1.a   Let $\alpha = 1$ $\beta = 3$ $\gamma = 3$ $\delta = 7$

$P(\beta, \gamma) = P(3, 3) = c(1 - \delta(3-3))$
$$= c(1-1) = 0$$

$P(\alpha, \delta) = P(1, 7) = c(1 - \delta'(1-7))$
$$= c$$

$P(\beta, \delta) = P(3, 7) = c(1 - \delta(3,7))$
$$= c$$

$P(\alpha, \gamma) = P(1, 3) = c(1 - \delta(1-3)) = c$

Expression is given as

$P(\beta, \gamma) + P(\alpha, \delta) - P(\beta, \delta) - P(\alpha, \gamma)$

$$= 0 + c - c - c = -c < 0$$

Hence Pott's model is not submodular