File: Ch01, Chapter 1, An Introduction to Econometrics

Multiple Choice

1.   Which of the following is NOT generally included in the study of econometrics?

      a.   Using economic data to estimate relationships.
      b.   Testing economic hypotheses.
      c.   Predicting economic outcomes.
      d.   Developing new economic relationships.

Ans: d
Level: Easy – Knowledge
AACSB: Reflective Thinking
Section: 1.1

2.   Which of the following questions is a type that tools of econometrics are meant to answer?

      a.   If goods A and B are substitutes and the price of good A increases by $0.50, by how much will the sales of good B change by?
      b.   If goods A and B are substitutes and the price of good A increases, how will this affect the demand for good B?
      c.   If an income increase causes the sales of good A to fall, everything else held constant, what type of good is good A?
      d.   Everything else the same, would the price of good A be higher in a competitive industry or a monopolistic industry?

Ans: a
Level: Medium – Application
AACSA: Analytic
Section: 1.1

3.   Consider the model $Q^d = f\left(P, P^s, P^c, INC\right)$ where Q^d is quantity demanded of a particular product per month, P is the price of the product, P^s is the price of substitutes, P^c is the price of complements, and INC is monthly income. This equation represents ____.

      a.   a non-linear model
      b.   an economic model
      c.   an econometric model
      d.   an interval forecast

Ans: b
Level: Easy – Comprehension
AACSB: Reflective Thinking
Section: 1.2

4.   Economic theory provides a basis for which variables are relevant and should be included in an econometric model. But econometrics provides tools to estimate ____ which tells us ____.

        a.   a model; the functional form that should be used
        b.   causality; why it happens that way
        c.   a parameter; how much or to what degree things change
        d.   variables; the probability of a specific outcome

Ans: c
Level: Medium – Analysis
AACSB: Analytic
Section: 1.2

5.   Why is a random error term included in an econometric model?

        a.   Because many economic models have not been well developed yet and need to allow for inaccuracies.
        b.   Because some people are irrational.
        c.   Because there is intrinsic uncertainty in any economic activity due to individual decision making.
        d.   Because most estimating techniques are not well suited to work with a deterministic model.

Ans: c
Level: Medium – Analysis
AACSB: Analytic
Section: 1.3

6.   Refer to the equation $Q^s = \beta_1 + \beta_2 P + \beta_3 P^r + \beta_4 P^s + \beta_5 TAX + e$ where Q^s is annual quantity supplied, P is the price of the product, P^r is the price of resources, P^s is the price of goods that are substitutes in production, and TAX is the excise tax on the product. This equation is ____.

        a.   an economic model
        b.   an econometric model
        c.   a market model
        d.   a non-linear model

Ans: b
Level: Easy – Comprehension
AACSB: Reflective Thinking
Section: 1.3

7.   Refer to the equation $Q^s = \beta_1 + \beta_2 P + \beta_3 P^r + \beta_4 P^s + \beta_5 TAX + e$ where Q^s is annual quantity supplied, P is the price of the product, P^r is the price of resources, P^s is the price of goods that are substitutes in production, and TAX is the excise tax on the product. In this equation, β_1 represents ____.

    a.   a parameter to be estimated
    b.   the random error term
    c.   the predicted quantity supplied
    d.   the equilibrium quantity

Ans: a
Level: Easy – Comprehension
AACSB: Reflective Thinking
Section: 1.3

8.   The parameters estimated using econometric methods are generally used for ____ or ____.

    a.   testing hypotheses; predicting
    b.   confirming; denying effects of policy
    c.   validation; repudiation
    d.   generating data; probability distributions

Ans: a
Level: Easy – Knowledge
AACSB: Reflective Thinking
Section: 1.3

9.   Suppose you stand outside a store and randomly give some shoppers coupons as they enter while other shoppers receive none. You then record how much each shopper spends in the store. The data you collect is ____ data.

    a.   survey
    b.   random
    c.   experimental
    d.   selective

Ans: c
Level: Easy – Knowledge
AACSB: Reflective Thinking
Section: 1.4

10.   Suppose you wish to study the effect on employment of the increase in the minimum wage in Seattle, WA and you use employment in Portland, OR as a control group since there was no increase in the minimum wage there. The type of data you would be analyzing is called ____ data.

        a.   survey
        b.   pure experimental
        c.   quasi-experimental
        d.   random

Ans: c
Level: Medium – Application
AACSB: Analytic
Section: 1.4

11.   A data set that has observations on one entity at multiple points in time is classified as ____.

        a.   time series data
        b.   cross-section data
        c.   panel data
        d.   flow data

Ans: a
Level: Easy – Knowledge
AACSB: Reflective Thinking
Section: 1.5

12.   A data set containing the number of adults with college degrees in each of the US states in 2009 is ____ data.

        a.   time series
        b.   cross-section
        c.   panel
        d.   flow

Ans: b
Level: Easy – Comprehension
AASCS: Reflective Thinking
Section: 1.5

13. What does it mean for a panel data set to be balanced?

   a. Males and females are equally represented in the sample.
   b. The observations are equally split before and after the event being studied.
   c. The number of observations in the treatment and control group are equal.
   d. Each unit of observation is observed for the same number of time periods.

Ans: d
Level: Medium – Analysis
AACSE: Analytic
Section: 1.5

14. Of the following steps in conducting empirical economic research, which one should be performed last?

   a. Find appropriate data that can be used for estimation.
   b. Build an economic model guided by economic theory.
   c. Evaluate and analyze the consequences and implications of the results.
   d. Estimate parameters and test hypotheses.

Ans: c
Level: Easy – Knowledge
AACSB: Reflective Thinking
Section: 1.6

15. Which of the following sections usually comes first in a research report?

   a. State of problem.
   b. Description of data.
   c. Review of literature on the topic.
   d. Economic model.

Ans: a
Level: Easy – Knowledge
AACSB: Reflective Thinking
Section: 1.7

16. NBER stands for ____.

   a. Northern Banks Emergency Reserves
   b. Normally Balanced Econometric Regression
   c. National Bureau of Economic Research
   d. National Business and Economic Regulators

Ans: c
Level: Easy – Knowledge
AACSB: Reflective Thinking

17.   The FRED database provides access to large amounts of economic data and is housed at the Federal Reserve Bank of ____.

    a.   Boston
    b.   New York
    c.   San Francisco
    d.   St. Louis

Ans: d
Level: Easy – Knowledge
AACSB: Reflective Thinking
Section: 1.8

Short Answer/Essay

18.   For each of the following, state whether it is i) time-series, cross-sectional, or panel data and ii) quantitative or qualitative data.

    a.   Daily close value of the Dow Jones Industrial Average (DJIA).
    b.   Education level obtained by individuals living in Schoharie County, NY in 2017.
    c.   Survey of Professional Forecasters which collects forecasts made by several forecasters of GDP, inflation rate, and other variables every quarter.

Ans: a. time series; quantitative; b. cross-sectional; qualitative; c. panel; quantitative
Level: Medium – Analysis
AACSB: Analytic
Section: 1.5