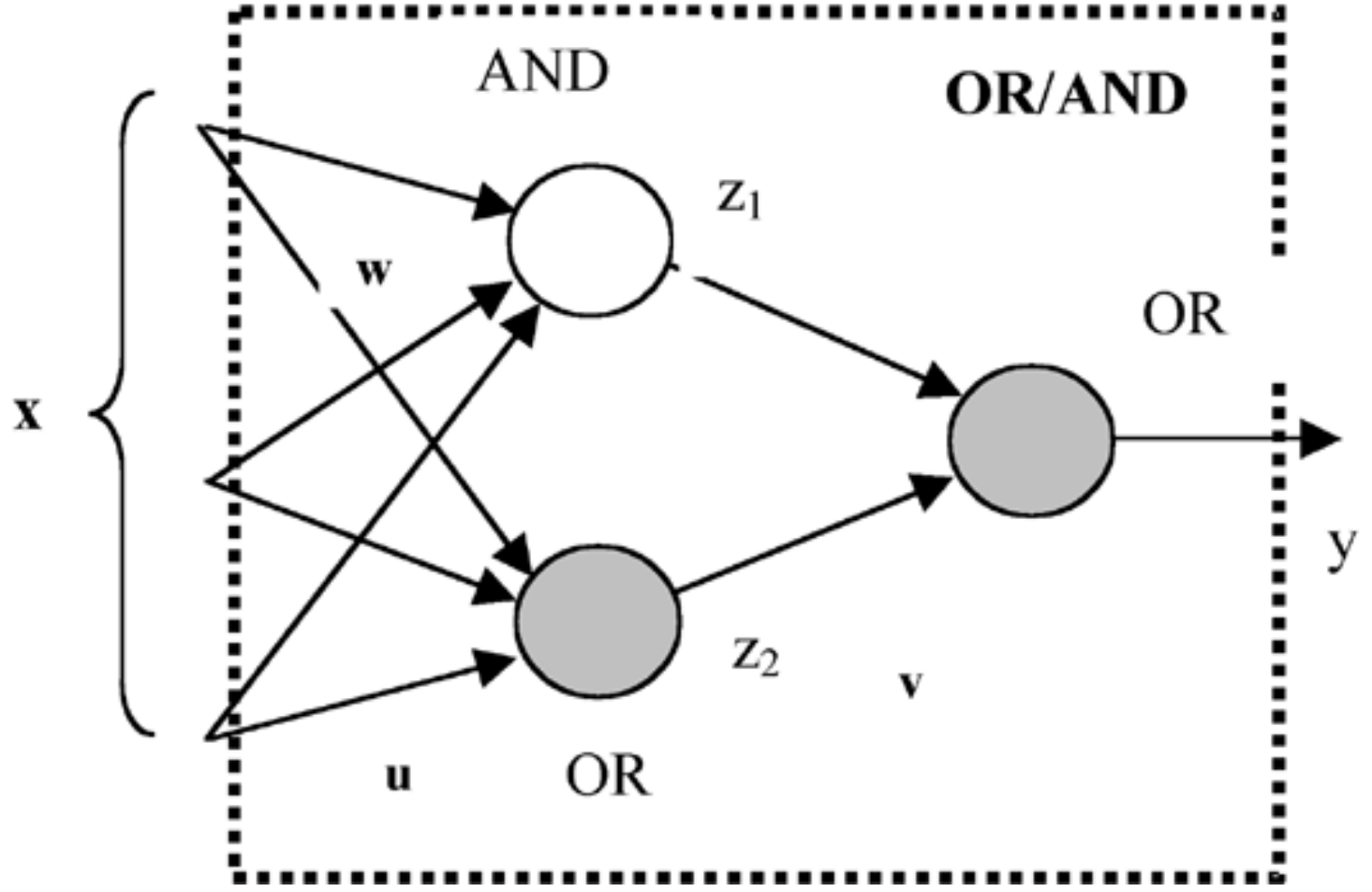
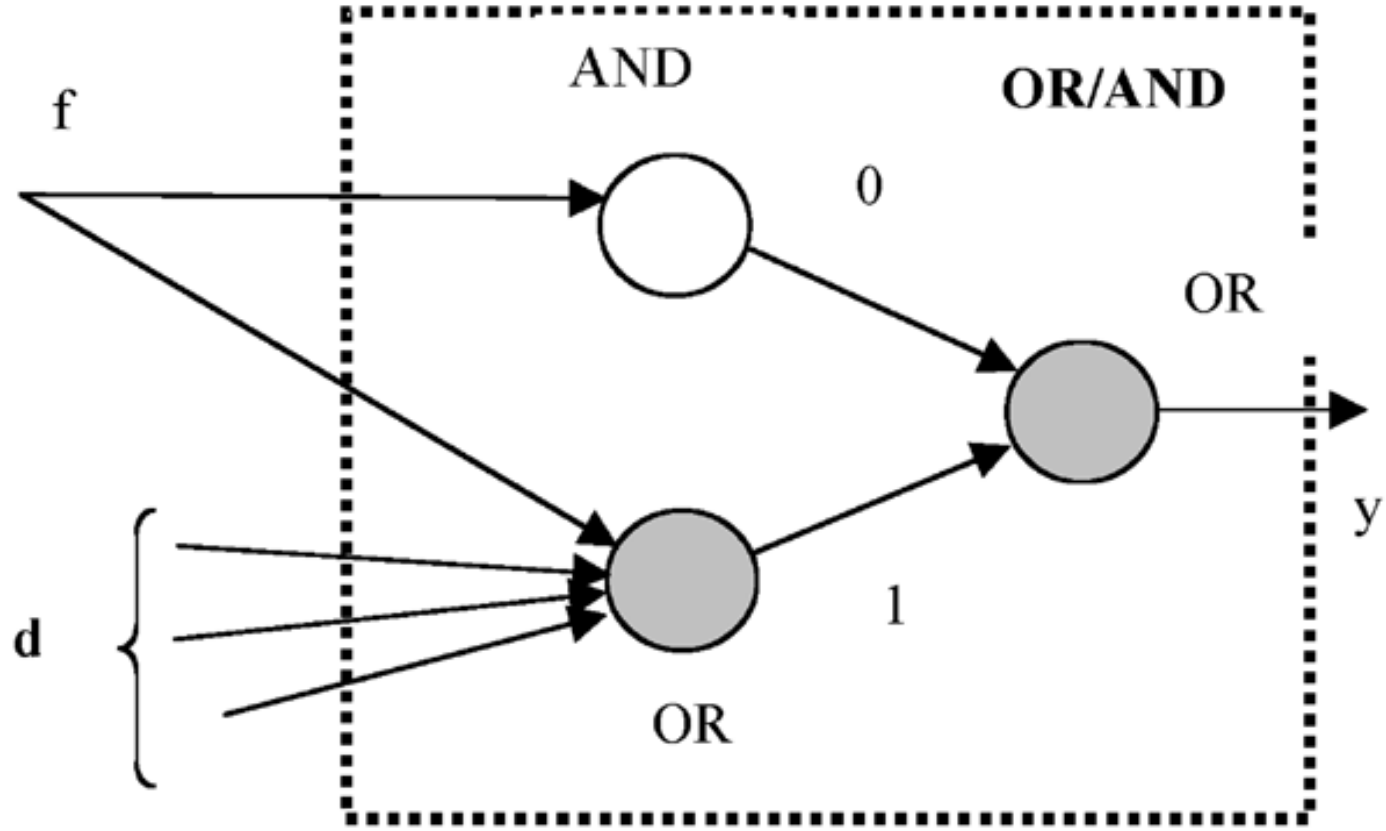
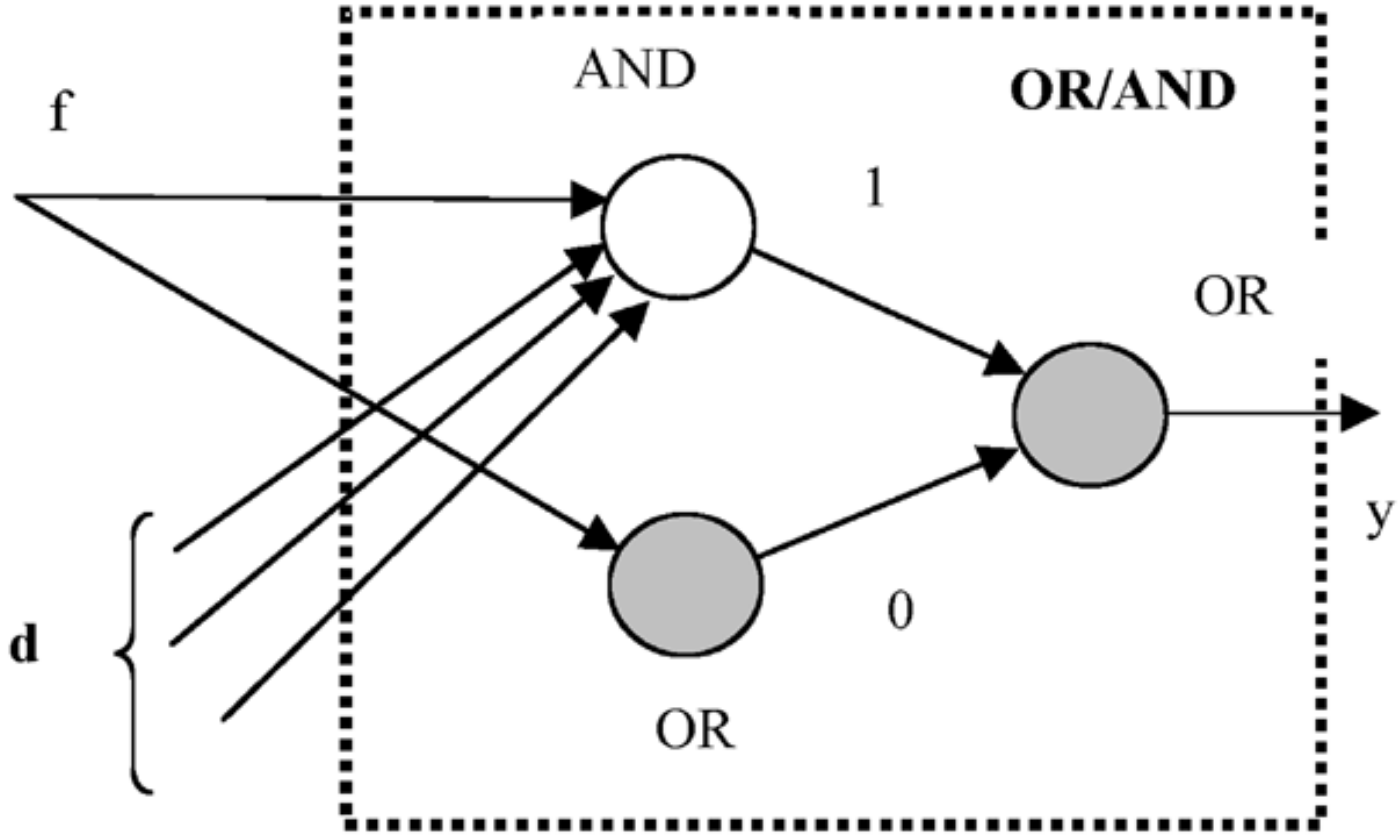
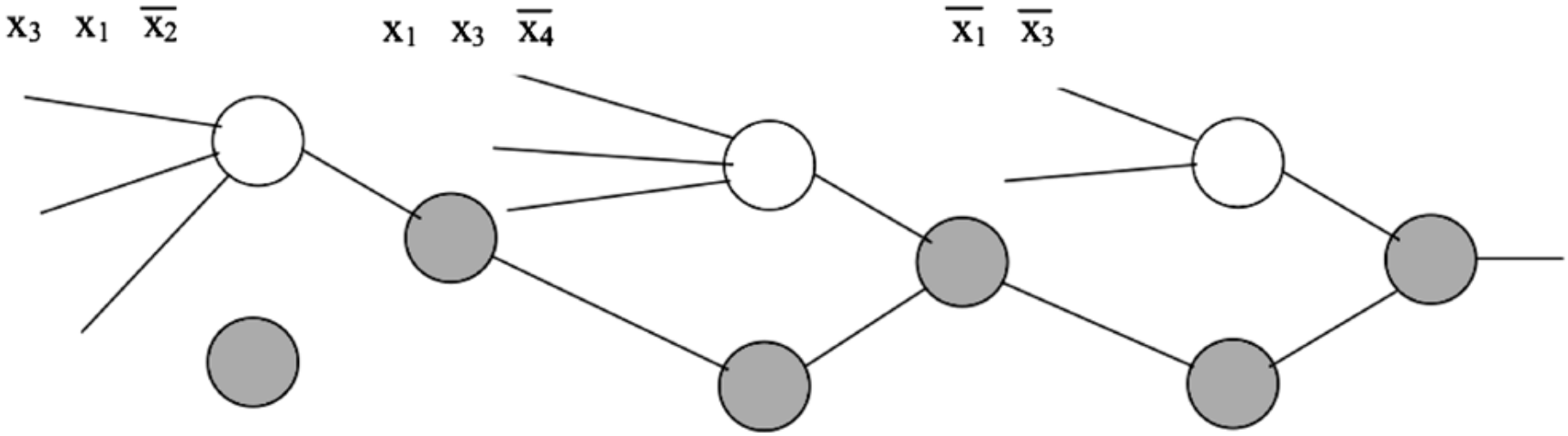

AND
OR/AND
z_1
w
OR
x
y
z_2
v
u
OR



(a)



(b)


x_3 x_1 $\overline{x_2}$
x_1 x_3 $\overline{x_4}$
$\overline{x_1}$ $\overline{x_3}$

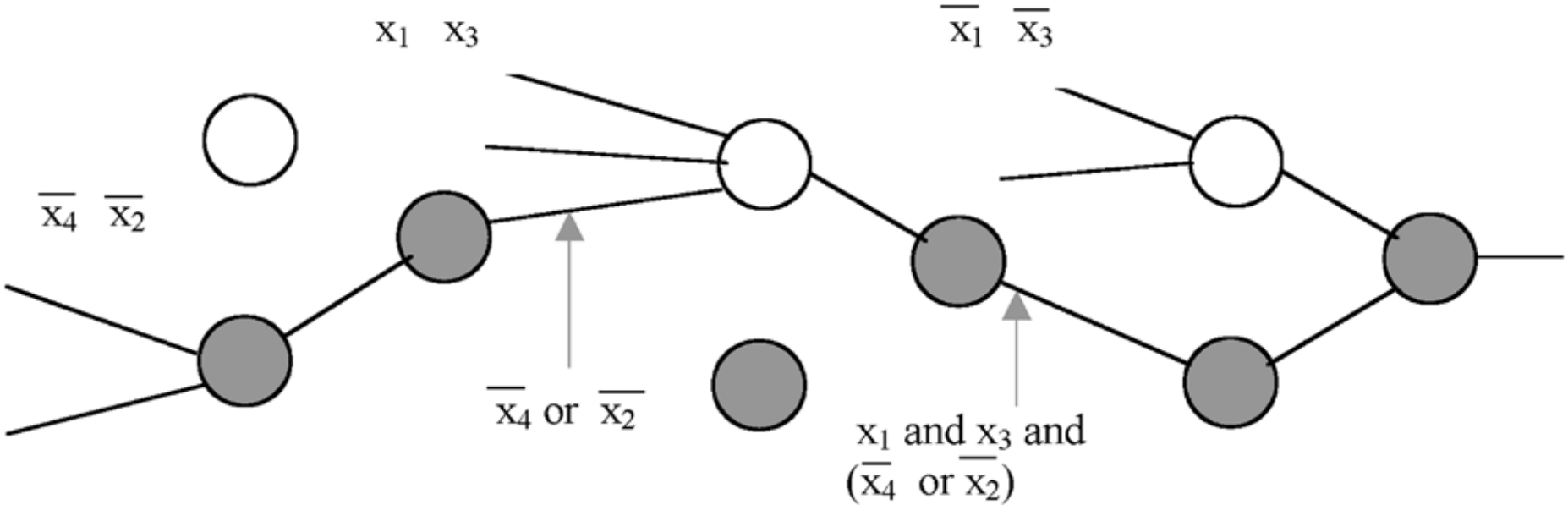

x_1 x_3
$\overline{x_1}$ $\overline{x_3}$
$\overline{x_4}$ $\overline{x_2}$
$\overline{x_4}$ or $\overline{x_2}$
x_1 and x_3 and
($\overline{x_4}$ or $\overline{x_2}$)

TABLE XVII
PERFORMANCE OF THE NETWORK FOR THE OPTIMAL CONFIGURATION OF THE STRUCTURAL PARAMETERS (DEPTH AND WIDTH); NO PRUNING HAS BEEN COMPLETED (INP IS SHORT FOR INPUT)

Data set	3	4	5	6	7
Auto-mpg	Q =(0.097652 0.110055 0.027749) κ = (1.62, 2.54, 8.66) Optimal parameters: (Layer:5Inp:2 Layer: 4Inp: 4 Layer:3Inp:2)	Q=(0.089163 0.110095 0.026796) κ = (1.74, 2.50, 9.50) Optimal parameters: (Layer:4Inp:3 Layer:2np:2 Layer:2np:5	Q=(0.097954 0.107995 0.024739) κ = (1.75, 2.43, 10.47) Optimal parameters: (Layer:5Inp:4 Layer:5Inp:4 Layer:5Inp:3)	Q=(0.103933 0.113212 0.021932) κ = (1.73, 2.37, 12.11) Optimal parameters: (Layer:5Inp:3 Layer:4Inp:2 Layer:4Inp:2)	Q=(0.109918 0.104494 0.024900) κ = (1.51, 2.62, 10.69) Optimal parameters: (Layer:3Inp:3 Layer:3Inp:4 Layer:3Inp:3)
Machine CPU	Q=(0.057367, 0.063419, 0.002449) κ=(1.55, 1.68, 20.24) Optimal parameters: (Layer:3Inp:3 Layer:2Inp:6 Layer:4Inp:6)	Q=(0.064684 0.053470 0.001732) κ = (1.37, 1.60, 64.34) Optimal parameters: (Layer:5Inp:5 Layer:2Inp: 6 Layer:1Inp:5)	Q=(0.059506 0.050577 0.001732) κ = (1.38, 1.64, 6.63) Optimal parameters: (Layer:5Inp:2 Layer:4Inp:3 Layer:5Inp:5)	Q=(0.062562 0.052820 0.002000) κ = (1.52, 1.74, 55.88) Optimal parameters: (Layer:5Inp:5 Layer:3Inp:4 Layer:1Inp:5)	Q=(0.051478 0.055263 0.001414) κ = (1.89, 1.59, 79.49) Optimal parameters: (Layer:2Inp:4 Layer:2Inp:4 Layer:2Inp:4)
Abalone	Q=(0.137430 0.152729 0.069635) κ=(0.93, 0.90, 0.56) Optimal parameters: (Layer:5Inp3: Layer:6Inp:5 Layer:5Inp:2)	Q=(0.137543 0.149760 0.069642) κ = (0.93, 0.92, 0.59) Optimal parameters: (Layer:4Inp:6 Layer:6Inp: 7 Layer:4Inp:3)	Q=(0.137931 0.154198 0.069685) κ = (0.94, 0.92, 0.59) Optimal parameters: (Layer:3Inp:6 Layer:5Inp: 5 Layer:4Inp:4)	Q=(0.139492 0.154803 0.069484) κ = (0.93, 0.91, 0.60) Optimal parameters: (Layer:6Inp:4 Layer:4Inp:5 Layer:5Inp:2)	Q=(0.139989 0.156831 0.070385) κ = (0.91, 0.91, 0.62) Optimal parameters: (Layer:5Inp:3 Layer:4Inp:4 Layer:5Inp:3)

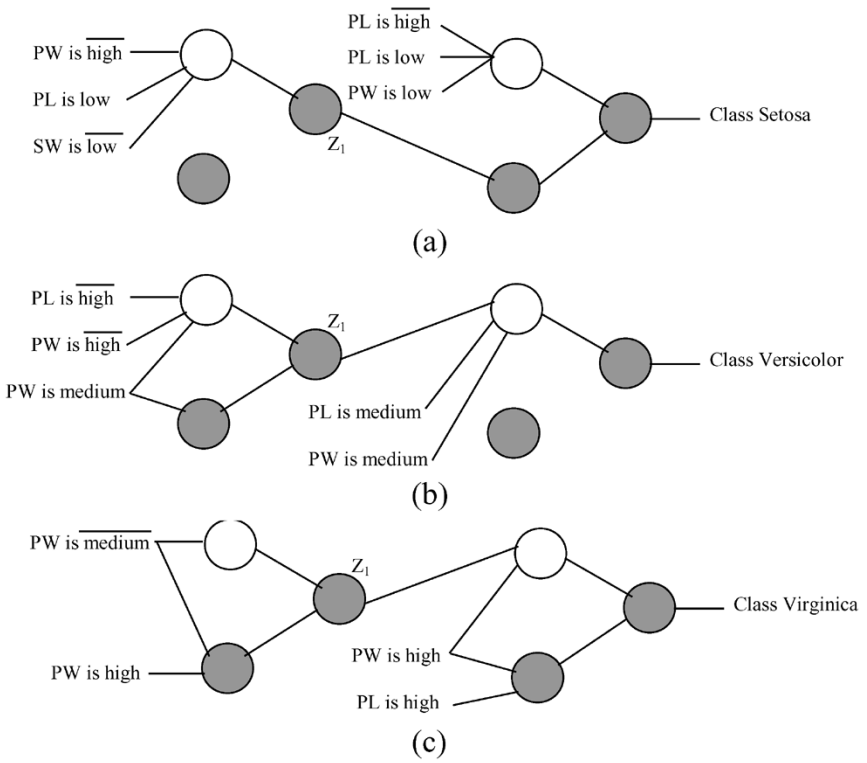


Fig. 28. Pruned logic network for IRIS data. (a) Setosa ($\lambda = 1$ and $\mu = 0$). (b) Versicolor ($\lambda = 0.9$ and $\mu = 0$). (c) Virginica ($\lambda = 0.6$ and $\mu = 0$).

the case of Lukasiewicz connectives, "AGE," "TAX," and "DIS" are taken into consideration.

Considering the best architecture of the network and completing its pruning, we arrive at the linguistic description of the