



Psychology Examination IAC Nationals 2024

Name _____

School _____

Grade _____

Instructions – Mark your answers on the scantron provided. Correct answers are worth 2 points. Incorrect answers are worth –1 point. Questions left blank are worth 0 points. Write the answer to your tiebreaker question in the box at the top of your scantron.

1. How did Jean Piaget shift the understanding of child development?

- A. Developmental stage determines cognition
- B. Intelligence is heritable
- C. Repetition reliably leads to memory
- D. Reasoning is dependent on verbal ability

2. Before Psychoanalytic theory, Sigmund Freud worked with what other technique to help patients manage unconscious forces?

- A. Phrenology
- B. Electroconvulsive therapy
- C. Behavioral conditioning
- D. Hypnosis

3. Which subfield of Psychology would be most likely to study the terms “scapegoat theory” and “cognitive dissonance”?

- A. Cognitive
- B. Social
- C. Evolutionary
- D. Industrial-Organizational

4. What would a behaviorist be interested in?

- A. IQ
- B. Information processing of memories
- C. Temperament
- D. Reinforcement schedules

5. Operational definitions of variables are important in psychological research for all except which of the following?

- A. Behaviors are varied
- B. Observations contain bias
- C. Definitions are used to diagnose
- D. Psychological topics are often abstract

6. Choose the set below that is ordered from least to most experimental control.

- A. Naturalistic observation -> correlational study -> randomized experiment
- B. Correlational study -> survey -> case study
- C. Randomized experiment -> correlational study -> survey
- D. Survey -> case study -> naturalistic observation

7. Cross-sectional and longitudinal studies both attempt to identify changes in behavior over time, but how are they different?

- A. Cross-sectional studies are randomized, but do not measure cohort effects
- B. Cross-sectional designs can determine individual change, but not group effects
- C. Longitudinal studies focus on an individual’s changes, but are limited by subject retention
- D. Longitudinal designs are inexpensive, but they are not statistically powerful

8. Which of the following is LEAST accurate?

- A. A hypothesis is a testable prediction.
- B. A theory is one’s best guess based on experience and personal perception.
- C. The dependent variable is measured.
- D. It is impossible to remove all confounds from a study’s design.

9. Data with a high standard deviation will create a normal curve with what general shape?

- A. Wide
- B. Compact
- C. Tall
- D. Short

10. Which of the following is NOT a function of an Institutional Review Board?

- A. Ensure that human subjects are not coerced
- B. Provide protection for vulnerable subjects
- C. Conduct a risk/ benefit analysis of proposed studies
- D. Determine the quality of research designs

11. How is heritability of a trait shown?
- When fraternal twins have a higher concordance rate than identical twins
 - As environments become dissimilar
 - Through epigenetics
 - With cloning
12. Evolutionary psychologists' catch phrase "widely and wisely" refers to what?
- The concept of natural selection
 - The evolution of gender and mating choices
 - The debate between science and religion over evolution
 - The gender differences in aggression
13. A neuron includes which of the following?
- An axon, dendrites, terminal branches, plus structures common to other cells in our bodies
 - Equipment necessary for sending only electrical messages
 - Glial cells
 - A membrane that acts like a barrier to the outside world- never letting anything through
14. The "All or None Principle" of action potentials says what about neural messages?
- If a stimulus reaches the cell's threshold, the neuron will fire an action potential.
 - There are no big or little action potentials.
 - The intensity of a stimulus is communicated via the number of action potentials generated.
 - All of the above are true.
15. All of the following except which can cause a neuron to fire an action potential?
- X-rays
 - electrical charges
 - neurotransmitters
 - drugs
16. How can we study the living brain?
- Use EEG to measure specific neurons
 - Use PET scan for structural detail
 - Use MRI to determine active areas
 - Use an fMRI to show structure and activity
17. What is the correct pairing of a cortical lobe and its main function?
- Parietal : expressing fear and aggression
 - Temporal : developing plans and judgments
 - Occipital : visual processing
 - Frontal : auditory processing
18. Which of the following statements about the sleep cycle is most accurate?
- The duration can be anywhere from 10 minutes to 6 hours.
 - It can be "reset" - especially with exposure to time cues (like light).
 - There are 3 stages: REM, light, and deep sleep.
 - One's natural sleep cycle is only disturbed by powerful stimuli.
19. Which of these is NOT a theory attempting to explain the purpose of dreaming?
- Dreams represent unconscious wishes.
 - The brain is converting meaningful events from the day into long-term memory.
 - A dream is the brain's way of organizing random neural firing.
 - Psychologists have asserted that they are not an important component of sleep.
20. Cutting the corpus callosum can lead to which of the following?
- Being predominantly right or left brained
 - Epilepsy
 - The split-brain phenomenon
 - Lateralization of the hemispheres
21. Which is the correct pairing between a property of a wave and the visual or auditory quality it conveys?
- Saturation : Position
 - Wavelength : Concordance
 - Amplitude : Brightness
 - Timbre: Color
22. All of these accurately describe rods and cones EXCEPT which of the following?
- All of our rods and cones are on the retina.
 - Most of our cones are located at the fovea.
 - Rods are responsible for vision in minimal light, therefore we can't see colors in the dark.
 - Rods convert wavelength, while cones convert wave amplitude.
23. Why are taste and smell the two senses that are most easily integrated?
- Their receptors are close and are activated by the same stimuli.
 - They utilize the same receptors.
 - The waves that stimulate the receptors enter the nose and mouth simultaneously.
 - These senses are not easily integrated.

24. What does "pain is in the brain" refer to?
- Pain receptors are in the brain.
 - Sensation of pain occurs in the body and spinal cord, while perception occurs in the brain.
 - After spinal cord injury, pain persists without communication between brain and body.
 - Pain is the same across all biological, psychological, and socio-cultural states.
25. Which is true about bottom-up and top-down processing?
- These processes are mutually exclusive.
 - In bottom-up, cognition starts with sensations; in top-down with perceptions.
 - While learning something new, you will rely mostly on top-down processes.
 - Bottom-up processes aren't used once you develop top-down processes.
26. Which is most accurate about single stimulus learning?
- Reinforcement leads to sensitization.
 - Sensitization happens without context.
 - Habituation only occurs with strong stimuli.
 - In habituation, you learn that a specific stimulus is unimportant and can be ignored.
27. Shaping is a procedure that involves what?
- Delaying gratification
 - Random punishment
 - Reinforcement for getting closer to a desired behavior
 - Internally motivated behaviors
28. Which is the correct pairing of a scientist and the paradigm they developed?
- Thorndike : cat in a puzzle box
 - Pavlov : rats pressing levers
 - Garcia : the Bobo doll
 - Skinner : dogs salivating to bells
29. How is Classical Conditioning conducted?
- Neutral stimuli are paired with biologically relevant stimuli to produce reflexive responses.
 - Rewards are used to increase behavior and punishers are used to decrease behavior.
 - Models perform desired behaviors.
 - Natural behaviors are observed and noted.
30. Choose the correct pairing below.
- Positive reinforcement : add punisher
 - Negative reinforcement : remove reward
 - Positive punishment : remove punisher
 - Negative punishment : add reward
31. Flashbulb memories are usually based upon which of the following?
- Important political events
 - Procedures and tasks
 - Emotionally significant events
 - Declarative statements and facts
32. Without rehearsal we automatically encode
- Basic details about sequence, spatial organization, and stimulus frequency
 - Information using mnemonic devices
 - Imagery, organization, and hierarchies
 - Verbatim accounts
33. What can help expand short term memory?
- Long term potentiation, or physically changing neurons to represent memories
 - Chunking, or using small, meaningful units to represent several pieces of information
 - Ignoring context cues
 - Latent learning, which happens later
34. Most cognitive psychologists believe that forgetting is not a true loss of information, but a retrieval failure due to what?
- Priming
 - Encoding obstacles
 - Context shift and interference
 - Storage decay
35. Loftus's research challenges eye-witness testimony due to the likelihood of what?
- Forgetting
 - The self-serving bias
 - The bystander effect
 - Memory construction
36. Which set shows the correct progression of language levels from least to most complex?
- Syntax -> Grammar -> morpheme
 - Phoneme -> morpheme -> grammar
 - Grammar -> phoneme -> syntax
 - Morpheme -> grammar -> phoneme
37. In regards to the development of language, what do most psychologists believe?
- Both nature and nurture contribute.
 - Like Skinner asserted, there is an innate predisposition in humans.
 - Like Chomsky asserted, language is based solely on imitation.
 - Other animals never demonstrate language.

38. What is the difference between deductive and inductive reasoning?
- Deductive applies generalized knowledge to specific cases.
 - Inductive uses specific cases to develop generalized knowledge.
 - Hypotheses are evidence of inductive, while deductive reasoning is the basis for theories.
 - All of the above are true.
39. Which is a correctly defined obstacle to problem solving?
- Functional fixedness- making a decision based on how easily you remember
 - Fixation- estimating the probability of something based on what it is most similar to
 - Confirmation bias- tendency to search for information that confirms one's preconception
 - Availability heuristic- thinking of things only in terms of their normal use
40. Which of the following is NOT true about types of intelligence?
- Fluid intelligence decreases with age.
 - Creative intelligence is easy to measure.
 - Practical intelligence is more correlated than analytical intelligence with job performance.
 - IQ tests are less meaningful for adults.
41. Which is the correct pairing of scientist and their focus while studying development?
- Freud : survival instinct to attach
 - Bandura : psychosexual stages
 - Lorenz : social aggression
 - Kohlberg : moral reasoning
42. The "Wire Mother" experiment showed that which is a crucial component of attachment?
- Fear
 - Contact and comfort
 - Obedience
 - Modeling
43. In the "Strange Situation," how would children with a secure attachment react when their mother returned to the room?
- Ignore their mother
 - Continue to be inconsolable
 - Acknowledge her return, but reject contact
 - Be happy, but go back to playing after a brief reunion
44. Baumrind's parenting styles are often depicted as the quadrants of a graph. Choose the correct pairing of style and quadrant.
- Authoritative (high demands/ low response)
 - Authoritarian (low demands/ low response)
 - Permissive (low demands/ high response)
 - Neglectful (high demands/ high response)
45. Vygotsky asserted that scaffolding could help kids navigate which developmental stage?
- Zone of proximal development
 - Object permanence
 - Latent
 - Imprinting
46. Which of the following correctly describes how new concepts are learned in Piaget's theory of cognitive development?
- Assimilation leads to accommodation
 - Schemas are created to accommodate unfamiliar stimuli
 - Assimilation and accommodation are the same process
 - Schemas are neither created nor modified
47. Erikson said that social development occurred through stage-specific what?
- Dilemmas
 - Hormones
 - Identities
 - Fixations
48. Which of the following best summarizes the drive-reduction theory of motivation?
- Unconscious forces lead us to choose between urges and societal norms
 - Motivations arise out of the biological need for homeostasis
 - We are motivated to act when our attitudes do not match our behaviors
 - Relationships are the strongest motivators
49. What is a possible critique of Maslow's hierarchy of needs?
- The pinnacle is based on Western ideals and not a universally salient motivator.
 - Belonging should form the base of the pyramid because humans are social animals.
 - The theory is inapplicable to daily life.
 - All of the above are true.
50. What leads to the overjustification effect?
- Arguments with no attempt at cooperation
 - Stressful life events
 - When extrinsic motivators block intrinsic enjoyment of an activity
 - Dissatisfied unconscious wishes
51. Which hypothesis is supported by a classic experiment with subjects holding a pencil in their teeth then rating movies as funnier?
- Primary emotions
 - Facial feedback
 - General adaptation syndrome
 - The Marx Brothers effect

52. Stress is which of the following?
- Completely harmful
 - A threat or challenge
 - Relative because it arises from our interpretations
 - The accumulation of catastrophes, transitions, and daily hassles in our lives
53. Stress impacts health, through all except which?
- It is a competing energy drain
 - By inhibiting immune system function through the release of steroid hormones
 - Because of maladaptive habits used to cope
 - It enhances an internal locus of control
54. Many theories assert that emotions are a combination of what factors?
- Problem-focused and reappraisal strategies of coping
 - Explanatory style, resilience, and hardiness
 - Physical responses, cognitive labels, and expressive behaviors
 - None of the above
55. Humanistic psychologists believe humans are good and that this can be seen when?
- With conditional positive regard
 - After maximizing the difference between one's perceived actual self and one's ideal self
 - Once one's self concept is strong
 - In a growth promoting environment, which is an environment full of flattery
56. Social cognitive personality theorists focus on which of the following?
- Reciprocal determinism
 - Explanatory style
 - Self-esteem
 - Locus of control
57. Which of the following are NOT personality traits included in the Big 5?
- Openness
 - Naivete
 - Conscientiousness
 - Extraversion
58. If psychological disorders are "deviant, distressful, and dysfunctional", which of these could, on its own, lead to a clinical diagnosis?
- Having hallucinations
 - Repeated suicide attempts
 - Walking around the block while nude
 - Fear of spiders
59. Outcome research has shown what?
- No single form of psychotherapy is best
 - All forms of therapy are applicable to all psychological disorders
 - With time, everyone gets equally better whether or not they are being treated
 - Ethical outcome research on the treatment of psychological disorders cannot be done
60. Which is most accurate about biomedical treatment of psychological disorders?
- Biomedical treatments are a last resort
 - These treatments are best used for lifelong maintenance of symptoms
 - Side effects are rarely an issue
 - Treatments are often hindered by common aspects of drug use, such as tolerance
61. Choose the correct pairing of a specific anxiety disorder and its symptoms.
- OCD: anxiety that lingers after a trauma
 - Phobia: constant tension
 - Panic disorder: acute exaggerated anxiety
 - PTSD: irrational fears
62. Learning theories assert that anxiety stems from increased and/or generalized fear gained through which process?
- Natural selection
 - Decreased frontal lobe activity
 - Stimulus discrimination
 - Conditioned emotional responding
63. All of these statements about depression are true EXCEPT which of the following?
- Depression is more common in ruminators.
 - Both electroconvulsive shock and cognitive behavioral therapy are effective treatments.
 - Depression can be alleviated with psychosurgical methods, including the split-brain procedure.
 - Depression is the number one reason people seek psychological help.
64. Patients with schizophrenia
- are likely to have been exposed to a viral infection during their prenatal development.
 - have significantly enlarged ventricles, resulting in an increase in brain volume.
 - are narcissistic and antisocial.
 - show dysfunctional behavior because of their relationship with their mother.
65. To test a treatment's effectiveness, scientists have to ensure that it is more effective than a placebo via what method?
- Double blind procedure
 - Tapering
 - Naturalistic observation
 - Survey

66. Which eating disorder has the highest mortality rate of all psychological disorders?

- A. Bulimia
- B. Anorexia
- C. Binge
- D. Orthorexia

67. What is the goal of most talk therapy?

- A. Psychoanalytic dream analysis
- B. To identify and manage negative thought patterns
- C. Extinction of fear through flooding
- D. Goal setting

68. Jane sees Kate (a friend from class) in the student center. Kate walks right past Jane without saying hi. Jane determines that Kate is rude. This is an example of

- A. Stereotyping
- B. Observational learning
- C. The fundamental attribution error
- D. Hindsight bias

69. During the Zimbardo prison experiment, student guards were able to act as they did towards student prisoners because of which?

- A. An attitude change precipitated by cognitive dissonance
- B. Social loafing
- C. They scapegoated the prisoners
- D. The frustration-aggression principle

70. Which of the following statements about conformity are true?

- A. We conform when we are insecure
- B. It can encourage immoral behavior
- C. It can promote learning
- D. All of the above are true

71. Which of these is true of prejudice?

- A. it can be eliminated totally
- B. it results, in part, from our natural tendency to categorize
- C. it always leads to discrimination
- D. it never leads to discrimination

72. Cooperation, communication, and conciliation

- A. are the foundation of altruism.
- B. produce social traps.
- C. develop through groupthink.
- D. help us to overcome conflict.

73. Aggression is triggered by which of the following?

- A. Aversive events
- B. The X chromosome
- C. Increased frontal lobe activity
- D. Decreased activity in the amygdala

74. What did Milgram, and subsequent replications of his famous experiment, determine could overcome blind obedience?

- A. Limiting exposure to the effects of complying
- B. A strong or overbearing authority figure
- C. Watching someone else refuse to obey
- D. A self-serving bias

75. CPR/ First Aid training encourages responders to do what in order to avoid the bystander effect?

- A. Directly assign tasks to others
- B. Immediately start first aid before checking whether the victim can respond
- C. Do everything yourself
- D. Ask the group for consensus before starting CPR

Tiebreaker

This question will only be scored if there is a tie for placement on the exam. **This is a required question, but there is no penalty for a wrong answer to this question.**

Write your answer legibly in the space provided on your scantron.

On average, how many neurons are located in the human cerebral cortex?