

Test Bank for Cognitive Psychology 3rd Goldstein

Chapter 01: Introduction to Cognitive Psychology

1. The example at the beginning of the book, in which Ruben talks to his friend on a mobile phone on his way to class, was used to illustrate how
- cognitive psychologists study problem solving in adults.
 - several different cognitive processes can take place at one time.
 - human cognition is affected by emotional events.
 - both physiology and behaviour is important to the study of cognition.

ANSWER: b

2. The branch of psychology concerned with the scientific study of the mind is called
- cognitive psychology.
 - introspection.
 - behaviourism.
 - memory consolidation.

ANSWER: a

3. Attention, perception and memory are all different types of mental processes in which the mind engages. These are known as different types of
- models.
 - cognition.
 - reaction times.
 - savings.

ANSWER: b

4. Donders' (1868) main reason for doing his choice reaction time experiment was to study
- sensation.
 - childhood attachment styles.
 - decision making.
 - personality development.

ANSWER: c

5. The main point of the Donders' (1868) reaction time experiments was to
- show that reaction times can be measured accurately.
 - measure the amount of time it takes to make a decision.
 - determine differences in the way people react to stimuli.
 - show that our cognitions are often based on unconscious inferences.

ANSWER: b

6. Reaction time refers to the time between the _____ of a stimulus and a person's response to it.
- sensation
 - transduction
 - change in intensity

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d. presentation

ANSWER: d

7. In Donders' (1868) experiment on decision making, when participants were asked to press one button if the light on the left was illuminated and another button if the light on the right was illuminated, they were engaged in a

- a. reaction time task.
- b. simple reaction time task.
- c. choice reaction time task.
- d. presentation task.

ANSWER: c

8. By comparing reaction times across different tasks, Donders (1868) was able to conclude how long the mind needs to perform a certain cognitive task. Donders interpreted the difference in reaction time between the simple and choice conditions of his experiment as indicating how long it took to

- a. perceive the stimulus.
- b. process the stimulus.
- c. attend to the stimulus.
- d. make a decision about the stimulus.

ANSWER: d

9. Donders' (1868) measurement of reaction time is particularly important because it demonstrated the "time course" on which the mind operates. In the choice reaction time task, Donders found that it took _____ to decide which of two buttons to push in response to a stimulus.

- a. less than one second
- b. between one and two seconds
- c. two to five seconds
- d. more than five seconds

ANSWER: a

10. Donders' experiments in cognitive psychology were the first to demonstrate that mental responses can only be

- a. measured directly.
- b. inferred from the participant's behaviour.
- c. measured by comparing the presentation of the stimulus and the participant's response.
- d. measured by comparing responses among different participants.

ANSWER: b

11. The first formal laboratory of psychology, where the approach of structuralism was created, was founded in which city?

- a. Amsterdam, The Netherlands
- b. Johannesburg, South Africa
- c. London, United Kingdom
- d. Leipzig, Germany

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ANSWER: d

12. The founder of the first laboratory of scientific psychology was

- a. Franciscus Donders.
- b. Hermann von Helmholtz.
- c. Wilhelm Wundt.
- d. Hermann Ebbinghaus.

ANSWER: c

13. Which of the following methods, often associated with structuralism, was used in the psychology laboratory established by Wilhelm Wundt?

- a. Analytic introspection
- b. Measuring reaction times
- c. Operant conditioning
- d. Classical conditioning

ANSWER: a

14. In the method of analytic introspection, trained participants describe their experiences and thought processes in response to

- a. questions.
- b. stimuli.
- c. sensations.
- d. behaviours.

ANSWER: b

15. When using himself as a participant, Ebbinghaus used which of the following stimuli in his "memory" experiments?

- a. Common words.
- b. Light illuminated on the left or the right of a computer screen.
- c. Grey rectangles in front of light rectangles.
- d. Three-letter nonsense syllables.

ANSWER: d

16. The measure of "savings" proposed by Ebbinghaus is

- a. the time taken to relearn a list minus the original time taken to learn a list.
- b. the time taken to learn a list of nonsense syllables.
- c. the original time taken to learn a list minus the time to relearn a list.
- d. the time taken to respond to nonsense syllables.

ANSWER: c

17. According to Ebbinghaus's (1913) savings curve, savings gives a measure of

- a. word familiarity.

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- b. sensory modality.
- c. elapsed time.
- d. reaction time.

ANSWER: c

18. The observations of William Jones were based on

- a. experiments.
- b. observations of how his own mind operated.
- c. analytic introspection.
- d. observations of participants.

ANSWER: b

19. Which of the following is a criticism of analytic introspection?

- a. It infers mental processes based on objective data.
- b. It produces results that are too easy to verify.
- c. It produces variable results from person to person.
- d. It requires no training.

ANSWER: c

20. John Watson believed that psychology should focus on the study of

- a. observable behaviour.
- b. mental processes.
- c. consciousness.
- d. attention.

ANSWER: a

21. According to the behaviourists, only the study of _____ should be the emphasis of the science of psychology.

- a. observable behaviour
- b. consciousness
- c. introspection
- d. the mind

ANSWER: a

22. Pavlov's experiment involving a dog, food and a bell is an example of which of the following types of experiments?

- a. Reaction time
- b. Unconscious inference
- c. Classical conditioning
- d. Operant conditioning

ANSWER: c

23. The investigation of how behaviour is strengthened by presentation of positive reinforcers (e.g., food) or withdrawal

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of negative reinforcers (e.g., shock) is best known as

- a. classical conditioning.
- b. the method of savings.
- c. choice reaction time.
- d. operant conditioning.

ANSWER: d

24. Which of the following psychologists is known for research on operant conditioning?

- a. Franciscus Donders
- b. Wilhelm Wundt
- c. John Watson
- d. B.F. Skinner

ANSWER: d

25. The finding that different people respond to different features of the same stimulus, shows that the _____ of a stimulus has an impact on behaviour, not just the objective qualities of the stimulus

- a. colour
- b. size
- c. category
- d. meaning

ANSWER: d

26. A mental conception of the layout of a physical space is known as a(n)

- a. cognitive map.
- b. mental model.
- c. artificial intelligence.
- d. memory consolidation.

ANSWER: a

27. Who developed the concept of the cognitive map?

- a. Chomsky
- b. Sanders
- c. James
- d. Tolman

ANSWER: d

28. Which of the following events is most closely associated with a resurgence in interest in the mind within the study of psychology?

- a. Watson's conditioning experiments in humans
- b. Skinner's publication of the book, *Verbal Behavior*
- c. Development of the technique of analytic introspection

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- d. The proposal of cognitive maps

ANSWER: b

29. Who proposed that children's language development was caused by imitation and reinforcement?

- a. Noam Chomsky
- b. John Watson
- c. Keller Breland
- d. B.F. Skinner

ANSWER: d

30. Regarding children's language development, Noam Chomsky noted that children generate many sentences they have never heard before. From this, he concluded that language development is driven largely by

- a. an inborn biological program.
- b. cultural influences.
- c. classical conditioning.
- d. operant conditioning.

ANSWER: a

31. During the "cognitive revolution" dramatic changes took place in the way psychology was studied. This so-called "revolution" occurred parallel to (and, in part, because of) the introduction of

- a. cognitive psychology textbooks.
- b. analytic introspection.
- c. Skinner boxes.
- d. computers.

ANSWER: d

32. Which of the following does NOT characterize the information processing (IP) approach to the study of cognition?

- a. IP depicts the mind as processing information in a sequence of stages.
- b. IP supports the principle of behaviourism that behaviour is a stimulus-response relationship.
- c. IP involves the use of computers as a metaphor to understand human cognition.
- d. IP traces the sequence of mental operations involved in cognition.

ANSWER: b

33. Broadbent was the first person to develop which of the following?

- a. A flow diagram depicting the mind as processing information in a sequence of stages
- b. A computer program for solving logic problems
- c. An experimental procedure for studying the way people process information
- d. The first textbook of cognitive psychology

ANSWER: a

34. Which of the following was not one of the findings from Cherry's (1953) experiment in which participants listen to two messages simultaneously?

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- a. People can focus on one message and ignore the other one.
- b. People can focus on the message they were repeating.
- c. People take in very little information about the ignored message.
- d. Even deaf individuals process auditory information, even on a non-conscious level.

ANSWER: d

35. The field that studies how to make machines "behave in ways that would be called intelligent if a human were so behaving" is known as

- a. cognitive psychology.
- b. behaviourism.
- c. artificial intelligence.
- d. flow diagramming.

ANSWER: c

36. The use of the term "artificial intelligence" was coined by

- a. B.F. Skinner.
- b. Colin Cherry.
- c. Edward Tolman.
- d. John McCarthy.

ANSWER: d

37. Newell and Simon were among the first to use computers in cognitive psychology. Their computer program

- a. simulated human attention.
- b. solved problems using humanlike reasoning processes.
- c. controlled presentation of visual stimuli during cognitive psychology experiments.
- d. introduced the first flow diagram.

ANSWER: b

38. Miller (1956) conducted experiments showing that humans can only hold around _____ items in their mind at any given time.

- a. two
- b. seven
- c. seventeen
- d. eleven

ANSWER: b

39. The work of George Miller showed that

- a. the human ability to process information is unlimited.
- b. there are limits to the human ability to process information.
- c. intelligent machines can be successfully created.
- d. memory consolidation is enhanced by REM sleep.

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ANSWER: b

40. The "cognitive revolution"

- a. occurred rapidly, within a period of a few years, in response to the attacks on Skinner and the development of computers.
- b. extended over a long period of time, beginning in the early part of the century, in reaction to Wundt's introspection experiments.
- c. was a gradual process that occurred over several decades.
- d. was not really necessary because the study of the mind has been a constant part of experimental psychology since the founding of the first psychology laboratory.

ANSWER: c

41. The first textbook with the title "Cognitive Psychology" was published by Neisser in

- a. 1956
- b. 1967
- c. 1966
- d. 1950

ANSWER: b

42. One type of model used to describe cognitive functions are structural models. Name two other types of models.

- a. Resource models and process models
- b. Biological models and psychological models
- c. Interpersonal models and intrapersonal models
- d. Psychodynamic models and behavioural models

ANSWER: a

43. An early model of memory indicates that incoming information is first handled by "sensory" memory, then is moved to "short term" memory, and finally is pushed into "long-term" memory. This model, proposed by Atkinson and Shiffrin in 1968, is an example of a _____ model.

- a. process
- b. nomothetic
- c. structural
- d. resource

ANSWER: a

44. David is working on a project for his cognitive psychology class. He builds a 3D model of the human brain, paints each major structure a different color, and constructs a "map" that shows which functions are controlled by which brain component. David's project is working from a(n) _____ model of cognitive psychology.

- a. analytic
- b. structural
- c. consolidative
- d. process

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ANSWER: b

45. Wicken's model that outlines three different dimensions relating to processing stages, processing modalities, and processing codes is an example of a _____ model?

- a. analytic
- b. structural
- c. resource
- d. process

ANSWER: b

46. Intermixing different topics within a particular domain during learning is called _____

- a. intrusion
- b. interruption
- c. interleaving
- d. infiltration

ANSWER: c

47. The principle of "spacing" suggests that repeating and reviewing information over time:

- a. may initially lead to slower learning but will ensure more durable retention
- b. may initially lead to quicker learning but will not lead to more durable retention
- c. may obstruct the learning process, both initially and in the long run
- d. may facilitate the learning process, both initially and in the long run

ANSWER: a

48. In their study on retrieval based learning, Roediger and Karpicke (2006) found that simply rereading information during practice produced _____ initial recall and a _____ drop in recall over a week's time.

- a. superior, slow
- b. superior, fast
- c. inferior, slow
- d. inferior, fast

ANSWER: b

49. In their study on retrieval based learning, Roediger and Karpicke (2006) found that repeated testing during practice produced _____ initial recall and a _____ drop in recall over a week's time.

- a. superior, slow
- b. superior, fast
- c. inferior, slow
- d. inferior, fast

ANSWER: c

50. Khanna (2015) found that students who engaged with ungraded pop quizzes during their introductory

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Psychology course performed better than their peers who only engaged with graded pop quizzes. She attributed this to the fact that participating in the ungraded quizzes led to less _____ and more _____ to the graded quizzes.

- a. anxiety, positivity
- b. anxiety, negativity
- c. positivity, anxiety
- d. practice, anxiety

ANSWER: a

51. Mueller and Oppenheimer (2014) found that compared to taking notes by hand, taking notes on a laptop led to *inferior* performance on tests of both factual and particularly conceptual understanding. This finding has been attributed to the finding that:

- a. laptop notes are typically shorter than long-hand notes
- b. laptop notes are typically longer than long-hand notes
- c. laptop notes typically show less verbatim overlap with the lecture than the long-hand notes
- d. laptop notes typically show greater verbatim overlap with the lecture than the long-hand notes

ANSWER: d

52. Explain how Donders' and Ebbinghaus's pioneering methods, though very different from each other, allowed for behaviour to determine a property of the mind.

ANSWER: Answer not provided

53. Describe analytic introspection using an experimental example, and describe two limitations to this method.

ANSWER: Answer not provided

54. Describe operant conditioning. How did B.F. Skinner explain language development in terms of operant conditioning? What were Noam Chomsky's criticisms of Skinner's account?

ANSWER: Answer not provided

55. Define a flow diagram and describe its importance to the information processing approach. Draw Broadbent's filter model of memory as a flow diagram.

ANSWER: Answer not provided

56. Distinguish between structural models, process models and resource models in cognitive psychology. Provide an example of each type of model.

ANSWER: Answer not provided

57. Describe and explain two study strategies that are considered to enhance learning, and which are supported by the results of cognitive psychological experiments.

ANSWER: Answer not provided