

List of Tables

2.1	Numerical outcomes of N_G via Br, M, Rd and α_1	43
2.2	Numerical outcomes of Be via Br, M, Rd and α_1	44
2.3	Numerical outcomes of $C_{fx}Re_x^{1/2}$ via f_w, M, γ and Gr_T	46
2.4	Numerical outcomes of $Nu_xRe_x^{-1/2}$ via $\lambda_1, M, Br, Pr, \beta$ and Rd . . .	46
3.1	Numerical outcomes of $C_{fx}Re_x^{1/2}$ via various parameters with $\beta =$ $\lambda_1 = Gr_C = 0.1, Br = Sc = \theta_w = 0.5, Pr = 7.0, Rd = 0.7$	65
3.2	Numerical outcomes of $Nu_xRe_x^{-1/2}$ via various parameters with $\beta =$ $\lambda_1 = Gr_T = Gr_C = 0.1, Br = \gamma = Sc = f_w = 0.5$	66
3.3	Numerical outcomes of $Sh_xRe_x^{-1/2}$ via various parameters with $M =$ $\beta = \lambda_1 = Gr_T = Gr_C = 0.1, Br = \theta_w = 0.5, Pr = 7.0, Rd = 0.7$	66
4.1	Series solution convergence for the values $We = 0.1, Du = 0.1, Sr =$ $0.1, \zeta = 0.1, M = 0.1, Pr = 0.7, Sc = 0.4, \theta_w = 1.1, Rd = 0.1,$ $Gr_T = 0.01, Gr_C = 0.01, \beta = 0.1, \hbar_f = -1.09, \hbar_\theta = -0.75$ and $\hbar_\phi = -0.83$	74
4.2	Similarity of $f''(0)$ for the various values of M when $We = \zeta = Gr_T =$ $Gr_C = 0.0$	77
4.3	Similarity of $-\theta'(0)$ for the various values of Pr when $We = Du =$ $\zeta = M = \theta_w = Rd = Gr_T = Gr_C = \beta = 0.0$	77
4.4	Skin friction coefficient, Nusselt and Sherwood number for numerous values of $M, \zeta, We, Gr_T, Gr_C, Pr, Rd, Du, \theta_w, \beta, Sc, Sr$	78
5.1	Comparison of numerical and analytical outcomes when $We = 0.05, p_i =$ $0.2, M = 0.04, f_w = 0.4, m = 0.6, Pr = 0.7, \zeta = 0.4, B = 0.5$ for vari- ous values of η	97
5.2	Comparison of numerical and analytical outcomes when $We = 0.5, p_i =$ $0.2, M = 0.04, f_w = 0.4, m = 0.6, Pr = 2, \zeta = 0.4, B = 0.5$ for various values of η	99

5.3	Comparison of Skin friction for stretching/shrinking case and different values of p_i, f_w, m, M, ζ	100
5.4	Nusselt count for different values of Pr, Du, m, Rd, θ_w	101
6.1	Comparison of Skin friction factor $Re_x^{\frac{1}{2}} C_{fx}$ for different values of K, A, Gr_T, Gr_C	121
6.2	Comparative analysis of $Re_x^1 M_{wx}$ for the varying values of $K, A, \lambda_3, \lambda_4$	121
6.3	Comparative analysis of $Re_x^{-1/2} Nu_x$ for the varying values of K, A, Pr, θ_w	122
6.4	Comparative analysis of $Re_x^{-1/2} Sh_x$ for the varying values of K, A, Sc	122
7.1	Convergence of series solution for $f''(0), \theta'(0)$ and $\phi'(0)$ when $f_w = M = A = Gr_T = Gr_C = 0.5, We = \lambda_1 = \lambda_2 = \gamma = K_c = Ec = Rd = 0.1, Sc = 0.2, Pr = 7.0, \theta_w = 1.1, h_f = -0.85, h_\theta = -0.94$ and $h_\phi = -0.34$	147
7.2	Similarity of $f''(0)$ for the different values of M when $We = Gr_T = Gr_C = f_w = \gamma = A = 0$	149
7.3	Similarity of $-\theta'(0)$ for the different values of Pr when $We = M = \theta_w = Rd = Gr_T = Gr_C = Ec = A = \lambda_1 = 0.0$	149
7.4	Skin friction coefficient, Nusselt number and Sherwood number for the different values $f_w, \lambda_1, \lambda_2, M, We, \gamma, Pr, Sc, A, Gr_T, Gr_C, K_c, Ec, Rd, \theta_w$	161
8.1	Convergence of series.	184
8.2	Numerical calculation of Nusselt number.	185