معادلات نظم الري بالتنقيط ٤٣٨ هزر (جماد أول ١٤٢٩هـ)

$q_e = \frac{2\pi R^3(\theta_f-\theta_i)}{3\times10^3\times t_a}$ $A_W = W\cdot \bar{S}_e = \pi R^2$ $P_w = \frac{N_p\times \bar{S}_e \times W}{S_p\times S_o}\times 100$ $Y_r = \frac{EC_w-(EC_e)_{min}}{(EC_e)_{max}-(EC_e)_{min}}\times100$ $LR_t = \frac{EC_w}{2(EC_e)_{max}}\times100$ $LR_t = \frac{L_n}{d_t}\times100=\frac{L_N}{D_t}\times100$ $ET_d = ET\left[\frac{P_d}{100}+0.15\left(1-\frac{P_d}{100}\right)\right]$ $ET_{ds} = ET_s\left[\frac{P_d}{100}+0.15\left(1-\frac{P_d}{100}\right)\right]$ $D_i = (ET_s - M_s - R_n)\left[\frac{P_d}{100}+0.15\left(1-\frac{P_d}{100}\right)\right]$	$R^3 = \frac{3\times10^3\times q_e\times t_a}{2\pi(\theta_f-\theta_i)}$ $\bar{S}_e = 0.8W$ $P_w = \frac{V_d}{V_t}\times100$ $V_t = S_e\times S_L\times Z$ $V_d = \pi\times X^2\times Y$ $EC_{dw} = 2(EC_e)_{max}$ $D_t = D_i + L_N$ $d_t = d_i + L_n$ $V_P = \frac{d_g}{F}\times S_p\times S_o$ $d_m = \frac{D_P}{100}\times\frac{P_w}{100}\times W_a\times Z$ $d_g = \frac{d_i\times T_r\times100}{E_u}$	$N_{day} = \frac{ET_{ds}}{ET_d}$ $q_e = \pi R^2 I$ $X = f T^g$ $\quad R = X$ $Y = i T^J$ $\quad R = 0.5W$ $g = \frac{\log(X_2/X_1)}{\log(T_2/T_1)}$ $J = \frac{\log(Y_2/Y_1)}{\log(T_2/T_1)}$ $T = \frac{V}{q_e}$ $\quad T_{aa} = \frac{V_P}{q_e\times N_p}$ $V_P = q_e\times N_p\times T_a$ $W_a = [(\theta_m)_{FC} - (\theta_m)_{WP}]\times\rho_d$ $F = \frac{d_i}{ET_d}$ $\quad F_m = \frac{d_m}{ET_d}$ $d_g = \frac{d_i\times100}{(1-LR_t)E_u}$
$q_e = 3.6\times C_n\times\frac{\pi}{4}d^2\times\sqrt{2gH}$ $q_e = 3.6\times0.4\times\frac{\pi}{4}d^2\times\sqrt{2g}\times H^{0.4}$ $q_e = 3.6\times C_n\times\frac{\pi}{4}d^2\times\sqrt{2g}\times H^{\beta}$ $q_e = 3.6\times C_n\times\frac{\pi}{4}d^2\times\left(\frac{H}{n}\right)^{0.5}\cdot\sqrt{2g}$ $q_e = 3.6\times C_n\times\frac{\pi}{4}d^2\times\left(\frac{H}{n}\right)^{0.7}\times\sqrt{2g}$ $q_e = 3.6\times C_O\times\frac{\pi}{4}d_o^2\times\sqrt{2gH_o}$	$H = \frac{1.153 L_e\times q_e}{d^4}$ $H = \frac{6.37 f\times L_e\times q_e^2}{d^5}$ $q_e = b H^{\beta}$ $\beta = \frac{\log(q_1/q_2)}{\log(H_1/H_2)}$ $H_o = \frac{H_i}{n_r^2+1}$ $S_i = n_r\times S_o$	$R_e = \frac{353.6\ q_e}{d}$ $(1\pm Cv)*q_a \rightarrow 67\%$ $(1\pm 2Cv)*q_a \rightarrow 95\%$ $(1\pm 3Cv)*q_a \rightarrow 100\%$ $(\bar{q}_e)_T = mT+b$ $(q_e)_T = \frac{(\bar{q}_e)_T}{100}\times(q_e)_{20^\circ c}$ سريان طبقي سريان مضطرب m 2.856 0.25 b 42.2 95.4
$H_f = 3.98\times10^5\times\frac{Q^{1.852}}{d^{4.871}}\times L$ $H_f = 1.135\times10^6\times\frac{Q^{1.852}}{d^{4.871}}\times L$ $TDH = H_i + \Delta Hs + (H_L)_{S.M} + (H_L)_M + H_{Ls}$ $Q_{Pump} = N_M\times Q_M$ $BP = \frac{Q_{pump}\times TDH}{102\times E_p}$	$\Delta H_S = 2.5(H_a - H_n)$ $(\Sigma H_L)_L = 0.55\ \Delta H_S$ $(\Sigma H_L)_F = 0.45\ \Delta H_S$ $L_L = N_{tree}\times S_P$ $Q_L = N_e\times q_e = \frac{L_L}{S_e}\times q_e$ $L_L = N_e\times S_e$ $\sum H_L = H_f \pm H_e$	$\frac{2S}{HP} = SDR - 1$ $SDR = \frac{d_o}{t_w}$ $\quad SDR = \frac{d_i}{t_w}$ $Q_L = N_{tree}\times N_P\times q_e$ $Q_F = N_L\times Q_L$ $Q_{S.M} = N_F\times Q_F$ $Q_M = N_{S.M}\times Q_{S.M}$

$C_f = \frac{100\ W_{effect}}{I_n}$ $\quad W_{effect} = Y \cdot W_{solution}$	$Q_f = \frac{0.36\ C_f \times Q}{\rho \times Y}$ $\quad Q_f = \frac{W_{solution} \cdot A}{\rho \cdot T} = \frac{V_f}{T_f}$

$Eu_d = \left(1 - 1.27 \frac{C_v}{\sqrt{N_P}}\right) \times \frac{q_n}{q_a} \times 100$ $S_d = \sqrt{\frac{q_1^2 + q_2^2 + ... + q_n^2 - n q_a^2}{n-1}}$ $S_d = \sqrt{\frac{\sum (q_i - q_a)^2}{n-1}}$ $\quad q_a = \frac{\sum q_i}{n}$ $H_{var} = \frac{H_m - H_n}{H_m} \times 100$ $q_{var} = \frac{q_m - q_n}{q_m} \times 100$ $q_{var} = \left[1 - (1 - H_{var})^{\beta}\right] \times 100$	$Eu_f = \frac{q_n}{q_a} \times 100$ $C_{ht} = \sqrt{C_{hP}^2 + C_{hh}^2}$ $C_{hP} = \sqrt{C_{v^2} + C_{P^2}}$ $C_v = \beta \cdot C_{hh}$ $C_v = \sqrt{C_b^2 + \beta^2 \cdot C_{hh}^2}$ $C_v = \frac{S_d}{q_a}$ $\quad C_{vs} = \frac{C_v}{\sqrt{N_P}}$	$Eu_a = 0.5 \left[\frac{\bar{q}_n}{q_a} + \frac{q_a}{q_8}\right] \times 100$ $U_S = (1 - C_v) \times 100$ $(U_S)_h = (1 - C_{hh}) \times 100$ $(U_S)_P = (1 - C_{hP}) \times 100$ $(U_S)_t = (1 - C_{ht}) \times 100$ $(C_{hh})_2 = \frac{\beta_2}{\beta_1} \times (C_{hh})_1$