Assignment - systems of equations

Consider the following structural form of a system of equations:

$$Y_{1t} = \beta_{10} + \beta_{11}Y_{2t} + \gamma_{11}X_{1t} + \gamma_{12}X_{2t} + u_{1t}$$

$$Y_{2t} = \beta_{20} + \beta_{21}Y_{1t} + \gamma_{21}X_{2t} + u_{2t}$$

with

Y_{1t} and Y_{2t} endogenous variables

X_{1t} and X_{2t} exogenous variables