Week 11 Assessment

The due date for submitting this assignment has passed.  
Due on 2021-04-07, 23:59 IST.

As per our records you have not submitted this assignment.

1) Which of the given statements are correct in the context of simultaneous equations model (SEM)?  
   1 point
   - The number of equations can be less than the number of endogenous variables
   - The endogenous variable in one equation cannot appear as an explanatory variable in another equation
   - There can be at most one endogenous variable
   - The reduced form equation will not include any endogenous variables on the right hand side
   No, the answer is incorrect.  
   Score: 0

   Accepted Answers:  
The reduced form equation will not include any endogenous variables on the right hand side

2) Given below are the demand (1) and supply (2) functions;
   \[ Q_D = a_0 + a_1P + a_2I + a_3 \]  
   \[ Q_S = b_0 + b_1P + b_2 \]  
   where \( Q \) is quantity, \( P \) is price and \( I \) is income. According to the necessary condition of identification, which function is identified?
   1 point
   - The demand function is identified and supply function is over-identified
   - The supply function is just-identified and the demand function is under-identified
   - The supply function is over-identified but demand function is just-identified
   - None of the functions are identified
   No, the answer is incorrect.  
   Score: 0

   Accepted Answers:  
The supply function is just-identified and the demand function is underidentified

3) Consider the following simultaneous equations model:
   \[ Q_D = a_0 + a_1P + a_2I + a_3 \]  
   \[ Q_S = b_0 + b_1P + b_2 \]  
   \[ Q_0 = c_0 \]  
   where \( Q \) is the quantity, \( P \) is the price and \( I \) is the income.
   Now, suppose that you are given the following estimation results of the reduced form equations,  
   \[ \hat{\beta}_0 = 23.42 + 0.129I \]  
   \[ \hat{\delta}_0 = 43.83 + 0.205I \]  
   Obtain the LS estimates of the structural coefficients
   1 point
   - \( \hat{\beta}_0 = 6.615 \) and \( \hat{\delta}_0 = 1.589 \)
   - \( a_0 = -4.149 \) and \( b_0 = 0.629 \)
   - \( \hat{\beta}_0 = 6.615 \) and \( \hat{\delta}_0 = 1.589 \), \( a_0 = -4.149 \) and \( b_0 = 0.629 \)
   - The estimates cannot be obtained with the information given
   No, the answer is incorrect.  
   Score: 0

   Accepted Answers:  
\( \hat{\beta}_0 = 6.615 \) and \( \hat{\delta}_0 = 1.589 \)

4) Select the correct statements concerning the disadvantages of the fixed effects LSDV model  
   1 point
   - The model is technical to estimate
   - The degrees of freedom may be lost due to estimation of many parameters
   - The model can help account for individual fixed effects only
   - There may be a problem of multicollinearity
   No, the answer is incorrect.  
   Score: 0

   Accepted Answers:  
The degrees of freedom may be lost due to estimation of many parameters

5) Consider the following equation and determine the class of model it represents
   \[ X_c = X_{c-1} = a_0 + a_1(X_{d-1} - X_{d-1}) + c_{c-1} \]  
   1 point
   - Between Estimation Method
   - Panel Data Method
   - First Difference Estimation Method
   - Before-After Estimation Method
   No, the answer is incorrect.  
   Score: 0

   Accepted Answers:  
First Difference Estimation Method

6) In order to estimate the causal effect of an intervention, which of the following are most important  
   1 point
   - The treatment and the control groups
   - A randomized control trial (RCT)
   - Homogeneity of control and treatment subjects
   - Panel data
   No, the answer is incorrect.  
   Score: 0

   Accepted Answers:  
The treatment and the control groups

Homogeneity of control and treatment subjects