$$
\begin{array}{l}
(\neg x_1 \vee s_{1,1}) \\
(\neg s_{1,j}) \qquad \text{for } 1 < j \leq k \\
(\neg x_i \vee s_{i,1}) \\
(\neg s_{i-1,1} \vee s_{i,1}) \\
\left.\begin{array}{l}
(\neg x_i \vee \neg s_{i-1,j-1} \vee s_{i,j}) \\
(\neg s_{i-1,j} \vee s_{i,j})
\end{array}\right\} \quad \text{for } 1 < j \leq k \\
(\neg x_i \vee \neg s_{i-1,k}) \\
(\neg x_n \vee \neg s_{n-1,k})
\end{array}
\quad \left.\begin{array}{l} \\ \\ \\ \\ \\ \\ \\ \end{array}\right\} \text{for } 1 < i < n
$$