Student name:\_\_\_\_\_\_\_\_\_\_

**MULTIPLE CHOICE - Choose the one alternative that best completes the statement or answers the question.
1)** Direct observation of phenomena, empirically testable hypotheses, and the ability to rule out rival hypotheses are all essential tenets of the \_\_\_\_\_\_\_\_.

 A) experiential method
 B) scientific method
 C) intuitive process
 D) strategic management process
 E) account planning philosophy

**2)** Business research \_\_\_\_\_\_\_\_ while data analytics \_\_\_\_\_\_\_\_.

 A) collects data to resolve a current dilemma; analyzes previously collected data.
 B) uses larger amounts of data; uses smaller amounts of data
 C) draws data from external and internal sources; draws data from internal data warehouses
 D) is referred to as big data; is referred to as small data

**3)** Business research \_\_\_\_\_\_\_\_ while data analytics \_\_\_\_\_\_\_\_.

 A) analyzes historical data; collects data to resolve a current dilemma
 B) uses smaller amounts of data; uses larger amounts of data
 C) draws data from external and internal sources; draws data from internal data warehouses
 D) is referred to as big data; is referred to as small data

**4)** Business research \_\_\_\_\_\_\_\_ while data analytics \_\_\_\_\_\_\_\_.

 A) analyzes historical data; collects data to resolve a current dilemma
 B) uses larger amounts of data; uses smaller amounts of data
 C) draws data from external and internal sources; draws data from internal data warehouses
 D) is referred to as small data; is referred to as big data

**5)** \_\_\_\_\_\_\_\_ is a form of argument that purports to be conclusive; the conclusion must necessarily follow from the reasons given.

 A) Induction
 B) Deduction
 C) Logic
 D) Philosophy
 E) Exposition

**6)** Which form of argument presents a conclusion based on reasons or proof?

 A) Induction
 B) Deduction
 C) Logic
 D) Philosophy
 E) Exposition

**7)** Which of the following is a requirement for a deduction to be considered correct?

 A) Validity
 B) Reliability
 C) Inference
 D) Empiricism
 E) Conclusiveness

**8)** Consider the following statements: "Inner-city household interviewing is especially difficult and expensive. This survey involves substantial inner-city household interviewing. The interviewing in this survey will be especially difficult and expensive." This is an example of a(n) \_\_\_\_\_\_\_\_.

 A) empirical argument
 B) inductive argument
 C) exposition
 D) deductive argument
 E) hypothesis

**9)** \_\_\_\_\_\_\_\_ is a form of reasoning that draws a conclusion from one or more particular facts or pieces of evidence.

 A) Induction
 B) Deduction
 C) Empiricism
 D) Logic
 E) Association

**10)** Because of the nature of induction, the conclusion can be thought of as \_\_\_\_\_\_\_\_.

 A) fact
 B) one explanation among many
 C) proof
 D) evidence
 E) empirical

**11)** Consider the following example: "Retail sales increases in the 2018 holiday season were below projections. Sales were disappointing because consumers were not confident about economic growth." This is an example of a(n) \_\_\_\_\_\_\_\_.

 A) inductive argument
 B) deductive argument
 C) empirical argument
 D) fact
 E) premise

**12)** \_\_\_\_\_\_\_\_ occurs when we observe a fact and ask, "Why is this?"

 A) Deduction
 B) Induction
 C) Exposition
 D) Empiricism
 E) Curiosity

**13)** \_\_\_\_\_\_\_\_ is the process by which we test whether a hypothesis is capable of explaining a fact.

 A) Deduction
 B) Induction
 C) Exposition
 D) Empiricism
 E) Curiosity

**14)** Which term below refers to a bundle of meanings or characteristics associated with certain concrete, unambiguous events, objects, conditions, or situations?

 A) Variable
 B) Construct
 C) Concept
 D) Theory
 E) Model

**15)** A \_\_\_\_\_\_\_\_ is an image or abstract idea specifically invented for a given research and/or theory-building project.

 A) variable
 B) construct
 C) concept
 D) theory
 E) model

**16)** An automobile is a(n) \_\_\_\_\_\_\_\_ concept, while service quality is a(n) \_\_\_\_\_\_\_\_ concept.

 A) abstract; objective
 B) subjective; objective
 C) intangible; tangible
 D) objective; abstract
 E) factual; perceptual

**17)** Abstract concepts such as personality, need for variety, and materialism are often called \_\_\_\_\_\_\_\_.

 A) variables
 B) constructs
 C) concepts
 D) theories
 E) models

**18)** Concepts are more \_\_\_\_\_\_\_\_, while constructs are more \_\_\_\_\_\_\_\_.

 A) concrete; abstract
 B) abstract; concrete
 C) intangible; tangible
 D) conceptual; factual
 E) intuitive; logical

**19)** Jack observes the history of his neighbor's purchase of new automobiles. His neighbor purchases a new car every year and always seems to have a nicer model than the year before. Jack thinks the dealership must appeal to his neighbor's fascination with new car styles. In this example, interest in new car styles is a \_\_\_\_\_\_\_\_.

 A) construct
 B) fact
 C) concept
 D) theory
 E) model

**20)** Bill often feels insecure about how others view him. To increase his feelings of self-esteem, Bill often buys expensive, luxury items. Self-esteem is an example of a \_\_\_\_\_\_\_\_.

 A) construct
 B) fact
 C) concept
 D) theory
 E) model

**21)** A(n) \_\_\_\_\_\_\_\_ describes the interrelationships between concepts and constructs.

 A) hypothetical construct
 B) hypothesis
 C) conceptual scheme
 D) operational definition
 E) inductive argument

**22)** A chair is defined as a seat, and a seat is defined as an object for sitting, a chair. This is an example of a(n) \_\_\_\_\_\_\_\_.

 A) hypothetical construct
 B) conceptual scheme
 C) operational definition
 D) dictionary definition
 E) mediating variable

**23)** To be categorized as a customer, an individual must have a history of shopping at the establishment at least twice prior to the start of the study with expenditures of more than $10. This is an example of a(n) \_\_\_\_\_\_\_\_.

 A) hypothetical construct
 B) conceptual scheme
 C) operational definition
 D) dictionary definition
 E) mediating variable

**24)** A(n) \_\_\_\_\_\_\_\_ defines a variable in terms of specific measurement and testing criteria.

 A) hypothetical construct
 B) operational definition
 C) dictionary definition
 D) conceptual scheme
 E) moderating variable

**25)** Which term below refers to an event, act, characteristic, trait, or attribute that can be measured and to which we assign categorical values?

 A) Construct
 B) Concept
 C) Variable
 D) Schema
 E) Model

**26)** Which of the following cannot be thought of as variables?

 A) Events
 B) Acts
 C) Characteristics
 D) People
 E) All of the above can be thought of as variables.

**27)** Which of the following is another term for independent variable?

 A) Discrete
 B) Criterion
 C) Moderator
 D) Predictor
 E) Construct

**28)** Which of the following is another term for dependent variable?

 A) Discrete
 B) Criterion
 C) Mediator
 D) Predictor
 E) Construct

**29)** Rachel is interested in learning the effect of using a celebrity endorsement on sales. The presence or absence of a celebrity endorsement is the \_\_\_\_\_\_\_\_ variable.

 A) independent
 B) dependent
 C) mediating
 D) criterion
 E) continuous

**30)** Which variable listed below is the variable manipulated by the researcher, thereby causing an effect on another variable?

 A) Criterion
 B) Mediator
 C) Dependent
 D) Predictor
 E) Moderator

**31)** Which variable listed below is the variable measured, predicted, or otherwise monitored and expected to be affected by manipulation of another variable?

 A) Dependent
 B) Moderator
 C) Independent
 D) Predictor
 E) Extraneous

**32)** Variables that are included because they are believed to have a significant contributory or contingent effect on the independent variable–dependent variable relationship are called \_\_\_\_\_\_\_\_ variables.

 A) criterion
 B) predictor
 C) mediator
 D) moderating
 E) extraneous

**33)** A variable that is assumed or excluded from a research study is a(n) \_\_\_\_\_\_\_\_ variable.

 A) criterion
 B) predictor
 C) mediator
 D) moderating
 E) extraneous

**34)** In the Southeast, the potato chip market share held by the Lays brand is 46 percent. This is an example of a(n) \_\_\_\_\_\_\_\_.

 A) research question
 B) descriptive hypothesis
 C) relational hypothesis
 D) explanatory hypothesis
 E) correlational hypothesis

**35)** Potato chip sales vary directly with the level of television viewing. This is an example of a \_\_\_\_\_\_\_\_.

 A) research question
 B) descriptive hypothesis
 C) correlational hypothesis
 D) causal hypothesis
 E) dichotomous hypothesis

**36)** An increase in hours of television viewing leads to increases in the sales of snack foods. This is an example of a \_\_\_\_\_\_\_\_.

 A) research question
 B) descriptive hypothesis
 C) correlational hypothesis
 D) causal hypothesis
 E) dichotomous hypothesis

**37)** Which of the following is an explanatory hypothesis?

 A) Young women purchase fewer meats than women who are 35 years of age or older.
 B) Sales of vegetarian foods vary by season.
 C) An increase in family income leads to an increase in the percentage of income spent on housing.
 D) Real estate investment trusts (REITs) experienced a record level of profitability in 2004.
 E) People in the South tend to rate the President more favorably than do people in the North.

**38)** Which of the following is a correlational hypothesis?

 A) A decrease in the value of the U.S. dollar relative to other currencies leads to an increase in exports.
 B) Education on the process of preparing meat for consumption leads to a decrease in the consumption of hamburgers.
 C) An increase in family income leads to an increase in the percentage of income spent on housing.
 D) Low interest rates resulted in a record year for real estate investment trusts (REITs) as individuals invested in real estate rather than other forms of investment.
 E) People in the South tend to rate the President more favorably than do people in the North.

**39)** Which of the following is not one of the conditions necessary for a hypothesis to be considered strong?

 A) Adequate for its purpose
 B) Addresses the presence of extraneous variables
 C) Testable
 D) Better than rival hypotheses
 E) All of these are necessary conditions.

**40)** A \_\_\_\_\_\_\_\_ is a set of systematically interrelated concepts, definitions, and propositions that are advanced to explain or predict phenomena.

 A) conceptual scheme
 B) hypothesis
 C) theory
 D) diagram
 E) factual schema

**41)** Which term listed below refers to a representation of a system constructed to study some aspect of that system or the system as a whole?

 A) Conceptual scheme
 B) Hypothesis
 C) Theory
 D) Diagram
 E) Model

**42)** The role of a model is to \_\_\_\_\_\_\_\_ while a theory's role is to \_\_\_\_\_\_\_\_.

 A) represent; explain
 B) explain; represent
 C) propose; prove
 D) describe; predict
 E) examine; experiment

**43)** Which type of variable is ignored (not measured) as it is believed its effect on the independent variable is randomized?

 A) Confounding
 B) Control
 C) Dependent
 D) Independent

**44)** Which of the following is *not* a condition of sound reasoning?

 A) Defining the management dilemma
 B) Identifying correct premises
 C) Testing connections between facts and assumptions
 D) Making claims based on adequate evidence
 E) All of the above are conditions for sound reasoning.

**45)** Data blending requires

 A) drawing data from separate data files to create a new data file that can be analyzed.
 B) removing identical data from multiple data files so the data exists in only one data file.
 C) analyzing separate data files and identifying conclusions that exist in all those files analyzed.
 D) merging all data files into one massive data file that can be analyzed.
 E) None of the above, as they do not describe data blending.

**46)** A conceptual scheme

 A) identifies all concepts/constructs of interest to a research question.
 B) identifies the hypothesized relationships of all concepts/constructs of interest to a research question.
 C) provides a spatial relationship of all concepts/constructs of interest to a research question.
 D) identifies key concepts/constructs that must be measured to answer a research question.
 E) Does none of the above.

**47)** CEOs believe the next 2-3 years will be more transformation than the last 50 because:

 A) growth will likely come from new partnerships or mergers, rather than existing businesses
 B) large percent of employees will have to be retrained
 C) industries are in the mist of disruption
 D) investments in AI will pay off
 E) all of the above.

**48)** CEOs believe the next 2-3 years will be more transformation than the last 50 because of all EXCEPT which of the following:

 A) growth will likely come from new partnerships or mergers, rather than existing businesses
 B) large percent of employees will have to be retrained
 C) industries are in the mist of disruption
 D) cyber security will be guaranteed
 E) none of the above.

**49)** A strategic inflection point is

 A) evidence that a business’s fundamentals are about to change
 B) evidence that existing business models are working
 C) do not demand a response by the business
 D) come from a business’s existing competitors
 E) none of the above.

**50)** If a business can identify early warnings of strategic inflection points, it can

 A) change its business practices to remain competitive
 B) avoid irrelevance in its own industry
 C) challenge taken-for-granted assumptions on which its business is based
 D) create a disruption in its own or a different industry
 E) all of the above.

**51)** When a business manager makes a decision about a management dilemma, he or she

 A) makes a judgment after careful consideration
 B) may rely on past experience, rather than gathering new data
 C) could delve into past data using sophisticated data analytics to gather new insights
 D) takes action appropriate to the decision.
 E) all of the above.

**52)** If a business dashboard revealed rising costs in an operating business unit, this would be a possible

 A) strategic inflection point.
 B) management dilemma.
 C) data silo.
 D) data warehouse.
 E) None of the above is correct.

**53)** Which of the following is *data* as opposed to *information*?

 A) raw, unprocessed facts
 B) a calculation of employee turnover for the last 12 months based on employee length of service
 C) the defection rate of a machine based on percent of defective products produced by a machine in the last 30 days
 D) the number of employees who completed privacy compliance training during the calendar year
 E) A and D above

**54)** Which of the following is an *insight* as opposed to *information*?

 A) the number of customer complaints on social media has dropped 50% in the last year.
 B) customer retention is up 20 percent in the last 90 days.
 C) higher employee turnover is likely caused by new rule requiring employees to arrive 20 minutes before their paid shift starts.
 D) profits are up 8 percent over the same period last year
 E) None of the above are insights

**55)** Which of the following is NOT a problem caused by data silos?

 A) incompatible data that can’t be easily blended
 B) data duplication
 C) missed opportunities
 D) easier access to data across the organization
 E) slower decision making

**56)** The data-driven organization is the gold-standard for business. In a data-driven organization \_\_\_\_\_\_\_\_.

 A) data silos are common
 B) decision makers have access to all business data
 C) only numerical data is available, not text, video, audio, or pictorial data and information
 D) consistency of data availability is not important
 E) None of the above is TRUE

**57)** Which term below refers to an electronic storehouse where vast arrays of data and information are organized to facilitate access and analysis by decision makers?

 A) Data silo
 B) Business dashboard
 C) Data blending
 D) Strategic Inflection Point
 E) Data warehouse

**ESSAY. Write your answer in the space provided or on a separate sheet of paper.
58)** Explain the essential tenets of the scientific method and why this method is important for business research.

**59)** Explain the meaning of deduction and induction. Provide an argument that exemplifies each form.

**60)** Recently, several states have passed no texting while driving laws, believing that texting is a major influence in the increase in traffic accidents, especially among younger drivers. Explain the meaning of an operational definition and develop a good operational definition for texting while driving. Identify the omissions that would weaken your definition.

**61)** Recently, several studies have sought to measure the extent of binge drinking among college students. Explain the meaning of an operational definition and develop a good operational definition for binge drinking.

**62)** Metro University has set a goal to increase the percentage of alumni who donate to the university and to increase the average amount given by those who have donated in the past. Metro University hopes that holding special events at homecoming night designed specifically for alums will result in an increase in donations. Consequently, it is planning a special Alumni Bash for homecoming night, and invitations have been sent to students who graduated between 1975 and 2000. Identify the dependent and independent variables in the example. State a hypothesis using the information provided.

**Answer Key**Test name: Schindler 1

1) B

2) A

3) B

4) D

5) B

6) B

7) A

8) D

9) A

10) B

11) A

12) B

13) A

14) C

15) B

16) D

17) B

18) A

19) A

20) A

21) C

22) D

23) C

24) B

25) C

26) D

27) D

28) B

29) A

30) D

31) A

32) D

33) E

34) B

35) C

36) D

37) C

38) E

39) B

40) C

41) E

42) A

43) B

44) E

45) A

46) B

47) E

48) D

49) A

50) E

51) E

52) B

53) E

54) C

55) D

56) B

57) E

58) The scientific method is an approach to problem-solving that is based on (1) direct observation of phenomena, (2) clearly defined variables, (3) empirically tested hypotheses, (4) elimination of rival hypotheses, (5) statistical justification of conclusions, and (6) a self-correcting process. It is important as a basis for business research because it ensures the validity of the conclusions we state based on the empirical data and that other conclusions have been eliminated through the process.

59) Deduction is a form of argument that suggests a conclusion from the reasons given. The reasons imply the conclusion. A deduction is valid if it is impossible for the conclusion to be false if the premises are true. Consider the following example.
 • Nordstrom employees receive a discount on all clothing purchases made at any Nordstrom store.
 • Sarah is an employee at the Nordstrom store in Thousand Oaks, California.
 • Sarah will receive a discount at any Nordstrom store.

 Induction is different from deduction in that it draws a conclusion from one or more facts. However, other conclusions could be drawn from the facts. For example, Burger King was featured on an episode of the Apprentice. Sales figures increased in the two weeks immediately following the episode. The conclusion is that the brand placement resulted in the increase in sales. While this conclusion is possible, other explanations have not been eliminated.

60) An operational definition is one that defines a variable in terms of specific measurement and testing criteria. Texting while driving can mean different things to different people. The use of an operational definition will ensure that the measurement is consistent. An example of an operational definition of texting while driving is "any use of a smart phone to read a received text or send a text while behind the wheel of a car that is turned on, regardless of whether that car is moving." A poor definition of texting while driving would fail to define driving and whether the person texting is sending or receiving/reading a text.

61) An operational definition is one that defines a variable in terms of specific measurement and testing criteria. Binge drinking can mean different things to different people. The use of an operational definition will ensure that the measurement is consistent. An example of an operational definition of binge drinking is the consumption of four or more 12-ounce beers in a 2-hour period or the consumption of three or more 4-ounce glasses of wine in a 2-hour period. A poor definition of binge drinking would be the consumption of four drinks in an evening. This definition is poor because the amount or type of alcohol in four drinks could be inconsistent from person to person as is the amount of time covered in an evening.

62) The dependent variable is alumni donations (percentage change in alumni who donate and dollar change in the amount given). The independent variable is the use of special events for alumni. A possible hypothesis is: alumni who attend the special events are more likely to donate and donate at a higher level than those who do not attend the events.