$K/t_p = 0.984$

From Fig. 12.5, n = 4

From Fig. 12.6, B = 360

From Eqn. 12.1 (here Q = 1.0 in. for a unit hydrograph)

$q_p = 360(258)(1.0)/19 = 4888$ cfs

Between t = O and $t = 1.6\ t_p = 1.6(19) = 30.4$ hr

$q = 4888(\ t\ /19)^3\ e^{-3(t/19-1)}$

Between t = 30.4 and $t = 3.3(19) = 62.7$ hr

$q = q_o\ e^{(30.4-t)/18.7}$

Where $q_o = 4888\ (30.4/19)^3\ e^{-3(30.4/19-1)} = 3309$ cfs

From t = 62.7 hr to $t = \infty$

$q = q_1 e^{(62.7\ -\ t)/56.1}$

Where $q_1 = 3309\ e^{(30.4\ -\ 62.7)/18.7} = 588$ cfs