Name: ______________________ Class: ______________________ Date: ______________

Ch 01: The Nature of Econometrics and Economic Data

1. Econometrics is the branch of economics that _____.
   a. studies the behavior of individual economic agents in making economic decisions
   b. develops and uses statistical methods for estimating economic relationships
   c. deals with the performance, structure, behavior, and decision-making of an economy as a whole
   d. applies mathematical methods to represent economic theories and solve economic problems

ANSWER: b

2. Nonexperimental data is called _____.
   a. cross-sectional data
   b. observational data
   c. time series data
   d. panel data

ANSWER: b

3. Which of the following is true of experimental data?
   a. Experimental data are collected in laboratory environments in the natural sciences.
   b. Experimental data cannot be collected in a controlled environment.
   c. Experimental data is sometimes called observational data.
   d. Experimental data is sometimes called retrospective data.

ANSWER: a

4. An empirical analysis relies on _____ to test a theory.
   a. common sense
   b. ethical considerations
   c. data
   d. customs and conventions

ANSWER: c

5. The term ‘*u*’ in an econometric model is usually referred to as the _____.
   a. error term
   b. parameter
   c. hypothesis
   d. dependent variable

ANSWER: a

6. The constants of econometric models are referred to as _____.
   a. parameters
   b. statistics
   c. error terms
   d. hypotheses

ANSWER: a

7. The parameters of an econometric model _____.

a. include all unobserved factors affecting the variable being studied
b. describe the strength of the relationship between the variable under study and the factors affecting it
c. refer to the explanatory variables included in the model
d. refer to the predictions that can be made using the model

ANSWER: b

8. Which of the following is the first step in empirical economic analysis?
a. Collection of data
b. Statement of hypotheses
c. Specification of an econometric model
d. Testing of hypotheses

ANSWER: c

9. A data set that consists of a sample of individuals, households, firms, cities, states, countries, or a variety of other units, taken at a given point in time, is called a(n) _____.
a. cross-sectional data set
b. longitudinal data set
c. time series data set
d. experimental data set

ANSWER: a

10. Data on the income of law graduates collected at different times during the same year is _____.
a. panel data
b. experimental data
c. time series data
d. cross-sectional data

ANSWER: d

11. A data set that consists of observations on a variable or several variables over time is called a _____ data set.
a. binary
b. cross-sectional
c. time series
d. experimental

ANSWER: c

12. Which of the following is true of time series data?
a. The time series data is easier to analyze than cross-sectional data.
b. The time series data are independent across time.
c. The chronological ordering of observations in a time series conveys potentially important information.
d. A time series data set consists of observations on a variable or several variables at a given time.

ANSWER: c

13. Which of the following is an example of time series data?

a. Data on the unemployment rates in different parts of a country during a year.
b. Data on the consumption of wheat by 200 households during a year.
c. Data on the gross domestic product of a country over a period of 10 years.
d. Data on the number of vacancies in various departments of an organization on a particular month.

ANSWER: c

14. Which of the following refers to panel data?
a. Data on the unemployment rate in a country over a 5-year period
b. Data on the birth rate, death rate and population growth rate in developing countries over a 10-year period.
c. Data on the income of 5 members of a family on a particular year.
d. Data on the price of a company's share during a year.

ANSWER: b

15. Which of the following is a difference between panel and pooled cross-sectional data?
a. A panel data set consists of data on different cross-sectional units over a given period of time while a pooled data set consists of data on the same cross-sectional units over a given period of time.
b. A panel data set consists of data on the same cross-sectional units over a given period of time while a pooled data set consists of data on different cross-sectional units over a given period of time
c. A panel data consists of data on a single variable measured at a given point in time while a pooled data set consists of data on the same cross-sectional units over a given period of time.
d. A panel data set consists of data on a single variable measured at a given point in time while a pooled data set consists of data on more than one variable at a given point in time.

ANSWER: b

16. _____ has a causal effect on _____.
a. Income; unemployment
b. Height; health
c. Income; consumption
d. Age; wage

ANSWER: c

17. Which of the following is true?
a. A variable has a causal effect on another variable if both variables increase or decrease simultaneously.
b. The notion of 'ceteris paribus' plays an important role in causal analysis.
c. Difficulty in inferring causality disappears when studying data at fairly high levels of aggregation.
d. The problem of inferring causality arises if experimental data is used for analysis.

ANSWER: b

18. Which of the following terms measures the association between two variables?
a. Casual effect
b. Independence
c. Average
d. Correlation

ANSWER: d

19. Experimental data are sometimes called retrospective data.

a. True

b. False

ANSWER: False

20. Experimental data are easy to obtain in the social sciences.

a. True

b. False

ANSWER: False

21. An economic model consists of mathematical equations that describe various relationships between economic variables.

a. True

b. False

ANSWER: True

22. Random sampling complicates the analysis of cross-sectional data.

a. True

b. False

ANSWER: False

23. A cross-sectional data set consists of observations on a variable or several variables over time.

a. True

b. False

ANSWER: False

24. A time series data is also called a longitudinal data set.

a. True

b. False

ANSWER: False

25. The notion of **ceteris paribus** means “other factors being equal.”

a. True

b. False

ANSWER: True

26. In the following econometric model, $wage = \beta_0 + \beta_1 educ + u$, which of the following factors would **not** be contained in the term u ?

a. Experience (*exper*)

b. Family background (*fback*)

c. Innate ability (*abil*)

d. Education (*educ*)

ANSWER: d

27. Given the following econometric model, $wage = \beta_0 + \beta_1 educ + u$, can we eliminate the error term u entirely?

a. Yes, by including other observable factors, such as experience, that can also influence wage.

b. Yes, by ensuring that everyone reports wage accurately and truthfully.

c. No, because education is not always reported accurately.

d. No, because many factors affect wage, that we cannot even list, let alone observe.

ANSWER: d

28. Why do labor economists often find it difficult to estimate the ceteris paribus return to education, in terms of wage, using non-experimental data?

a. Education level in non-experimental data is probably dependent on other omitted factors that also affect wage.

b. In a non-experimental setting, education level is often difficult to measure.

c. Wage is often reported unreliably and inaccurately.

d. Experience, another factor that also affects wage, is generally difficult to measure.

ANSWER: a