File: ch01, Chapter 1: Introduction to Statistics

True/False

1. Virtually every area of business uses statistics in decision making.

**Ans: True**

Title: Practice Question 1

Level of Difficulty: Easy

Learning Objective: LO 1

Feedback True: Correct! Virtually every area of business uses statistics in decision making.

Feedback False: Incorrect. Virtually every area of business uses statistics in decision making.

2. The highest level of data measurement is the ratio-level measurement.

**Ans: True**

Title: Practice Question 2

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback True: Correct! The highest level of data measurement is the ratio-level measurement.

Feedback False: Incorrect. The highest level of data measurement is the ratio-level measurement.

3. Since statistics deals with primarily with facts and figures, ethical considerations do not play any role in statistical analysis.

**Ans: False**

Title: Practice Question 3

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback True: Incorrect. Ethical considerations do play a role in statistical analysis.

Feedback False: Correct! Ethical considerations do play a role in statistical analysis.

**Multiple Choice**

4. Which of the following descriptive measure is not a statistic?

a) sample mean *x̅*

b) population mean *µ*

c) sample standard deviation *s*

d) sample variance *s*2

e) sample median

**Ans: b, population mean *µ***

Title: Practice Question 4

Level of Difficulty: Medium

Learning Objective: LO 2

Feedback A: Incorrect. Population mean is not a statistic.

Feedback B: Correct! Population mean is not a statistic.

Feedback C: Incorrect. Population mean is not a statistic.

Feedback D: Incorrect. Population mean is not a statistic.

Feedback E: Incorrect. Population mean is not a statistic.

5. To study the impact of advertising on various market segments, market researchers use \_\_\_\_\_\_\_\_\_\_.

a) graphical statistics

b) demographic statistics

c) inferential statistics

d) constructive statistics

**Ans: c. inferential statistics**

Title: Practice Question 5

Level of Difficulty: Medium

Learning objective: LO 2

Feedback A: Incorrect. Researchers use inferential statistics to study the impact of advertising on market segments.

Feedback B: Incorrect. Researchers use inferential statistics to study the impact of advertising on market segments.

Feedback C: Correct! Researchers use inferential statistics to study the impact of advertising on market segments.

Feedback D: Incorrect. Researchers use inferential statistics to study the impact of advertising on market segments.

6. Researchers want to study whether women or men are more adept at remembering where they leave misplaced items (such as credit cards, phone). They collected 500 women and men to participate a study in which each person placed 10 common objects in a 12-room “virtual” house represented on a computer screen. 30 minutes later, the participants were asked to recall where they put each of the items, and for each subject, the answer was recorded to be “yes” or “no”. In this study, the researchers used:

a) graphical statistics

b) demographic statistics

c) inferential statistics

d) constructive statistics

**Ans: c. inferential statistics**

Title: Practice Question 6

Level of Difficulty: Medium

Learning objective: LO 2

Feedback A: Incorrect. In this study the researchers used inferential statistics.

Feedback B: Incorrect. In this study the researchers used inferential statistics.

Feedback C: Correct! In this study the researchers used inferential statistics.

Feedback D: Incorrect. In this study the researchers used inferential statistics.

7. A small portion or a subset of the population on which data is collected for conducting statistical analysis is called \_\_\_\_\_\_\_\_\_\_.

a) a population

b) a census

c) a sample

d) a data set

**Ans: c. a sample**

Title: Practice Question 7

Level of Difficulty: Easy

Learning Objective: LO 2

Feedback A: Incorrect. A sample is a subset of the population on which data is collected for purposes of statistical analysis.

Feedback B: Incorrect. A sample is a subset of the population on which data is collected for purposes of statistical analysis.

Feedback C: Correct! A sample is a subset of the population on which data is collected for purposes of statistical analysis.

Feedback D: Incorrect. A sample is a subset of the population on which data is collected for purposes of statistical analysis.

8. The activity or the process of collecting the data on the population is called \_\_\_\_\_\_\_\_\_\_.

a) a population

b) a census

c) a sample

d) a data set

**Ans: b. a census**

Title: Practice Question 8

Level of Difficulty: Easy

Learning Objective: LO 2

Feedback A: Incorrect. A census is the activity or process of collecting data on the population.

Feedback B: Correct! A census is the activity or process of collecting data on the population.

Feedback C: Incorrect. A census is the activity or process of collecting data on the population.

Feedback D: Incorrect. A census is the activity or process of collecting data on the population.

9. One investigating company tracked all credit card purchases during 2016 and measured two variables: (1) the type of credit card used (VISA, MasterCard, American Express, or Discover), and (2) the amount (in dollars) of each purchase. The data set collected represents \_\_\_\_\_\_\_\_\_\_.

a) a population

b) a census

c) a sample

d) a data set

**Ans: a, a population**

Title: Practice Question 9

Level of Difficulty: Medium

Learning Objective: LO 2

Feedback A: Correct! The collection of all credit card purchases during 2016 represents a population.

Feedback B: Incorrect. The collection of all credit card purchases during 2016 represents a population.

Feedback C: Incorrect. The collection of all credit card purchases during 2016 represents a population.

Feedback D: Incorrect. The collection of all credit card purchases during 2016 represents a population.

10. Researchers want to investigate the relationship between the voters’ income level and their voting tendencies in the United States. They took a random sample from each state and asked them about their tendency of voting. What is the population in this problem?

a) the voters’ voting tendencies

b) the voters’ income level

c) all of the voters in United States

d) the random sample of voters collected by the researchers

e) the income level of the randomly selected voters from each state

**Ans: c, all of the voters in United States**

Title: Practice Question 10

Level of Difficulty: Easy

Learning Objective: LO 2

Feedback A: Incorrect. The population in this example would be all of the voters in the U.S.

Feedback B: Incorrect. The population in this example would be all of the voters in the U.S.

Feedback C: Correct! The population in this example would be all of the voters in the U.S.

Feedback D: Incorrect. The population in this example would be all of the voters in the U.S.

Feedback E: Incorrect. The population in this example would be all of the voters in the U.S.

11. From the above problem, what is the sample?

a) the voters’ voting tendencies

b) the voters’ income level

c) all of the voters in United States

d) all the voters collected by the researchers from each state

e) the income level of the randomly selected voters from each state

**Ans: d, all the voters collected by the researchers from each state**

Title: Practice Question 11

Level of Difficulty: Easy

Learning Objective: LO 2

Feedback A: Incorrect. The sample in this example would be all the voters collected by the researchers from each state.

Feedback B: Incorrect. The sample in this example would be all the voters collected by the researchers from each state.

Feedback C: Incorrect. The sample in this example would be all the voters collected by the researchers from each state.

Feedback D: Correct! The sample in this example would be all the voters collected by the researchers from each state.

Feedback E: Incorrect. The sample in this example would be all the voters collected by the researchers from each state.

12. When you use the data gathered from a group to describe or reach conclusions about that same group, you are performing \_\_\_\_\_\_\_\_\_\_.

a) descriptive statistics

b) a census

c) inferential statistics

d) constructive statistics

**Ans: a. descriptive statistics**

Title: Practice Question 12

Level of Difficulty: Medium

Learning Objective: LO 2

Feedback A: Correct! Descriptive statistics include data gathered from a group to describe that group.

Feedback B: Incorrect. Descriptive statistics include data gathered from a group to describe that group.

Feedback C: Incorrect. Descriptive statistics include data gathered from a group to describe that group.

Feedback D: Incorrect. Descriptive statistics include data gathered from a group to describe that group.

13. When you use the data gathered from a sample to generate statistics to reach conclusions about the population from which the sample was taken, you are performing \_\_\_\_\_\_\_\_\_\_.

a) descriptive statistics

b) a census

c) inferential statistics

d) constructive statistics

**Ans: c. inferential statistics**

Title: Practice Question 13

Level of Difficulty: Medium

Learning Objective: LO 2

Feedback A: Incorrect. Inferential statistics are used to reach conclusions about a population based on data from a sample.

Feedback B: Incorrect. Inferential statistics are used to reach conclusions about a population based on data from a sample.

Feedback C: Correct! Inferential statistics are used to reach conclusions about a population based on data from a sample.

Feedback D: Incorrect. Inferential statistics are used to reach conclusions about a population based on data from a sample.

14. A descriptive measure of a sample is called \_\_\_\_\_\_\_\_\_\_.

a) a census

b) a parameter

c) a statistic

d) a sample

**Ans: c. a statistic**

Title: Practice Question 14

Level of Difficulty: Easy

Learning Objective: LO 2

Feedback A: Incorrect.

Feedback B: Incorrect.

Feedback C: Correct!

Feedback D: Incorrect.

15. To study the impact of advertising on various market segments, a soft drink company creates an advertisement depicting a dispensing machine that talks to the buyer, and market researchers measure the impact of the new advertisement on various age group and they use\_\_\_\_\_\_\_\_\_\_.

a) graphical statistics

b) demographic statistics

c) inferential statistics

d) constructive statistics

**Ans: c. inferential statistics**

Title: Practice Question 15

Level of Difficulty: Medium

Learning objective: LO 2

Feedback A: Incorrect.

Feedback B: Incorrect.

Feedback C: Correct!

Feedback D: Incorrect.

16. Which of the following statements about population parameters is most appropriate?

a) Population parameters are usually denoted by Roman letters.

b) Population parameters can always be calculated easily and economically.

c) Population parameters can be calculated with little time or money.

d) Inferences about population parameters are always subject to uncertainty.

**Ans: d. Inferences about population parameters are always subject to uncertainty.**

Title: Practice Question 16

Level of Difficulty: Hard

Learning Objective: LO 2

Feedback A: Incorrect.

Feedback B: Incorrect.

Feedback C: Incorrect.

Feedback D: Correct!

17. A company wants to learn the customers’ purchase habits of buying certain products. This company did a survey about a random 1000 customers, who were asked about the times they purchased the certain products within one month. Then what is the data in this example:

a) times the customers purchased the certain products

b) customers’ purchase habits

c) all the records of times for purchasing the certain products for all of the 100 customers

d) 1000 random customers

**Ans: c. all the records of times for purchasing the certain products for all of the 100 customers**

Title: Practice Question 17

Level of Difficulty: Medium

Learning Objective: LO 3

Feedback A: Incorrect.

Feedback B: Incorrect.

Feedback C: Correct!

Feedback D: Incorrect.

18. Researchers often wish to measure consumers' satisfaction toward certain products and might ask consumers to specify their feelings as either "very dissatisfied," "somewhat dissatisfied," "somewhat satisfied," or "very satisfied." This is an example of what level of data?

a) nominal

b) ordinal

c) interval

d) ratio

e) exponential

**Ans: b, ordinal**

Title: Practice Question 18

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback A: Incorrect.

Feedback B: Correct!

Feedback C: Incorrect.

Feedback D: Incorrect.

Feedback E: Incorrect.

19. Researchers often wish to know the color preference of consumers and might ask consumers to specify their favorite color, such as red, blue, yellow or purple. This is an example of what level of data?

a) nominal

b) ordinal

c) interval

d) ratio

e) exponential

Ans: a, nominal

Title: Practice Question 19

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback A: Correct! Favorite color would be an example of a nominal level of data.

Feedback B: Incorrect. Favorite color would be an example of a nominal level of data.

Feedback C: Incorrect. Favorite color would be an example of a nominal level of data.

Feedback D: Incorrect. Favorite color would be an example of a nominal level of data.

Feedback E: Incorrect. Favorite color would be an example of a nominal level of data.

20. What is the level of data corresponding to a military rank (Lieutenant, Captain, Major)?

a) nominal

b) ordinal

c) interval

d) ratio

e) exponential

Ans: b, ordinal

Title: Practice Question 20

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback A: Incorrect. Military titles (i.e. rank) represent an ordinal level of data.

Feedback B: Correct! Military titles (i.e. rank) represent an ordinal level of data.

Feedback C: Incorrect. Military titles (i.e. rank) represent an ordinal level of data.

Feedback D: Incorrect. Military titles (i.e. rank) represent an ordinal level of data.

Feedback E: Incorrect. Military titles (i.e. rank) represent an ordinal level of data.

21. One investigating company tracked all credit card purchase during 2012 and measured two variables: (1) the type of credit card used (VISA, MasterCard, American Express, or Discover), and (2) the amount (in dollars) of each purchase. Identify the level of each variable measured.

a) Ordinal level, Interval level

b) Ordinal level, Nominal level

c) Nominal level, Interval level

d) Nominal level, Ordinal level

**Ans: c, Nominal level, Interval level**

Title: Practice Question 21

Level of Difficulty: Easy

Learning Objective: LO 4

Feedback A: Incorrect. The two variables are nominal level and interval level, respectively.

Feedback B: Incorrect. The two variables are nominal level and interval level, respectively.

Feedback C: Correct! The two variables are nominal level and interval level, respectively.

Feedback D: Incorrect. The two variables are nominal level and interval level, respectively.

22. Chemists need to measure the temperature when performing chemistry experiments. What is the level of the data of the heat measured in degrees centigrade?

a) nominal

b) ordinal

c) interval

d) ratio

e) exponential

**Ans: c, interval**

Title: Practice Question 22

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback A: Incorrect. Heat measured in degrees centigrade would be interval level data

Feedback B: Incorrect. Heat measured in degrees centigrade would be interval level data

Feedback C: Correct! Heat measured in degrees centigrade would be interval level data.

Feedback D: Incorrect. Heat measured in degrees centigrade would be interval level data

Feedback E: Incorrect. Heat measured in degrees centigrade would be interval level data

23. A score on a 15-point multiple choices quiz measuring knowledge of statistics is an example of a(n)

a) nominal

b) ordinal

c) interval

d) ratio

e) exponential

**Ans: b, ordinal**

Title: Practice Question 23

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback A: Incorrect. A numerical score on a multiple-choice quiz is an example of ordinal data.

Feedback B: Correct! A numerical score on a multiple-choice quiz is an example of ordinal data.

Feedback C: Incorrect. A numerical score on a multiple-choice quiz is an example of ordinal data.

Feedback D: Incorrect. A numerical score on a multiple-choice quiz is an example of ordinal data.

Feedback E: Incorrect. A numerical score on a multiple-choice quiz is an example of ordinal data.

24. Which level of data measurement allows the most or broadest application of statistical techniques?

a) Nominal

b) Ordinal

c) Interval

d) Ratio

**Ans: d. Ratio**

Title: Practice Question 24

Level of Difficulty: Hard

Learning Objective: LO 4

Feedback A: Incorrect. Ratio level data allows for the broadest application of statistical techniques.

Feedback B: Incorrect. Ratio level data allows for the broadest application of statistical techniques.

Feedback C: Incorrect. Ratio level data allows for the broadest application of statistical techniques.

Feedback D: Correct! Ratio level data allows for the broadest application of statistical techniques.

25. Which of the following statements captures a key aspect of ratio level data?

a) ratio data have equal intervals

b) ratio data have an absolute zero, i.e., the zero value represents the absence of the characteristic being studied

c) zero in ratio data is a matter of convention or convenience and not a natural or fixed zero point

d) ratio data is called qualitative data sometimes

**Ans: b, ratio data have an absolute zero, i.e., the zero value represents the absence of the characteristic being studied**

Title: Practice Question 25

Level of Difficulty: Hard

Learning Objective: LO 4

Feedback A: Incorrect. A key aspect of ratio level data is that ratio data have an absolute zero.

Feedback B: Correct! A key aspect of ratio level data is that ratio data have an absolute zero.

Feedback C: Incorrect. A key aspect of ratio level data is that ratio data have an absolute zero.

Feedback D: Incorrect. A key aspect of ratio level data is that ratio data have an absolute zero.

26. Which of the following type of data is the highest level of data measurement?

a) nominal level data

b) ordinal level data

c) interval level data

d) ratio level data

e) exponential level data

**Ans: d, ratio level data**

Title: Practice Question 26

Level of Difficulty: Easy

Learning Objective: LO 4

Feedback A: Incorrect. Ratio level data is the highest level of data measurement.

Feedback B: Incorrect. Ratio level data is the highest level of data measurement.

Feedback C: Incorrect. Ratio level data is the highest level of data measurement.

Feedback D: Correct! Ratio level data is the highest level of data measurement.

Feedback E: Incorrect. Ratio level data is the highest level of data measurement.

27. Which of the following type of data is the lowest level of data measurement?

a) nominal level data

b) ordinal level data

c) interval level data

d) ratio level data

e) exponential level data

**Ans: a, nominal level data**

Title: Practice Question 27

Level of Difficulty: Easy

Learning Objective: LO 4

Feedback A: Correct! Nominal level data is the lowest level of data measurement.

Feedback B: Incorrect. Nominal level data is the lowest level of data measurement.

Feedback C: Incorrect. Nominal level data is the lowest level of data measurement.

Feedback D: Incorrect. Nominal level data is the lowest level of data measurement.

Feedback E: Incorrect. Nominal level data is the lowest level of data measurement.

28. Parametric statistics require that data be \_\_\_\_\_\_\_\_\_\_.

a) nominal or ordinal

b) ordinal or interval

c) interval or ratio

d) ratio or ordinal

**Ans: c. interval or ratio**

Title: Practice Question 28

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback A: Incorrect. Parametric statistics require data to be interval or ratio.

Feedback B: Incorrect. Parametric statistics require data to be interval or ratio.

Feedback C: Correct! Parametric statistics require data to be interval or ratio.

Feedback D: Incorrect. Parametric statistics require data to be interval or ratio.

29. Nonparametric statistics must be used if the data are \_\_\_\_\_\_\_\_\_\_.

a) nominal or ordinal

b) ordinal or interval

c) interval or ratio

d) ratio or ordinal

**Ans: a. nominal or ordinal**

Title: Practice Question 29

Level of Difficulty: Medium

Learning Objective: LO 4

Feedback A: Correct! Nonparametric statistics must be used if the data are nominal or ordinal.

Feedback B: Incorrect. Nonparametric statistics must be used if the data are nominal or ordinal.

Feedback C: Incorrect. Nonparametric statistics must be used if the data are nominal or ordinal.

Feedback D: Incorrect. Nonparametric statistics must be used if the data are nominal or ordinal.

30. A study was conducted to investigate the effect of a coal-fired generating plant upon the water quality of a river. As part of an environmental impact study, fish were captured, tagged, and released. The following information was recorded for each fish:

sex (0=female, 1=male), length (cm), maturation (0=young, 1=adult), weight (g). The level of these data is:

a) nominal, ratio, nominal, ratio

b) nominal, interval, ordinal, ratio

c) nominal, ratio, ordinal, ratio

d) ordinal, ratio, nominal, ratio

e) ordinal, interval, ordinal, ratio

**Ans: c, nominal, ratio, ordinal, ratio**

Title: Practice Question 30

Level of Difficulty: Hard

Learning Objective: LO 4

Feedback A: Incorrect. The level of these data is: nominal, ratio, ordinal, ratio

Feedback B: Incorrect. The level of these data is: nominal, ratio, ordinal, ratio

Feedback C: Correct! The level of these data is: nominal, ratio, ordinal, ratio

Feedback D: Incorrect. The level of these data is: nominal, ratio, ordinal, ratio

Feedback E: Incorrect. The level of these data is: nominal, ratio, ordinal, ratio

31. Which of the following is not a characteristic or dimension associated with big data?

a) variety

b) velocity

c) veracity

d) viscosity

e) volume

Ans: d, viscosity

Title: Practice Question 31

Level of Difficulty: Easy

Learning Objective: LO 6

Feedback A: Incorrect. Vascularity is not a characteristicor dimension associated with big data.

Feedback B: Incorrect. Vascularity is not a characteristicor dimension associated with big data.

Feedback C: Incorrect. Vascularity is not a characteristicor dimension associated with big data.

Feedback D: Correct! Vascularity is not a characteristicor dimension associated with big data.

Feedback E: Incorrect. Vascularity is not a characteristicor dimension associated with big data.

32. The term describing big data that has to do with data quality, correctness, and accuracy is:

a) variety

b) velocity

c) veracity

d) vascularity

e) volume

Ans: c, veracity

Title: Practice Question 32

Level of Difficulty: Easy

Learning Objective: LO 6

Feedback A: Incorrect. Veracity has to do with data quality, correctness,and accuracy.

Feedback B: Incorrect. Veracity has to do with data quality, correctness,and accuracy.

Feedback C: Correct! Veracity has to do with data quality, correctness,and accuracy.

Feedback D: Incorrect. Veracity has to do with data quality, correctness,and accuracy.

Feedback E: Incorrect. Veracity has to do with data quality, correctness,and accuracy.

33. Some common applications of statistics in business include which of the following:

a) predicting the outcome of an election

b) determining consumer sentiment

c) estimating salary data for various demographics

d) comparing the spending of two different groups

e) all of the above

Ans: e, all of the above

Title: Practice Question 33

Level of Difficulty: Easy

Learning Objective: LO 1

Feedback A: Incorrect. All of the above are applications of statistics in business.

Feedback B: Incorrect. All of the above are applications of statistics in business.

Feedback C: Incorrect. All of the above are applications of statistics in business.

Feedback D: Incorrect. All of the above are applications of statistics in business.

Feedback E: Correct! All of the above are applications of statistics in business.

34. The following can be ascertained with statistics:

a) an estimate of the number of cars on a particular highway between 8 am – 9 am on weekdays

b) whether males or females are more likely to buy a certain flavor of ice cream

c) the true mean height of a population

d) both a and b

e) all of the above

Ans: d, all of the above except c

Title: Practice Question 34

Level of Difficulty: Medium

Learning Objective: LO 1

Feedback A: Incorrect. All of the above except c are examples of statistics in business. A population mean is not a statistic.

Feedback B: Incorrect. All of the above except c are examples of statistics in business. A population mean is not a statistic.

Feedback C: Incorrect. All of the above except c are examples of statistics in business. A population mean is not a statistic.

Feedback D: Correct! All of the above except c are examples of statistics in business. A population mean is not a statistic.

Feedback E: Incorrect. All of the above except c are examples of statistics in business. A population mean is not a statistic.

35. When estimating the amount of traffic congestion on a particular highway during a given timeframe, which of the following are variables:

a) the day of the week

b) the length of the highway

c) the number of cars that arrive on the highway

d) the average speed of the cars

e) all of the above

f) both c and d

Ans: f, both c and d

Title: Practice Question 35

Level of Difficulty: Medium

Learning Objective: LO 3

Feedback A: Incorrect. Only c and d are examples of variables. The rest are fixed.

Feedback B: Incorrect. Only c and d are examples of variables. The rest are fixed.

Feedback C: Incorrect. Both c and d are examples of variables. The rest are fixed.

Feedback D: Incorrect. Both c and d are examples of variables. The rest are fixed.

Feedback E: Incorrect. Only c and d are examples of variables. The rest are fixed.

Feedback F: Correct! Both c and d are examples of variables. The rest are fixed.

36. Which of the following statements is/are false regarding data measurement?

a) A measurement is taken when a standard process is used to assign numbers to particular attributes or characteristics of a variable.

b) Data are recorded measurements.

c) There are five levels of data measurement.

d) Nominal data measurement can be used only to classify or categorize.

e) all of the above

Ans: c, There are five levels of data measurement

Title: Practice Question 36

Level of Difficulty: Medium

Learning Objective: LO 3

Feedback A: Incorrect. There are five levels of data measurement, is false.

Feedback B: Incorrect. There are five levels of data measurement, is false.

Feedback C: Correct! There are four levels of data measurement.

Feedback D: Incorrect. There are five levels of data measurement, is false.

Feedback E: Incorrect. There are five levels of data measurement, is false.

37. Which of the following is not a category of business analytics?

a) descriptive analytics

b) predictive analytics

c) prescriptive analytics

d) nonparametric analytics

e) all of the above are categories of business analytics

Ans: d, nonparametric statistics

Title: Practice Question 37

Level of Difficulty: Easy

Learning Objective: LO 7

Feedback A: Incorrect. Nonparametric analytics, is not a category of business analytics.

Feedback B: Incorrect. Nonparametric analytics, is not a category of business analytics.

Feedback C: Incorrect. Nonparametric analytics, is not a category of business analytics.

Feedback D: Correct! Nonparametric analytics is not a category of business analytics.

Feedback E: Incorrect. Nonparametric analytics, is not a category of business analytics.

38. The study of the visual representation of data and is employed to convey data or information by imparting it as visual objects displayed in graphics is which of the following:

a) descriptive analytics

b) data visualization

c) descriptive statistics

d) graphical analytics

e) none of the above

Ans: b, data visualization

Title: Practice Question 38

Level of Difficulty: Easy

Learning Objective: LO 5

Feedback A: Incorrect Data visualization, is the study of the visual representation of data and is employed to convey data or information by imparting it as visual objects displayed in graphics.

Feedback B: Correct! Data visualization is the study of the visual representation of data and is employed to convey data or information by imparting it as visual objects displayed in graphics Feedback C: Incorrect Data visualization, is the study of the visual representation of data and is employed to convey data or information by imparting it as visual objects displayed in graphics.

Feedback D: Incorrect Data visualization, is the study of the visual representation of data and is employed to convey data or information by imparting it as visual objects displayed in graphics. Feedback E: Incorrect Data visualization, is the study of the visual representation of data and is employed to convey data or information by imparting it as visual objects displayed in graphics.

39. Which of the following processes is not one of the steps of ETL:

a) train

b) extract

c) load

d) transform

e) all of the above are steps of ETL

Ans: a, train

Title: Practice Question 39

Level of Difficulty: Medium

Learning Objective: LO 6

Feedback A: Correct! The steps associate with ETL are extract, transform, and load. a, train, is not one of the steps.

Feedback B: Incorrect. The steps associate with ETL are extract, transform, and load. a, train, is not one of the steps.

Feedback C: Incorrect. The steps associate with ETL are extract, transform, and load. a, train, is not one of the steps.

Feedback D: Incorrect. The steps associate with ETL are extract, transform, and load. a, train, is not one of the steps.

Feedback E: Incorrect. The steps associate with ETL are extract, transform, and load. a, train, is not one of the steps.

40. “Garbage in/garbage out” is most relevant to which of the following dimensions associated with big data:

a) variety

b) velocity

c) veracity

d) value

e) volume

Ans: c, veracity

Title: Practice Question 40

Level of Difficulty: Medium

Learning Objective: LO 6

Feedback A: Incorrect. Veracity of data has to do with data quality, correctness, and accuracy.

Feedback B: Incorrect. Veracity of data has to do with data quality, correctness, and accuracy.

Feedback C: Correct! Veracity of data has to do with data quality, correctness, and accuracy.

Feedback D: Incorrect. Veracity of data has to do with data quality, correctness, and accuracy. Feedback E: Incorrect. Veracity of data has to do with data quality, correctness, and accuracy.

True/False

41. True or False: If data are only nominal or ordinal in level, nonparametric statistics must be used.

**Ans: True**

Title: Practice Question 41

Level of Difficulty: Medium

Learning Objective: LO 6

Feedback True: Correct! If data are only nominal or ordinal in level, nonparametric statistics must be used.

Feedback False: Incorrect. If data are only nominal or ordinal in level, nonparametric statistics must be used.

42. Which of the following categories of business analytics attempts to find the best course of action under certain circumstances:

a) descriptive analytics

b) predictive analytics

c) prescriptive analytics

d) graphical analytics

e) none of the above

Ans: c, prescriptive analytics

Title: Practice Question 42

Level of Difficulty: Easy

Learning Objective: LO 7

Feedback A: Incorrect. Prescriptive analytics attempts to find the best course of action under certain circumstances.

Feedback B: Incorrect. Prescriptive analytics attempts to find the best course of action under certain circumstances.

Feedback C: Correct! Prescriptive analytics attempts to find the best course of action under certain circumstances.

Feedback D: Incorrect. Prescriptive analytics attempts to find the best course of action under certain circumstances.

Feedback E: Incorrect. Prescriptive analytics attempts to find the best course of action under certain circumstances.

43. Which of the following categories of business analytics is also sometimes referred to as reporting analytics:

a) descriptive analytics

b) predictive analytics

c) prescriptive analytics

d) graphical analytics

e) none of the above

Ans: a, descriptive analytics

Title: Practice Question 43

Level of Difficulty: Easy

Learning Objective: LO 7

Feedback A: Correct! Descriptive analytics is also sometimes referred to as reporting analytics.

Feedback B: Incorrect. Descriptive analytics is also sometimes referred to as reporting analytics.

Feedback C: Incorrect. Descriptive analytics is also sometimes referred to as reporting

Feedback D: Incorrect. Descriptive analytics is also sometimes referred to as reporting

Feedback E: Incorrect. Descriptive analytics is also sometimes referred to as reporting

44. Which of the following categories of business analytics builds and assesses algorithmic models aimed at making empirical rather than theoretical predictions and is designed to predict future observations:

a) descriptive analytics

b) predictive analytics

c) prescriptive analytics

d) graphical analytics

e) none of the above

Ans: b, predictive analytics

Title: Practice Question 44

Level of Difficulty: Easy

Learning Objective: LO 7

Feedback A: Incorrect. Descriptive analytics, builds and assesses algorithmic models aimed at making empirical rather than theoretical predictions and is designed to predict future observations.

Feedback B: Correct! Descriptive analytics, builds and assesses algorithmic models aimed at making empirical rather than theoretical predictions and is designed to predict future observations.

Feedback C: Incorrect. Descriptive analytics, builds and assesses algorithmic models aimed at making empirical rather than theoretical predictions and is designed to predict future observations.

Feedback D: Incorrect. Descriptive analytics, builds and assesses algorithmic models aimed at making empirical rather than theoretical predictions and is designed to predict future observations.

Feedback E: Incorrect. Descriptive analytics, builds and assesses algorithmic models aimed at making empirical rather than theoretical predictions and is designed to predict future observations.

45. The correct order to perform the key steps associated with Data Mining are as follows:

a) data extraction, data cleansing, database management

b) data extraction, database management, data analysis

c) data transformation, data extraction, data analysis

d) data extraction, data cleansing, data analysis

Ans: d, data extraction, data cleansing, data analysis

Title: Practice Question 45

Level of Difficulty: Medium

Learning Objective: LO 5

Feedback A: Incorrect. The correct order to perform the key steps associated with Data Mining are data extraction, data cleansing, and data analysis.

Feedback B: Incorrect. The correct order to perform the key steps associated with Data Mining are data extraction, data cleansing, and data analysis.

Feedback C: Incorrect. The correct order to perform the key steps associated with Data Mining are data extraction, data cleansing, and data analysis.

Feedback D: Correct! The correct order to perform the key steps associated with Data Mining are data extraction, data cleansing, and data analysis.

46. The ultimate goal of the process of Data Mining is:

a) to make the data accessible and usable to the business analyst

b) to extrapolate from past trends to make future predictions

c) to remove outliers and produce a clean dataset

d) to utilize software to make business decisions

Ans: a, to make the data accessible and usable to the business analyst

Title: Practice Question 46

Level of Difficulty: Easy

Learning Objective: LO 5

Feedback A: Correct! The ultimate goal of the process of Data Mining is to make the data accessible and usable to the business analyst.

Feedback B: Incorrect. The ultimate goal of the process of Data Mining is to make the data accessible and usable to the business analyst.

Feedback C: Incorrect. The ultimate goal of the process of Data Mining is to make the data accessible and usable to the business analyst.

Feedback D: Incorrect. The ultimate goal of the process of Data Mining is to make the data accessible and usable to the business analyst.

47. Which of the following is a true statement regarding big data?

a) The inconsistencies which are often found in Big Data sets refer to the variety of data.

b) The many sources from which Big Data can be pulled from refer to the volume of data.

c) The inaccuracies that can be found in Big Data refer to the veracity of data.

d) The challenges of linking together various sources of data refer to the volume of data.

e) All of the above are true.

Ans: c, The inaccuracies that can be found in Big Data refer to the veracity of data.

Title: Practice Question 47

Level of Difficulty: Medium

Learning Objective: LO 6

Feedback A: Incorrect. The inconsistencies which are often found in Big Data sets refer to the veracity of data.

Feedback B: Incorrect. The many sources from which Big Data can be pulled from refer to the variety of data.

Feedback C: Correct! The inaccuracies that can be found in Big Data refer to the veracity of data.

Feedback D: Incorrect. The challenges of linking together various sources of data refer to the variety of data.

Feedback E: Incorrect. Answer choice c is a correct statement.

48. In a business environment, the following terms are synonymous with Business Analytics:

a) data analytics

b) data science

c) business intelligence

d) big data

e) all of the above

Ans: e, all of the above

Title: Practice Question 48

Level of Difficulty: Easy

Learning Objective: LO 5

Feedback A: Incorrect. All of the above terms are synonymous with Business Analytics.

Feedback B: Incorrect. All of the above terms are synonymous with Business Analytics. Feedback C: Correct! All of the above terms are synonymous with Business Analytics. Feedback D: Incorrect. All of the above terms are synonymous with Business Analytics.

Feedback E: Correct! All of the above terms are synonymous with Business Analytics.

49. Predicting the outcome of an election is an example of which category of business analytics?

a) descriptive analytics

b) predictive analytics

c) prescriptive analytics

d) graphical analytics

e) none of the above

Ans: b, predictive analytics

Title: Practice Question 49

Level of Difficulty: Easy

Learning Objective: LO 7

Feedback A: Incorrect. Predicting the outcome of an election is an example of predictive analytics.

Feedback B: Correct! Predicting the outcome of an election is an example of predictive analytics.

Feedback C: Incorrect. Predicting the outcome of an election is an example of predictive analytics.

Feedback D: Incorrect. Predicting the outcome of an election is an example of predictive analytics.

Feedback E: Incorrect. Predicting the outcome of an election is an example of predictive analytics.

50. Providing a historical view of trends in company sales is an example of which category of business analytics?

a) descriptive analytics

b) predictive analytics

c) prescriptive analytics

d) graphical analytics

e) none of the above

Ans: a, descriptive analytics

Title: Practice Question 50

Level of Difficulty: Easy

Learning Objective: LO 7

Feedback A: Correct! Providing a historical view of trends in company sales is an example of descriptive statistics.

Feedback B: Incorrect. Providing a historical view of trends in company sales is an example of descriptive statistics.

Feedback C: Incorrect. Providing a historical view of trends in company sales is an example of descriptive statistics.

Feedback D: Incorrect. Providing a historical view of trends in company sales is an example of descriptive statistics.

Feedback E: Incorrect. Providing a historical view of trends in company sales is an example of descriptive statistics.

51. Self-driving cars are an example of which category of business analytics?

a) descriptive analytics

b) predictive analytics

c) prescriptive analytics

d) graphical analytics

e) none of the above

Ans: c, prescriptive analytics

Title: Practice Question 51

Level of Difficulty: Easy

Learning Objective: LO 7

Feedback A: Incorrect. Self-driving cars are an example of prescriptive analytics.

Feedback B: Incorrect. Self-driving cars are an example of prescriptive analytics.

Feedback C: Correct! Self-driving cars are an example of prescriptive analytics.

Feedback D: Incorrect. Self-driving cars are an example of prescriptive analytics.

Feedback E: Incorrect. Self-driving cars are an example of prescriptive analytics.

52. Determining whether the members of a group are for or against vaccinations based on a survey given to select members of the group is an example of:

a) descriptive statistics

b) predictive statistics

c) inferential statistics

d) nonparametric statistics

Ans: c, inferential statistics

Title: Practice Question 52

Level of Difficulty: Easy

Learning Objective: LO 1

Feedback A: Incorrect. Determining whether the members of a group are for or against vaccinations based on a survey given to select of members of the group is an example of inferential statistics.

Feedback B: Incorrect. Determining whether the members of a group are for or against vaccinations based on a survey given to select of members of the group is an example of inferential statistics.

Feedback C: Correct! Determining whether the members of a group are for or against vaccinations based on a survey given to select of members of the group is an example of inferential statistics.

Feedback D: Incorrect. Determining whether the members of a group are for or against vaccinations based on a survey given to select of members of the group is an example of inferential statistics.

53. Metric data has the following characteristics:

a) quantitative data

b) higher level data

c) classified as interval or ratio data

d) must use parametric statistics

e) all of the above

**Ans: e, all of the above**

Title: Practice Question 53

Level of Difficulty: Easy

Learning Objective: LO 3

Feedback A: Incorrect. Metric data has all of the above characteristics.

Feedback B: Incorrect. Metric data has all of the above characteristics.

Feedback C: Incorrect. Metric data has all of the above characteristics.

Feedback D: Incorrect. Metric data has all of the above characteristics.

Feedback E: Correct! Metric data has all of the above characteristics.