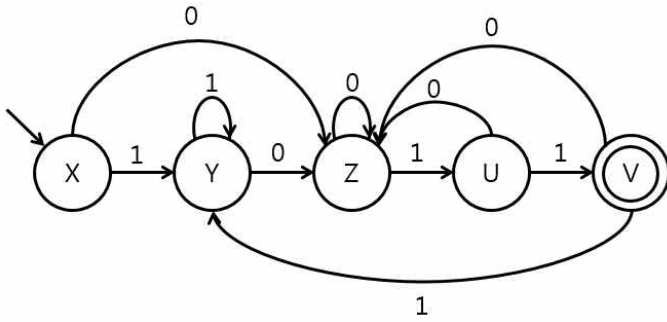
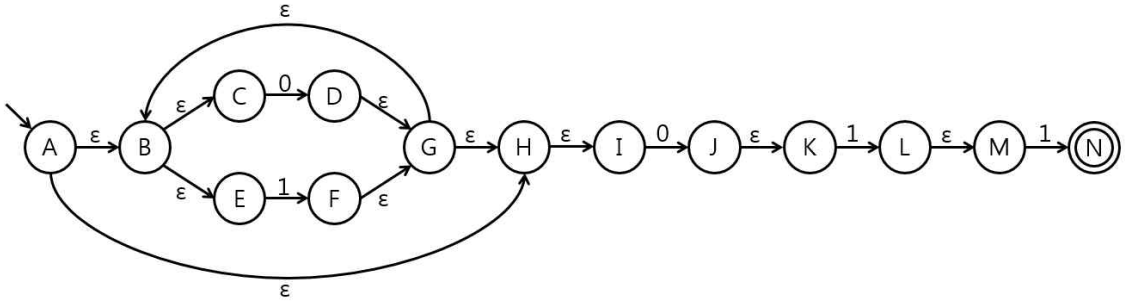
$R_{31}^{(2)} = (10 + 0)(00)^*0 + 1 = 100(00)^* + 1 = (1 + 00)(00)^*$

$R_{32}^{(2)} = (10 + 0)(00)^*(00 + \epsilon) + 10 + 0 = (10 + 0)(00)^*$

$R_{33}^{(2)} = (10 + 0)(00)^*(01 + 1) + 11 + \epsilon = 1(00)^*1 + 00^*1 + 10(00)^*1 + 10(00)^*1 + \epsilon$   
 $= (1 + 0)0^*1 + \epsilon$

1-(d).  $R = R_{13}^{(3)} = (0 + \epsilon)(00)^*1(1(00)^*1 + 10(00)^*1 + 0^*01)^*$   
 $= 0^*1((1 + 0)0^*1)^*$

2.



		0	1
X	$\epsilon^*({ A }) = \{A,B,C,E,H,I\}$	$\epsilon^*({ D, J })$	$\epsilon^*({ F })$
Y	$\epsilon^*({ F }) = \{F,G,H,I,B,C,E\}$	$\epsilon^*({ D, J })$	$\epsilon^*({ F })$
Z	$\epsilon^*({ D, J }) = \{D,G,H,I,B,C,E,J,K\}$	$\epsilon^*({ D, J })$	$\epsilon^*({ F, L })$
U	$\epsilon^*({ F, L }) = \{F,G,H,I,B,C,E,L,M\}$	$\epsilon^*({ D, J })$	$\epsilon^*({ F, N })$
V	$\epsilon^*({ F, N }) = \{F,G,H,I,B,C,E,N\}$	$\epsilon^*({ D, J })$	$\epsilon^*({ F })$

혹은 minimize 후 아래 그림과 같이 그린 것

