Q(pcs) $\begin{array}{llllllll}0 & 1 & 2 & 3 & 4 & 5 & 6\end{array}$
TC(\$) 40060010001600280041005400
TR(\$) 0100020003000400050006000
TP(\$) -400-400 100014001200900400
MC(\$) - 200400600120013001300
The profit maximizing point is where $P=M R=M C=\$ 1000$
$\mathrm{MC}=(\mathrm{TC} 2-\mathrm{TC} 1) /(\mathrm{Q} 2-\mathrm{Q} 1)$
As $\mathrm{MR}=\mathrm{MC}$ in the point between 3 and 4 units, we choose 3 units, as there is higher total profit (TP) in this point.
So, the firm should produce 3 units to maximize its profit.

