2.

CFG: $S \to 00|11|0S1|1S0|1S1|0S0|$

∴ PDA 转移函数:

a) $\delta(q, \varepsilon, I) = \{(q, 00), (q, 11), (q, 0S1), (q, 1S0), (q, 1S1)(q, 0S0)$

b) $\delta(q, 0, 0) = \{(q, \varepsilon)\}$ $\delta(q, 1, 1) = \{(q, \varepsilon)\}$

∴ 以空栈形式接受.

3.

$V = \{S, [qZ_0q], [pXp], [qXq], [qXp], [pZ_0q]\}$

$[qZ_0q] \to 1[qXq][qZ_0q]$

$[qXq] \to 1[qXq][qXq]$

$[qXp] \to 0[pXp]$

$[qZ_0q] \to \varepsilon$

$[pXp] \to 1$

$[pZ_0q] \to 0[qZ_0q]$

∴ $S \to [qZ_0q]$ ~~[pZ₀q]~~