**Chapter 1: Cognitive Psychology: History, Methods, and Paradigms**

# Test Bank

## Multiple Choice

1. Which of the following is NOT an example of a cognitive process?

a. attention

b. perception

c. reflex

d. problem solving

Ans: c

Learning Objective: 1-1: Identify examples of cognitive activity that occur in everyday life

Cognitive Domain: Knowledge

Answer Location: Setting the Stage

Difficulty Level: Easy

2. That guest star on your favorite television show looks familiar. You are sure that you have seen him before, but you are unable to think of his name. The fact that you know you have seen the face before, however, illustrates the cognitive process of \_\_\_\_\_\_.

a. perception

b. attention

c. recognition

d. problem solving

Ans: c

Learning Objective: 1-1: Identify examples of cognitive activity that occur in everyday life

Cognitive Domain: Comprehension

Answer Location: Setting the Stage

Difficulty Level: Medium

3. The earliest theories about cognitive abilities date back to \_\_\_\_\_\_.

a. Aristotle and Plato

b. John Locke

c. Sigmund Freud

d. Williams James

Ans: a

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Influences on the Study of Cognition

Difficulty Level: Easy

4. All of the following statements are central to empiricism EXCEPT \_\_\_\_\_\_.

a. Knowledge comes from an individual’s experience.

b. Learning takes place through the mental association of two ideas.

c. Environment plays a powerful role in determining intellectual ability.

d. Important structures of the human mind are present at birth.

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Influences on the Study of Cognition

Difficulty Level: Easy

5. The philosopher John Locke was a strong believer in \_\_\_\_\_\_, which rests on the assumption that knowledge comes from an individual’s own experience.

a. nativism

b. empiricism

c. behaviorism

d. structuralism

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology Influences on the Study of Cognition

Cognitive Domain: Knowledge

Difficulty Level: Easy

6. The belief that most of our abilities and tendencies are with us from birth is known as \_\_\_\_\_\_.

a. nativism

b. empiricism

c. associationism

d. behaviorism

Ans: a

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Influences on the Study of Cognition

Difficulty Level: Easy

7. \_\_\_\_\_\_ emphasizes the role of constitutional factors over the role of learning in the acquisition of abilities and tendencies.

a. Behaviorism

b. Empiricism

c. Nativism

d. Functionalism

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Influences on the Study of Cognition

Difficulty Level: Medium

8. Historians date the founding of scientific psychology to the 1879 laboratory of \_\_\_\_\_\_.

a. Williams James

b. Wilhelm Wundt

c. Edward Titchener

d. Edward Thorndike

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Structuralism

Difficulty Level: Easy

9. A traditional “school” within psychology that had as its goal the identification of the simplest possible units of the mind is \_\_\_\_\_\_.

a. functionalism

b. structuralism

c. behaviorism

d. the Gestalt school

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Structuralism

Difficulty Level: Easy

10. Which of the following is NOT one of the four properties that Wundt proposed as the basis for any conscious thought or idea?

a. mode

b. quantity

c. intensity

d. duration

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Structuralism

Difficulty Level: Medium

11. Wilhelm Wundt and his students used a technique known as \_\_\_\_\_\_ to study mental states.

a. behaviorism

b. intensity measurement

c. componentialism

d. introspection

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Structuralism

Difficulty Level: Easy

12. A traditional “school” within psychology that emphasized the adaptation of the organism to its environment and focused on questions such as what role a particular system served for an organism is called \_\_\_\_\_\_.

a. functionalism

b. structuralism

c. behaviorism

d. connectionism

Ans: a

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Functionalism

Difficulty Level: Medium

13. The school of psychology known as functionalism, which emphasized the purposes of the mind’s operations, was founded by \_\_\_\_\_\_.

a. Wilhelm Wundt

b. John Watson

c. William James

d. Edward Titchener

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Functionalism

Difficulty Level: Easy

14. One difference between functionalism and structuralism was that \_\_\_\_\_\_.

a. functionalists emphasized laboratory experimentation more than structuralists

b. functionalists wanted to study whole organisms in real-life tasks

c. structuralists were more interested in habit formation

d. functionalists wanted to study only observable behaviors

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Analysis

Answer Location: Influences on the Study of Cognition

Difficulty Level: Hard

15. Which “school” of psychology emphasized objectivity of research methods and measurement?

a. connectionism

b. functionalism

c. structuralism

d. behaviorism

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Behaviorism

Difficulty Level: Medium

16. Which of the following is true regarding Watson’s behaviorism?

a. It is sometimes regarded as a branch of structuralism.

b. It relies heavily on the technique of introspection.

c. It rejected references to unobservable mental states such as consciousness.

d. It had a large positive impact on the development of cognitive psychology.

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Behaviorism

Difficulty Level: Medium

17. Skinner objected to hypothesizing the existence of \_\_\_\_\_\_, which he took to be internal copies of external stimuli.

a. reinforcers

b. instincts

c. motivators

d. mental representations

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Behaviorism

Difficulty Level: Medium

18. Even rats have goals and expectations and can form mental representations of mazes, according to \_\_\_\_\_\_.

a. Watson

b. Skinner

c. Tolman

d. Galton

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Behaviorism

Difficulty Level: Easy

19. Which of the following is a central tenet of the Gestalt school of psychology?

a. The goal of psychology is to break down and identify the simplest mental elements that make up conscious experience.

b. The most important function of the mind is to allow the individual to adapt to his or her environment.

c. Psychological phenomena cannot be reduced to simple elements, but must be studied in their entirety.

d. The intellectual structures of a child differ qualitatively from those of a mature adult.

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Gestalt Psychology

Difficulty Level: Medium

20. The belief that psychological phenomena cannot be reduced to simple elements but must be studied in their entirety is central to the school known as \_\_\_\_\_\_.

a. structuralism

b. Gestalt psychology

c. behaviorism

d. connectionism

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Gestalt Psychology

Difficulty Level: Medium

21. The invention of which of the following might be most closely associated with the cognitive revolution?

a. lightbulb

b. telephone

c. computer

d. satellite

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Medium

22. Gestalt psychologists would likely say that members of other cognitive schools of thinking \_\_\_\_\_\_.

a. offered incomplete accounts of psychological processes

b. ignored individuals’ personal cognitive experience

c. should focus more on how the mind imposes order on the outside world

d. all of these

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Gestalt Psychology

Difficulty Level: Medium

23. Which of the following is NOT associated with the work of Francis Galton?

a. the inheritability of intellectual abilities

b. the development of cognitive ability from childhood through old age

c. the measurement of individual differences

d. the study of mental imagery

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Study of Individual Differences

Difficulty Level: Medium

24. Which of the following was NOT instrumental in producing the “cognitive revolution”?

a. attempts to create an artificial intelligence

b. Noam Chomsky’s work in the field of linguistics

c. the development of the computer

d. B. F. Skinner’s development of the Skinner box

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Medium

25. The \_\_\_\_\_\_ was a rejection of the prevailing assumption that mental events were beyond the realm of scientific study.

a. cognitive revolution

b. behaviorist rebellion

c. human factors movement

d. psychodynamic theory

Ans: a

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

26. Noam Chomsky believed all of the following EXCEPT \_\_\_\_\_\_.

a. Children learn grammar through the reinforcement and punishment of their utterances by parents and other adults.

b. An implicit system of rules underlies our language abilities.

c. Generative rules allow speakers to construct all “legal” grammatical sentences in their language.

d. People routinely process enormously complex information.

Ans: a

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

27. Noam Chomsky revolutionized the field of \_\_\_\_\_\_ and showed how behaviorism could not adequately explain language.

a. neuroscience

b. computer science

c. human factors

d. linguistics

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

28. The field of \_\_\_\_\_\_ developed during World War II to study such practical questions as how to design aircraft that were safer for human beings to operate.

a. psycholinguistics

b. human factors engineering

c. Gestalt psychology

d. structural modeling

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

29. The term “limited capacity processors” suggests that \_\_\_\_\_\_.

a. computers have limited memory storage

b. human beings can only do so many things at once

c. neurons can only fire at a certain rate

d. processing in the brain occurs in parallel

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Medium

30. The term \_\_\_\_\_\_ refers to the claim that neural structures supporting a particular cognitive process reside in a particular brain region.

a. limited capacity processors

b. synaptic transmission

c. brain plasticity

d. localization of function

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

31. Gardner believed that cognitive theories must focus on events “between input and output”—in other words, that cognition must be analyzed at the level of \_\_\_\_\_\_.

a. behavior

b. representation

c. neurons

d. culture

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Medium

32. The interdisciplinary field of cognitive science brings together all of the following fields EXCEPT \_\_\_\_\_\_.

a. philosophy

b. linguistics

c. computer science

d. psychoanalysis

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

33. Ecological validity refers to the extent to which \_\_\_\_\_\_.

a. one can study things that occur in the real world

b. one can isolate the causes of behaviors or reactions

c. one can explain the phenomena that are observed

d. one can predict new phenomena based on current results

Ans: a

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology Cognitive Domain: Knowledge

Answer Location: Naturalistic Observation

Difficulty Level: Easy

34. The term \_\_\_\_\_\_ refers to the relevance of the research to the “real world.”

a. internal validity

b. evolutionary validity

c. ecological validity

d. natural validity

Ans: c

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Naturalistic Observation

Difficulty Level: Easy

35. The major disadvantage of naturalistic observation is the lack of \_\_\_\_\_\_.

a. experimental control

b. ecological validity

c. training given to the participants

d. findings to analyze

Ans: a

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Naturalistic Observation

Difficulty Level: Medium

36. Clinical interviews are to introspection as \_\_\_\_\_\_ are to \_\_\_\_\_\_.

a. naturalistic observations; experiments

b. naturalistic observations; quasi-experiments

c. controlled observations; naturalistic observations

d. controlled observations; experiments

Ans: c

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Controlled Observation and Clinical Interviews

Difficulty Level: Medium

37. \_\_\_\_\_\_ allow(s) the researcher to observe behavior unobtrusively, but still retain some control over the setting in which observations are conducted or the conditions that participants will experience.

a. Controlled observation

b. Brain imaging

c. Laboratory experiments

d. Clinical interviews

Ans: a

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Controlled Observation and Clinical Interviews

Difficulty Level: Easy

38. Which of the following has the highest ecological validity?

a. experiment

b. introspection

c. naturalistic observation

d. clinical interview

Ans: c

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Research Methods in Cognitive Psychology

Difficulty Level: Medium

39. Different people participate in different experimental conditions in a(n) \_\_\_\_\_\_.

a. introspective procedure

b. clinical interview

c. controlled observation

d. between-subjects design

Ans: d

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Experiments and Quasi-Experiments

Difficulty Level: Easy

40. When the same experimental subjects participate in two different experimental conditions, the design is called a \_\_\_\_\_\_ design.

a. between-subjects

b. case study

c. within-subjects

d. clinical interview

Ans: c

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Experiments and Quasi-Experiments

Difficulty Level: Easy

41. Which of the following allows us to support claims about cause-and-effect relationships?

a. experiment

b. naturalistic observation

c. controlled observation

d. case study

Ans: a

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Experiments and Quasi-Experiments

Difficulty Level: Medium

42. Since the 1970s, various techniques of \_\_\_\_\_\_ have allowed us to construct pictures of the anatomy and functioning of intact brains.

a. brain imaging

b. neurosurgery

c. brain lesioning

d. single-cell recording

Ans: a

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Investigations of Neural Underpinnings

Difficulty Level: Easy

43. The field most concerned with ensuring that we succesfully interact with and operate technology is \_\_\_\_\_\_.

a. connectionist modeling

b. human factors engineering

c. evolutionary survival

d. brain imaging

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Medium

44. A body of knowledge structured according to what its proponents consider important, which guides research topics and research methods, is called a \_\_\_\_\_\_.

a. paradigm

b. hypothesis

c. methodology

d. metaphor

Ans: a

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

45. A paradigm in psychology answers all of the following questions EXCEPT \_\_\_\_\_\_.

a. what assumptions may be made in studying a phenomenon

b. what types of training and degrees are needed by researchers

c. what sorts of questions should be studied

d. what sorts of analogies and metaphors are appropriate

Ans: b

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Paradigms of Cognitive Psychology

Difficulty Level: Easy

46. All of the following are basic assumptions of the traditional information processing approach to cognition EXCEPT \_\_\_\_\_\_.

a. serial processing

b. people are general-purpose symbol manipulators

c. the function of consciousness

d. information is processed in stages

Ans: c

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Information-Processing Approach

Difficulty Level: Medium

47. Which of the following is a basic assumption of the connectionist approach?

a. multiple stores and a central processor

b. multiple stores where information is kept throughout processing

c. networks of connections among simple processing units

d. a central processor that directs the flow of information

Ans: c

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Connectionist Approach

Difficulty Level: Medium

48. Connectionist models share the assumption that \_\_\_\_\_\_.

a. processing occurs serially

b. knowledge is stored in various storehouses

c. a central processor directs the flow of information

d. processing occurs in parallel

Ans: d

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Connectionist Approach

Difficulty Level: Medium

49. Which approach is most consistent with the way the brain functions?

a. information processing

b. evolutionary

c. ecological

d. connectionist

Ans: d

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Connectionist Approach

Difficulty Level: Medium

50. Processes that occur simultaneously rather than one at a time are known as \_\_\_\_\_\_ processes.

a. serial

b. parallel

c. central

d. sequential

Ans: b

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The Connectionist Approach

Difficulty Level: Easy

51. The idea of natural selection is central to which paradigm?

a. information processing

b. connectionist

c. evolutionary

d. ecological

Ans: c

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The Evolutionary Approach

Difficulty Level: Easy

52. The Adult Math Project is rooted in which paradigm?

a. information processing

b. evolutionary

c. ecological

d. connectionist

Ans: c

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The Ecological Approach and Embodied Cognition

Difficulty Level: Easy

53. The ecological approach overlaps most with the \_\_\_\_\_\_ approach.

a. information processing

b. evolutionary

c. experimental

d. connectionist

Ans: b

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Ecological Approach and Embodied Cognition

Difficulty Level: Medium

54. Which of the following is NOT a characteristic of the ecological approach?

a. It has its roots in psychology and anthropology.

b. It emphasizes larger cultural contexts for cognition.

c. It emphasizes realistic, “everyday” contexts.

d. It emphasizes carefully controlled, laboratory experimentation.

Ans: d

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Ecological Approach and Embodied Cognition

Difficulty Level: Medium

56. Which of the following paradigms might suggest that the most important part of cognition is how we interact with the environment and objects in it even without mental representations?

a. evolutionary approach

b. connectionist approach

c. embodied cognition

d. cognitive neuroscience

Ans: c

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Ecological Approach and Embodied Cognition

Difficulty Level: Medium

57. Which of the following independent variables would be indicative of a quasi-experiment?

a. dosage levels of a drug

b. gender of a participant

c. time given to complete a task

d. types of stimuli presented

Ans: b

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Application

Answer Location: Experiments and Quasi-Experiments

Difficulty Level: Medium

58. The notion that technology should be built with the cognitive capabilities of humans in mind is referred to as the \_\_\_\_\_\_.

a. motor-mind problem

b. system-cognition interface

c. constrained-systems model

d. person-machine system

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Easy

59. Of the following, which research design might be considered to be the best compromise between ecological validity and experimental control?

a. the study of human behavior following a once-in-a-generation natural disaster

b. a study to determine the optimal dosage of a new memory-enhancing drug

c. a study to determine the efficacy of programs to improve workplace efficiency

d. a study to catalogue the range of behaviors of non-human primates in zoos

Ans: c

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Research Methods in Cognitive Psychology

Difficulty Level: Medium

60. Which of the following paradigms most closely compares the human mind to a computer?

a. information processing approach

b. connectionist approach

c. ecological approach

d. evolutionary approach

Ans: a

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Information-Processing Approach

Difficulty Level: Medium

61. A Gestalt psychologist would most likely endorse which of the following ideas?

a. We can only study the behaviors that we can observe.

b. We sometimes create shapes out of particular star constellations.

c. The most important thing is understanding the purpose of the mind.

d. Constructing our mental representations requires many small, simple elements.

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Gestalt Psychology

Difficulty Level: Medium

62. Williams James is to \_\_\_\_\_\_ as Wilhelm Wundt is to \_\_\_\_\_\_.

a. connectionism; empiricism

b. Gestalts; nativism

c. representationist; behaviorist

d. functionalism; structuralism

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Influences on the Study of Cognition

Difficulty Level: Medium

63. In our everyday lives, our general lived experience is that our cognitive processes are \_\_\_\_\_\_.

a. slow and difficult

b. slow and complicated

c. quick and inaccurate

d. quick and effortless

Ans: d

Learning Objective: 1-1: Identify examples of cognitive activity that occur in everyday life

Cognitive Domain: Application

Answer Location: Setting the Stage

Difficulty Level: Medium

64. Which of the following would NOT be considered a cognitive process?

a. problem-solving

b. personality

c. memory

d. pattern recognition

Ans: b

Learning Objective: 1-1: Identify examples of cognitive activity that occur in everyday life

Cognitive Domain: Comprehension

Answer Location: Setting the Stage

Difficulty Level: Medium

65. Of the following, which would be considered the most difficult aspect of research in cognitive psychology?

a. Creating tasks that measure everyday cognition in the laboratory.

b. There is no way to accurately study the human mind.

c. There are too many complex cognitive processes to study.

d. We can only accurately study the brains of animals.

Ans: a

Learning Objective: 1-1: Identify examples of cognitive activity that occur in everyday life

Cognitive Domain: Comprehension

Answer Location: Setting the Stage

Difficulty Level: Medium

66. Which of the following might be a valid criticism of Wundt and Tichener’s introspection technique?

a. There were no interesting questions to study with introspection.

b. Individuals do not have the ability to self-reflect on their own mind.

c. It is difficult to verify someone’s reported introspective experience.

d. People cannot distinguish the experience of one cognitive ability from another.

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Structuralism

Difficulty Level: Medium

67. Psychologists from which of the following historical schools would be most likely to reject the idea that we have mental representations?

a. structuralism

b. functionalism

c. Gestalt psychology

d. behaviorism

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Behaviorism

Difficulty Level: Medium

68. Which paradigm involves mental representation through the activation of nodes?

a. connectionist

b. evolutionary

c. ecological

d. information processing

Ans: a

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The Connectionist Approach

Difficulty Level: Easy

69. As a cognitive researcher, you determine that, just like us, primates quickly recognize certain classes of threats in their environment and can act quickly and accordingly. This kind of finding would be most in line with which cognitive paradigm?

a. information-processing

b. connectionist

c. ecological

d. evolutionary

Ans: d

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Application

Answer Location: The Evolutionary Approach

Difficulty Level: Medium

70. You have one friend who claims that he absolutely can never remember anyone’s facial features. You decide to work closely with them in order to learn as much as you can about how we view and remember faces. This would be what kind of research design?

a. quasi-experiment

b. clinical interview

c. experiment

d. naturalistic observation

Ans: b

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Application

Answer Location: Controlled Observation and Clinical Interviews

Difficulty Level: Medium

71. A researcher observes that children who grow up with access to certain kinds of toys like building blocks and video games have higher than average spatial ability scores. This would be an example of \_\_\_\_\_\_.

a. behaviorism

b. introspection

c. Gestalt principles

d. individual differences

Ans: d

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Application

Answer Location: The Study of Individual Differences

Difficulty Level: Medium

72. Prior to the creation of modern brain imaging techniques, what was the main way to study the human brain?

a. photographs

b. autopsy

c. intentional trauma

d. through the use of chemicals

Ans: b

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Investigations of Neural Underpinnings

Difficulty Level: Easy

73. Which of the following was a benefit of introspection?

a. It only focused on cognitive processes that were accessible.

b. It used only the most highly trained observers to come to its conclusions.

c. It allowed researchers to begin understanding how some cognitive processes might work.

d. It was unable to determine the real-world function of cognitive processes.

Ans: c

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Introspection

Difficulty Level: Medium

74. Of the paradigms of cognitive psychology, which would be least likely to argue that mental representations and processes are only internally generated?

a. information-processing approach

b. connectionist approach

c. evolutionary approach

d. ecological approach

Ans: d

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Analysis

Answer Location: Paradigms of Cognitive Psychology

Difficulty Level: Hard

75. Experiments are to \_\_\_\_\_\_ as naturalistic observations are to \_\_\_\_\_\_.

a. experimental control; ecological validity

b. ecological validity; experimental control

c. uninformative; informative

d. informative; uninformative

Ans: a

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Research Methods in Cognitive Psychology

Difficulty Level: Medium

## True/False

1. Theories about cognition date back to the days of Aristotle and Plato.

Ans: T

Learning Objective: 1-1: Identify examples of cognitive activity that occur in everyday life.

Cognitive Domain: Knowledge

Answer Location: Influences on the Study of Cognition

Difficulty Level: Easy

2. Sam is very outgoing, while his friend Lawrence is very quiet. An empiricist would say that the difference in their personalities is probably due to biologically endowed personality traits.

Ans: F

Learning Objective: 1-1: Identify examples of cognitive activity that occur in everyday life.

Cognitive Domain: Application

Answer Location: Influences on the Study of Cognition

Difficulty Level: Medium

3. William James modeled the functionalist school of psychology on the science of chemistry.

Ans: F

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Functionalism

Difficulty Level: Easy

4. Early research on cognition made its greatest strides during the behaviorist period.

Ans: F

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The “Cognitive Revolution” and the Birth of Cognitive Science

Difficulty Level: Medium

5. B. F. Skinner believed that mental representations were simply internal copies of external stimuli.

Ans: T

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Behaviorism

Difficulty Level: Medium

6. If you want to learn about cause and effect, you must use the experimental method.

Ans: T

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Experiments and Quasi-Experiments

Difficulty Level: Easy

7. The biggest advantage of the experimental method is its high ecological validity.

Ans: F

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Comprehension

Answer Location: Naturalistic Observation

Difficulty Level: Medium

8. When participants in an experiment all receive multiple different experimental conditions, it is called a between-subjects design.

Ans: F

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Experiments and Quasi-Experiments

Difficulty Level: Easy

9. All connectionist models share the assumption that there must be a central processor that directs the flow of information.

Ans: F

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Knowledge

Answer Location: The Connectionist Approach

Difficulty Level: Easy

10. Evolutionary psychologists believe that we can only understand how a cognitive system works if we understand how evolutionary forces shaped the system in certain directions.

Ans: T

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Comprehension

Answer Location: The Evolutionary Approach

Difficulty Level: Medium

## Essay

1. Contrast the goals of structuralism, functionalism, and behaviorism.

Ans: A good answer should include the following points: (1) Structuralism was concerned with cataloging the component parts of conscious experience. (2) Functionalism was concerned with understanding the whole of consciousness, and particularly the function of cognitive processes in adapting to our environments. (3) Behaviorism was only concerned with connecting observable stimuli and observable behaviors, without reference to intervening, invisible cognitive processes

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Analysis

Answer Location: Influences on the Study of Cognition

Difficulty Level: Hard

2. Describe how a cognitive psychologist would use the experimental method and the naturalistic observation method to study the effect of a perpetrator’s hat on witnesses’ ability to accurately identify the perpetrator in a lineup.

Ans: A good answer should include the following points: (1) An experiment would involve manipulating the independent variable (the presence of a hat on a perpetrator) while holding other factors constant. (2) An experiment would involve tight control over all circumstances of the “crime” and the administration of the lineup—for example, through using videotapes of the crime and randomly assigning participants to conditions. (3) The observational method would involve recording data from actual crimes in which perpetrators did or did not wear hats. (4) The observational method would be higher in ecological validity, but be lower in experimental control.

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Application

Answer Location: Research Methods in Cognitive Psychology

Difficulty Level: Medium

3. Compare the assumptions of the information processing paradigm and the connectionist paradigm. What metaphors are appropriate for each?

Ans: A good answer should include the following points: (1) The information processing approach assumes that information flows through a sequence of stages as it is processed. (2) The connectionist paradigm assumes that processing occurs in parallel, as different processing units are activated simultaneously. (3) The computer is a good metaphor for the information processing approach. (4) The human brain is a good metaphor for the connectionist approach.

Learning Objective: 1-4: Differentiate among the four paradigms of cognitive psychology

Cognitive Domain: Analysis

Answer Location: Paradigms of Cognitive Psychology

Difficulty Level: Hard

4. Describe the process of introspection used by Wundt and Titchener and how this might add to our ability to uncover cognitive processes.

Ans: Highly trained observers were exposed to various stimuli. They would then describe their conscious experiences. These allowed structuralists to identify the moment to moment experiences people felt with a cognitive processes. Along with the assumption that conscious thought was a marriage of sensations, the idea was that identifying those sensations in the moment must reveal how consciousness and mental processes work.

Learning Objective: 1-2: Describe the various schools of psychology as their history relates to cognitive psychology

Cognitive Domain: Knowledge

Answer Location: Structuralism

Difficulty Level: Easy

5. If you are interested in determining how cognitive processes change over time, how would you devise an experiment to test this in a between-subjects deign and with a within-subjects design?

Ans: Between-subjects designs use participants in only one of the experimental conditions. Thus, you could test younger individuals and compare them to older individuals to see if there are differences in cognitive ability. Within-subjects designs have participants contribute to all experimental conditions. Thus, you would need to test individuals at multiple time points throughout some time period in order to see how their cognitive abilities change or not.

Learning Objective: 1-3: Summarize the major research designs used in cognitive psychology

Cognitive Domain: Application

Answer Location: Experiments and Quasi-Experiments

Difficulty Level: Medium