Figure 5: Decay of the transient components for the velocity $v(r, t)$ and the shear stress $\tau(r, t)$ of generalized Burgers’ fluid given by Eqs. (31) and (32), for $R_1 = 0.3$, $R_2 = 0.6$, $r = 0.5$ $f = -2$, $\rho = 1000$, $\lambda_1 = 5$, $\lambda_2 = 3$, $\lambda_3 = 5$, $\lambda_4 = 2$ and different values of $\nu$.

Figure 6: Profiles of the velocity $v(r, t)$ and the shear stress $\tau(r, t)$ given by Eqs. (20) and (24), for $R_1 = 0.3$, $R_2 = 0.6$, $f = -2$, $\nu = 0.005$, $\mu = 5$, $\lambda_2 = 3$, $\lambda_3 = 5$, $\lambda_4 = 2$, $t = 20s$ and different values of $\lambda_1$. 