

# ADDITIONAL MCAT HIGH-YIELD PRACTICE TESTS - PSYCHOLOGICAL, SOCIAL, AND BIOLOGICAL FOUNDATIONS OF BEHAVIOR

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## BIOLOGICAL FOUNDATIONS OF BEHAVIOR (Questions 1-25)

1. The primary neurotransmitter of the parasympathetic nervous system is:

- A. Norepinephrine
  - B. Acetylcholine
  - C. Dopamine
  - D. Serotonin
- 

2. Damage to Broca's area results in:

- A. Inability to understand language
  - B. Inability to form new memories
  - C. Loss of visual processing
  - D. Difficulty producing speech
- 

3. The primary function of the hippocampus is:

- A. Memory formation and spatial navigation
- B. Emotional processing only
- C. Motor coordination

D. Visual perception

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**4. Weber's law states that the just noticeable difference (JND) is:**

- A. Constant regardless of stimulus intensity
  - B. Always the same absolute value
  - C. Proportional to the original stimulus intensity
  - D. Inversely proportional to stimulus intensity
- 

**5. Rods in the retina are responsible for:**

- A. Color vision
  - B. Vision in low light conditions
  - C. High visual acuity
  - D. Central vision only
- 

**6. The "gate control theory" explains the modulation of:**

- A. Visual perception
  - B. Auditory processing
  - C. Olfactory sensation
  - D. Pain perception
- 

**7. Which brain structure is primarily involved in coordinating motor movements?**

- A. Cerebellum
- B. Hypothalamus

- C. Amygdala
  - D. Hippocampus
- 

**8. The endocrine system differs from the nervous system in that endocrine signals:**

- A. Act faster
  - B. Use electrical transmission
  - C. Are slower and longer-lasting
  - D. Only affect adjacent cells
- 

**9. Myelin sheath increases the speed of neural transmission through:**

- A. Increasing neurotransmitter release
  - B. Saltatory conduction
  - C. Continuous conduction
  - D. Synaptic plasticity
- 

**10. The hypothalamus regulates:**

- A. Language comprehension
  - B. Fine motor control
  - C. Abstract reasoning
  - D. Hunger, thirst, and body temperature
- 

**11. Dopamine is primarily associated with:**

- A. Reward, motivation, and motor control

- B. Sleep regulation only
  - C. Pain perception
  - D. Memory consolidation
- 

**12. The absolute threshold is defined as:**

- A. Maximum stimulus intensity tolerable
  - B. Difference between two stimuli
  - C. Minimum stimulus intensity detectable 50% of the time
  - D. Point of sensory adaptation
- 

**13. The vestibular system is responsible for:**

- A. Taste perception
  - B. Balance and spatial orientation
  - C. Olfactory processing
  - D. Visual acuity
- 

**14. Long-term potentiation (LTP) is a mechanism underlying:**

- A. Muscle contraction
  - B. Sensory adaptation
  - C. Hormone secretion
  - D. Learning and memory
- 

**15. The sympathetic nervous system activation causes:**

- A. Increased digestion and decreased heart rate
  - B. Pupil constriction
  - C. Decreased blood pressure
  - D. Increased heart rate and pupil dilation
- 

**16. Which neurotransmitter is most associated with mood regulation and depression?**

- A. GABA
  - B. Glutamate
  - C. Serotonin
  - D. Acetylcholine
- 

**17. The thalamus functions as a:**

- A. Memory storage center
  - B. Relay station for sensory information (except smell)
  - C. Primary motor control center
  - D. Emotional processing center only
- 

**18. Cortisol is released by the adrenal glands in response to:**

- A. Low blood sugar only
  - B. High calcium levels
  - C. Low blood pressure only
  - D. Stress (HPA axis activation)
-

**19. Sensory adaptation occurs when:**

- A. Stimulus intensity increases
  - B. Receptors become less sensitive to constant stimulation
  - C. New stimuli are introduced
  - D. Attention shifts
- 

**20. The corpus callosum connects:**

- A. Brain and spinal cord
  - B. Left and right brain hemispheres
  - C. Cerebrum and cerebellum
  - D. Thalamus and hypothalamus
- 

**21. Which brain imaging technique measures blood flow to assess brain activity?**

- A. EEG
  - B. fMRI
  - C. CT scan
  - D. X-ray
- 

**22. The reticular formation is involved in:**

- A. Color vision
- B. Taste processing
- C. Fine motor control
- D. Arousal and attention

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**23. Heritability refers to:**

- A. The proportion of trait variation in a population due to genetic factors
  - B. Whether a trait can be inherited
  - C. The percentage of genes inherited
  - D. Environmental influence on traits
- 

**24. Bottom-up processing involves:**

- A. Using prior knowledge to interpret sensory input
  - B. Applying schemas to perception
  - C. Building perception from sensory input
  - D. Top-down expectations
- 

**25. Wernicke's area is associated with:**

- A. Motor speech production
  - B. Language comprehension
  - C. Visual processing
  - D. Motor coordination
- 

**INDIVIDUAL PROCESSES (Questions 26-50)**

**26. Short-term memory typically holds information for:**

- A. Several hours
- B. Permanently

- C. Less than 1 second
  - D. About 20-30 seconds
- 

**27. According to the information processing model, encoding refers to:**

- A. Converting sensory input into a form usable by memory
  - B. Retrieving stored information
  - C. Maintaining information in memory
  - D. Forgetting information
- 

**28. Proactive interference occurs when:**

- A. New information interferes with old memories
  - B. Physical trauma disrupts memory
  - C. Old information interferes with learning new information
  - D. Memory improves over time
- 

**29. Iconic memory is:**

- A. Long-term visual memory
  - B. Brief sensory memory for sounds
  - C. Brief sensory memory for visual information
  - D. Permanent memory storage
- 

**30. The primacy effect in serial position demonstrates that:**

- A. Middle items are best remembered

- B. Recent items are best remembered
  - C. All items are equally remembered
  - D. First items are best remembered
- 

**31. Functional fixedness is a barrier to problem-solving involving:**

- A. Language difficulties
  - B. Memory deficits
  - C. Inability to see new uses for familiar objects
  - D. Lack of motivation
- 

**32. Heuristics are:**

- A. Guaranteed problem-solving methods
  - B. Mental shortcuts for quick decision-making
  - C. Always accurate
  - D. Only used by experts
- 

**33. The availability heuristic leads to:**

- A. Systematic problem-solving
  - B. Logical deduction
  - C. Perfect recall
  - D. Judging probability by ease of recalling examples
- 

**34. Confirmation bias involves:**

- A. Seeking evidence that supports existing beliefs
  - B. Considering all evidence equally
  - C. Changing beliefs based on evidence
  - D. Ignoring all information
- 

**35. Metacognition refers to:**

- A. Fast, automatic thinking
  - B. Emotional reasoning
  - C. Thinking about one's own thinking
  - D. Unconscious processing
- 

**36. According to Piaget, the concrete operational stage is characterized by:**

- A. Abstract reasoning
  - B. Logical thinking about concrete objects
  - C. Sensorimotor exploration
  - D. Egocentric thinking
- 

**37. Classical conditioning was first demonstrated by:**

- A. Pavlov with dogs
  - B. Skinner with rats
  - C. Watson with monkeys
  - D. Bandura with children
-

**38. In operant conditioning, negative reinforcement:**

- A. Punishes behavior
  - B. Has no effect
  - C. Weakens behavior
  - D. Strengthens behavior by removing aversive stimulus
- 

**39. Latent learning demonstrates that:**

- A. Learning requires immediate reinforcement
  - B. Punishment is necessary for learning
  - C. Learning can occur without reinforcement
  - D. Only observable behaviors can be learned
- 

**40. Observational learning is best explained by:**

- A. Classical conditioning
  - B. Operant conditioning
  - C. Habituation
  - D. Social learning theory (Bandura)
- 

**41. REM sleep is characterized by:**

- A. Slow brain waves and easy arousal
- B. Light sleep only
- C. Delta waves
- D. Rapid eye movements and vivid dreams

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**42. The James-Lange theory of emotion proposes that:**

- A. Emotion and physiological response occur simultaneously
  - B. Cognition determines emotion
  - C. Emotion causes physiological response
  - D. Physiological response causes emotion
- 

**43. According to Maslow's hierarchy, which needs must be satisfied first?**

- A. Esteem needs
  - B. Self-actualization
  - C. Safety needs
  - D. Physiological needs
- 

**44. The "Big Five" personality traits include all EXCEPT:**

- A. Intelligence
  - B. Openness
  - C. Conscientiousness
  - D. Neuroticism
- 

**45. According to Erikson, the primary psychosocial conflict in adolescence is:**

- A. Trust vs. mistrust
- B. Autonomy vs. shame
- C. Identity vs. role confusion

D. Intimacy vs. isolation

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**46. Positive symptoms of schizophrenia include:**

- A. Flat affect and social withdrawal
  - B. Lack of motivation
  - C. Reduced speech
  - D. Hallucinations and delusions
- 

**47. Major depressive disorder is characterized by:**

- A. Alternating mood episodes
  - B. Persistent elevated mood
  - C. Persistent depressed mood and anhedonia
  - D. Anxiety only
- 

**48. Obsessive-compulsive disorder involves:**

- A. Hallucinations
  - B. Mood swings
  - C. Persistent unwanted thoughts and repetitive behaviors
  - D. Memory loss
- 

**49. Cognitive-behavioral therapy (CBT) focuses on:**

- A. Unconscious conflicts
- B. Medication only

- C. Past childhood experiences exclusively
  - D. Changing maladaptive thoughts and behaviors
- 

**50. The biopsychosocial model views illness as resulting from:**

- A. Biological factors only
  - B. Psychological factors only
  - C. Social factors only
  - D. Interaction of biological, psychological, and social factors
- 

## **SOCIAL PROCESSES (Questions 51-75)**

**51. The fundamental attribution error refers to:**

- A. Overemphasizing situational factors
  - B. Overemphasizing dispositional factors in explaining others' behavior
  - C. Accurate attribution of behavior
  - D. Self-serving bias
- 

**52. Cognitive dissonance occurs when:**

- A. Attitudes and behaviors are consistent
  - B. People agree with each other
  - C. Attitudes and behaviors conflict
  - D. No attitude exists
- 

**53. The foot-in-the-door technique involves:**

- A. Demanding large commitment first
  - B. Making small request followed by larger request
  - C. Threatening consequences
  - D. Offering rewards
- 

**54. Groupthink is most likely when:**

- A. Groups are diverse
  - B. Dissent is encouraged
  - C. Time pressure is low
  - D. Cohesive groups seek consensus without critical evaluation
- 

**55. Social facilitation suggests that:**

- A. Presence of others always improves performance
  - B. Presence of others always impairs performance
  - C. Others have no effect on performance
  - D. Presence of others enhances performance on simple tasks
- 

**56. The bystander effect demonstrates that:**

- A. More bystanders increase helping
  - B. Bystanders always help
  - C. Individuals always help
  - D. More bystanders decrease likelihood of helping
-

**57. Prejudice is best defined as:**

- A. Negative behavior toward a group
  - B. A positive attitude only
  - C. Unjustified negative attitude toward a group
  - D. Factual beliefs about groups
- 

**58. Stereotypes are:**

- A. Always accurate
  - B. Individual beliefs only
  - C. Never change
  - D. Generalized beliefs about group members
- 

**59. In-group bias refers to:**

- A. Favoring one's own group
  - B. Treating all groups equally
  - C. Favoring out-groups
  - D. Having no group preferences
- 

**60. The mere exposure effect suggests that:**

- A. Familiarity decreases liking
- B. Exposure has no effect
- C. First impressions never change
- D. Repeated exposure increases liking

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**61. According to social exchange theory, relationships continue when:**

- A. Costs exceed rewards
- B. Rewards equal costs
- C. Costs are maximized
- D. Rewards exceed costs

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**62. Deindividuation in groups leads to:**

- A. Increased self-awareness
- B. Enhanced personal responsibility
- C. Reduced anonymity
- D. Decreased self-awareness and increased impulsive behavior

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**63. Conformity was famously studied by:**

- A. Milgram's obedience studies
- B. Zimbardo's prison study
- C. Asch's line judgment studies
- D. Pavlov's conditioning experiments

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**64. Obedience to authority was demonstrated in:**

- A. Asch's conformity studies
- B. Zimbardo's study
- C. Bandura's study

D. Milgram's shock experiments

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**65. Self-fulfilling prophecy occurs when:**

- A. Predictions have no effect
  - B. Expectations influence behavior to confirm the expectation
  - C. Prophecies always fail
  - D. Random outcomes occur
- 

**66. Attribution theory examines how people:**

- A. Form attitudes
  - B. Explain behavior causes
  - C. Make decisions
  - D. Solve problems
- 

**67. The elaboration likelihood model suggests persuasion occurs through:**

- A. One route only
  - B. Central and peripheral routes
  - C. Emotional appeals only
  - D. Logical arguments only
- 

**68. Social loafing occurs when:**

- A. Individuals work alone
- B. Individual contributions are identifiable

- C. Individuals exert less effort in groups
  - D. Groups are small
- 

**69. The self-serving bias leads people to:**

- A. Blame themselves for all outcomes
  - B. Attribute success to external factors
  - C. View all outcomes neutrally
  - D. Attribute successes to internal factors and failures to external factors
- 

**70. Reciprocity norm suggests that:**

- A. People should help those who help them
  - B. People should never help others
  - C. Help should be one-directional
  - D. Social obligations don't exist
- 

**71. Altruism is defined as:**

- A. Self-interested helping
  - B. Helping for rewards
  - C. Selfless concern for others' welfare
  - D. Forced helping
- 

**72. Aggression is more likely when:**

- A. Temperatures are moderate

- B. Resources are abundant
  - C. No provocation occurs
  - D. Frustration or provocation is present
- 

**73. Social identity theory proposes that:**

- A. Identity is purely individual
  - B. Groups have no influence on identity
  - C. Self-concept is unrelated to groups
  - D. Part of self-concept comes from group memberships
- 

**74. Ethnocentrism involves:**

- A. Appreciating all cultures equally
  - B. Having no cultural views
  - C. Valuing other cultures more
  - D. Judging other cultures by one's own cultural standards
- 

**75. Contact hypothesis suggests prejudice can be reduced through:**

- A. Separation of groups
  - B. Competition between groups
  - C. Ignoring differences
  - D. Equal-status contact under supportive conditions
-

## **SOCIAL STRUCTURE & DEMOGRAPHICS (Questions 76-100)**

**76. Social stratification refers to:**

- A. Random distribution of resources
  - B. Equal distribution of wealth
  - C. Hierarchical arrangement of individuals into social classes
  - D. Absence of social classes
- 

**77. Social mobility describes:**

- A. Physical movement between places
  - B. Changes in social status or class position
  - C. Geographic migration only
  - D. Cultural change
- 

**78. Cultural capital, as defined by Bourdieu, includes:**

- A. Financial wealth only
  - B. Physical possessions
  - C. Geographic location
  - D. Knowledge, skills, and education conferring social status
- 

**79. The poverty line is:**

- A. The income threshold below which a family is considered poor
- B. Always the same globally

- C. Not adjusted for family size
  - D. Based on luxury standards
- 

**80. Medicalization refers to:**

- A. Increasing healthcare costs
  - B. Defining non-medical issues as medical problems
  - C. Improving medical technology
  - D. Training more doctors
- 

**81. The sick role, according to Parsons, involves:**

- A. No social expectations
  - B. Working while ill
  - C. Ignoring medical advice
  - D. Exemption from normal responsibilities and seeking medical help
- 

**82. Social epidemiology examines:**

- A. Viral transmission only
  - B. How social factors affect health and disease distribution
  - C. Medical treatments exclusively
  - D. Individual genetics only
- 

**83. Health disparities are differences in health outcomes:**

- A. That occur randomly

- B. That are unavoidable
  - C. Between different population groups
  - D. That don't exist
- 

**84. The sociological imagination, coined by C. Wright Mills, connects:**

- A. Biology and psychology only
  - B. Personal troubles and public issues
  - C. Medicine and law
  - D. Economics and physics
- 

**85. Urbanization refers to:**

- A. Rural development
  - B. Population decrease
  - C. Population shift from rural to urban areas
  - D. Agricultural expansion
- 

**86. Demographic transition theory describes:**

- A. Individual aging
  - B. Population movement
  - C. Economic development only
  - D. Population changes as societies develop economically
- 

**87. Fertility rate measures:**

- A. Lifespan
  - B. Number of live births per woman
  - C. Infant mortality
  - D. Population density
- 

**88. Institutional discrimination involves:**

- A. Individual prejudiced actions only
  - B. No systematic patterns
  - C. Random outcomes
  - D. Systematic discrimination embedded in social institutions
- 

**89. Symbolic interactionism focuses on:**

- A. Large-scale social structures only
  - B. Biological determinism
  - C. Unconscious processes
  - D. Meanings people create through social interaction
- 

**90. Social constructionism argues that:**

- A. All knowledge is objective
  - B. Biology determines everything
  - C. Reality is predetermined
  - D. Many aspects of reality are socially created
-

**91. The medicalization of deviance involves:**

- A. Criminalizing medical practices
  - B. Ignoring deviant behavior
  - C. Defining deviance as medical conditions
  - D. Eliminating all medical care
- 

**92. Labeling theory suggests that:**

- A. Labels have no effect
  - B. Deviance is inherent
  - C. Societal reactions and labels create deviance
  - D. Crime is biologically determined
- 

**93. The hidden curriculum in schools refers to:**

- A. Explicit academic content
  - B. Official course syllabi
  - C. Standardized test material
  - D. Implicit lessons about social norms and values
- 

**94. Assimilation occurs when:**

- A. Minority groups maintain separate identities
- B. Cultures remain completely distinct
- C. Majority culture disappears
- D. Minority groups adopt majority culture

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**95. Multiculturalism promotes:**

- A. Cultural homogeneity
  - B. Elimination of diversity
  - C. Coexistence and appreciation of diverse cultures
  - D. Dominance of one culture
- 

**96. Secularization refers to:**

- A. Increased religious influence
  - B. Formation of new religions
  - C. Religion becoming more political
  - D. Declining religious influence in society
- 

**97. Feminist theory examines:**

- A. Male perspectives exclusively
  - B. Biology only
  - C. Economic systems exclusively
  - D. Gender inequality and women's experiences
- 

**98. Social capital refers to:**

- A. Financial resources only
- B. Networks and relationships providing value
- C. Physical infrastructure

D. Educational institutions

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**99. Globalization involves:**

- A. Isolation of nations
  - B. Decreased communication
  - C. Local focus only
  - D. Increasing interconnection of world economies and cultures
- 

**100. Life expectancy is influenced by:**

- A. Genetics only
- B. Individual choices only
- C. Random chance exclusively
- D. Socioeconomic status, healthcare access, and environmental factors

# Answer Explanations

## 1. B - Acetylcholine

The parasympathetic nervous system (the "rest and digest" system) uses acetylcholine (ACh) as its primary neurotransmitter at both preganglionic and postganglionic synapses. ACh slows heart rate, stimulates digestion, and promotes energy conservation. The sympathetic system primarily uses norepinephrine at postganglionic synapses.

## 2. D - Difficulty producing speech

Broca's area, located in the frontal lobe (typically left hemisphere), is responsible for speech production and motor aspects of language. Damage causes Broca's aphasia - patients understand language but struggle to produce fluent speech (expressive aphasia). Wernicke's area damage affects comprehension.

## 3. A - Memory formation and spatial navigation

The hippocampus is critical for forming new explicit (declarative) memories and consolidating them into long-term storage. It's also essential for spatial memory and navigation. Damage (like in patient H.M.) prevents forming new long-term memories (anterograde amnesia) while leaving older memories and procedural memory intact.

## 4. C - Proportional to the original stimulus intensity

Weber's law states that the just noticeable difference (JND) is a constant proportion of the original stimulus. For example, if you need 1 kg added to a 10 kg weight to notice a difference (10% ratio), you'd need 2 kg added to a 20 kg weight. The ratio stays constant even as absolute values change.

## 5. B - Vision in low light conditions

Rods are photoreceptor cells highly sensitive to light, enabling scotopic (low-light) vision. They're concentrated in peripheral retina, don't detect color, and provide lower acuity. Cones function in bright light, provide color vision and high acuity, and concentrate in the fovea (central vision).

## 6. D - Pain perception

Gate control theory (Melzack & Wall) explains pain modulation. Non-pain input (like rubbing) can "close the gate" by activating inhibitory interneurons in the spinal cord, reducing pain signal transmission to the brain. Descending signals from the brain can also modulate the gate.

## 7. A - Cerebellum

The cerebellum ("little brain") coordinates voluntary movements, maintains posture and balance, and enables motor learning. Damage causes ataxia - uncoordinated movements, poor balance, and difficulty with fine motor tasks. It integrates sensory input with motor commands.

### **8. C - Are slower and longer-lasting**

The endocrine system communicates via hormones released into the bloodstream, producing slower but longer-lasting effects than the nervous system's rapid electrical and chemical signals. Hormones can affect distant target cells throughout the body. Nervous signals act quickly but briefly.

### **9. B - Saltatory conduction**

Myelin sheath (produced by oligodendrocytes in CNS, Schwann cells in PNS) insulates axons, allowing action potentials to "jump" between nodes of Ranvier. This saltatory conduction is much faster than continuous conduction in unmyelinated axons. Demyelination (as in multiple sclerosis) impairs neural transmission.

### **10. D - Hunger, thirst, and body temperature**

The hypothalamus maintains homeostasis by regulating hunger, thirst, body temperature, sleep-wake cycles, and endocrine function (via pituitary gland). It's the body's "thermostat" and integrates autonomic nervous system responses with hormonal signals.

### **11. A - Reward, motivation, and motor control**

Dopamine pathways are involved in reward and pleasure (mesolimbic pathway), motivation, motor control (nigrostriatal pathway - degeneration causes Parkinson's), and executive function. Dysregulation is implicated in addiction, schizophrenia, and movement disorders.

### **12. C - Minimum stimulus intensity detectable 50% of the time**

The absolute threshold is the minimum stimulus intensity that can be detected 50% of the time. It varies by sensory modality and individual factors. Below threshold = subliminal. Signal detection theory accounts for response bias in threshold measurement.

### **13. B - Balance and spatial orientation**

The vestibular system in the inner ear (semicircular canals and otolith organs) detects head position, movement, and acceleration, providing sense of balance and spatial orientation. It works with proprioception and vision to maintain equilibrium. Damage causes vertigo and balance problems.

### **14. D - Learning and memory**

Long-term potentiation (LTP) is lasting strengthening of synapses based on recent activity patterns. When neurons fire together repeatedly, their connection strengthens ("neurons that fire together wire together"). LTP in the hippocampus is thought to underlie memory formation and synaptic plasticity.

### **15. D - Increased heart rate and pupil dilation**

The sympathetic nervous system ("fight or flight") causes: increased heart rate, pupil dilation, bronchodilation, increased blood pressure, decreased digestion, and glucose release. These prepare the body for action.

### **16. C - Serotonin**

Serotonin regulates mood, sleep, appetite, and other functions. Low serotonin is associated with depression and anxiety. SSRIs (selective serotonin reuptake inhibitors) are common antidepressants that increase serotonin availability in synapses by blocking reuptake.

### **17. B - Relay station for sensory information (except smell)**

The thalamus relays sensory information (except olfaction, which goes directly to cortex) to appropriate cortical areas for processing. It's a "switchboard" filtering and directing sensory input. It also regulates consciousness, sleep, and alertness.

### **18. D - Stress (HPA axis activation)**

Cortisol is released by adrenal cortex when the hypothalamic-pituitary-adrenal (HPA) axis is activated by stress. It mobilizes energy, suppresses immune function, and helps body cope with stressors. Chronic elevated cortisol has negative health effects including impaired memory and immune suppression.

### **19. B - Receptors become less sensitive to constant stimulation**

Sensory adaptation occurs when receptors decrease their response to unchanging stimuli. Examples: not feeling clothes on skin, adapting to smells, adjusting to darkness. This allows detection of changes in environment rather than constant stimulation. Different senses adapt at different rates.

### **20. C - Left and right cerebral hemispheres**

The corpus callosum connects the two cerebral hemispheres, allowing them to communicate and coordinate. Split-brain studies (cutting corpus callosum to treat epilepsy) revealed hemispheric specialization: left hemisphere typically handles language and analytical tasks, right handles spatial and holistic processing.

### **21. B - fMRI**

Functional magnetic resonance imaging (fMRI) measures blood flow changes (BOLD signal) to assess brain activity. Active brain regions require more oxygen, increasing blood flow. fMRI provides good spatial resolution showing which brain areas activate during tasks. EEG measures electrical activity with good temporal resolution.

## **22. D - Arousal and attention**

The reticular formation (network in brainstem) regulates arousal, alertness, and attention. It filters sensory input and determines what reaches consciousness. Damage can cause coma. The reticular activating system (RAS) maintains wakefulness and focuses attention.

## **23. A - The proportion of trait variation in a population due to genetic factors**

Heritability estimates what percentage of observed variation in a trait within a population is attributable to genetic differences (vs. environmental). Heritability  $\neq$  "genetically determined" - it's population-specific and doesn't apply to individuals. High heritability doesn't mean traits can't change with environment.

## **24. C - Building perception from sensory input**

Bottom-up processing constructs perception from raw sensory data without prior expectations - analysis begins with stimulus and builds up to higher-level processing. Top-down processing uses prior knowledge, expectations, and context to interpret sensory information. Both typically work together in perception.

## **25. B - Language comprehension**

Wernicke's area, located in the temporal lobe (typically left), is responsible for language comprehension. Damage causes Wernicke's aphasia (receptive aphasia) - patients produce fluent but meaningless speech and cannot understand language. This contrasts with Broca's aphasia affecting production.

## **26. D - About 20-30 seconds**

Short-term memory (working memory) holds limited information (about  $7 \pm 2$  items) for brief periods, typically 20-30 seconds without rehearsal. Information can be maintained longer through rehearsal or transferred to long-term memory through encoding. Chunking increases capacity by grouping information.

## **27. A - Converting sensory input into a form usable by memory**

Encoding is the process of transforming sensory information into memory representations that can be stored. Types include visual (imagery), acoustic (sound), and semantic (meaning) encoding. Deeper, semantic encoding generally produces better retention than shallow, structural encoding.

## **28. C - Old information interferes with learning new information**

Proactive interference occurs when previously learned information makes it harder to learn or recall new information. Example: old phone number interfering with remembering new one. Retroactive interference is the opposite - new learning interferes with old memories. Both explain forgetting.

### **29. C - Brief sensory memory for visual information**

Iconic memory is ultra-brief sensory memory for visual stimuli, lasting less than a second. Sperling's experiments demonstrated people see more than they can report - iconic memory fades before all items can be verbally reported. Echoic memory is the auditory equivalent (lasts 3-4 seconds).

### **30. D - First items are best remembered**

The primacy effect (remembering first items best) occurs because early items receive more rehearsal and transfer to long-term memory. Combined with the recency effect (remembering last items from short-term memory), this creates the serial position curve. Middle items are recalled least.

### **31. C - Inability to see new uses for familiar objects**

Functional fixedness is a cognitive bias limiting perception of object uses to their typical functions. Example: not seeing a shoe as a hammer. It's a type of mental set that inhibits creative problem-solving. Overcoming functional fixedness enables innovative thinking.

### **32. B - Mental shortcuts for quick decision-making**

Heuristics are mental shortcuts or "rules of thumb" that simplify decision-making and judgment. They're usually efficient but can lead to systematic errors (biases). Examples: availability, representativeness, and anchoring heuristics. Algorithms guarantee correct solutions but are slower.

### **33. D - Judging probability by ease of recalling examples**

The availability heuristic judges event likelihood by how easily examples come to mind. Vivid, recent, or dramatic events seem more common than they are. Example: overestimating airplane accident risk after media coverage. Memory accessibility doesn't always reflect true probability.

### **34. A - Seeking evidence that supports existing beliefs**

Confirmation bias is the tendency to search for, interpret, and recall information confirming pre-existing beliefs while dismissing contradictory evidence. It maintains beliefs despite evidence against them and contributes to polarization. Scientists combat it through hypothesis testing and peer review.

### **35. C - Thinking about one's own thinking**

Metacognition is awareness and understanding of one's own thought processes - "thinking about thinking." It includes monitoring comprehension, evaluating strategy effectiveness, and planning approach to tasks. Strong metacognitive skills improve learning and problem-solving.

### **36. B - Logical thinking about concrete objects**

Piaget's concrete operational stage (ages 7-11) is characterized by logical thinking about concrete objects and events, conservation understanding, reversibility, and classification abilities. Children can perform mental operations but struggle with abstract, hypothetical reasoning (which develops in formal operational stage).

### **37. A - Pavlov with dogs**

Ivan Pavlov discovered classical conditioning studying dogs' digestive systems. He noticed dogs salivated to stimuli associated with food (bell). Through repeated pairings of neutral stimulus (bell) with unconditioned stimulus (food), the bell became a conditioned stimulus eliciting conditioned response (salivation).

### **38. D - Strengthens behavior by removing aversive stimulus**

Negative reinforcement strengthens behavior by removing or avoiding unpleasant stimuli. Example: taking aspirin removes headache pain, reinforcing aspirin-taking. It's not punishment - it increases behavior. Positive reinforcement adds pleasant stimulus; punishment decreases behavior.

### **39. C - Learning can occur without reinforcement**

Latent learning (Tolman's rats learning maze layout without reinforcement) demonstrates learning can occur without immediate reinforcement and may not be expressed until motivation exists. This challenged strict behaviorism's view that learning requires reinforcement and showed cognitive factors' importance.

### **40. D - Social learning theory (Bandura)**

Observational learning (modeling) occurs by watching others. Bandura's Bobo doll experiments showed children imitate observed aggressive behavior. Social learning theory adds cognitive factors (attention, retention, reproduction, motivation) to behaviorism, explaining how learning occurs through observation without direct reinforcement.

### **41. D - Rapid eye movements and vivid dreams**

REM (rapid eye movement) sleep is characterized by rapid eye movements, vivid dreams, muscle paralysis (except eye and breathing muscles), and paradoxically active brain waves resembling waking state. REM increases across the night. REM deprivation impairs learning and mood.

### **42. D - Physiological response causes emotion**

The James-Lange theory proposes physiological arousal precedes and causes emotional experience: "We feel sad because we cry." Event → Physiological response → Emotion. This contrasts with common-sense view (emotion causes physiological response) and Cannon-Bard theory (simultaneous occurrence).

### **43. D - Physiological needs**

Maslow's hierarchy is typically depicted as a pyramid with physiological needs (food, water, shelter, sleep) at the base. These must be satisfied before higher needs: safety, love/belonging, esteem, and self-actualization at the peak. Critics note people sometimes prioritize higher needs despite unmet lower needs.

#### **44. A - Intelligence**

The Big Five personality traits (OCEAN or CANOE) are: Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. These dimensions are relatively stable across time and cultures. Intelligence is a cognitive ability, not a Big Five personality trait.

#### **45. C - Identity vs. role confusion**

Erikson's eight psychosocial stages each involve a developmental conflict. Adolescence (12-18 years) centers on identity vs. role confusion - developing sense of self and personal identity or experiencing confusion about one's role. Successful resolution leads to fidelity.

#### **46. D - Hallucinations and delusions**

Positive symptoms of schizophrenia are additions to normal functioning: hallucinations (false perceptions, often auditory), delusions (false beliefs), disorganized speech, and disorganized behavior. Negative symptoms are reductions: flat affect, alogia (poverty of speech), avolition (lack of motivation), and social withdrawal.

#### **47. C - Persistent depressed mood and anhedonia**

Major depressive disorder (MDD) involves persistent ( $\geq 2$  weeks) depressed mood and/or anhedonia (loss of pleasure/interest) plus other symptoms: sleep changes, appetite changes, fatigue, worthlessness/guilt, concentration problems, psychomotor changes, or suicidal thoughts. It significantly impairs functioning.

#### **48. C - Persistent unwanted thoughts and repetitive behaviors**

Obsessive-compulsive disorder (OCD) involves obsessions (intrusive, unwanted thoughts causing anxiety) and/or compulsions (repetitive behaviors or mental acts performed to reduce anxiety). Common themes: contamination/washing, symmetry/ordering, forbidden thoughts, and harm/checking. Compulsions provide temporary relief.

#### **49. D - Changing maladaptive thoughts and behaviors**

Cognitive-behavioral therapy (CBT) addresses maladaptive thought patterns and behaviors. It combines cognitive therapy (identifying and changing distorted thinking) with behavioral techniques (exposure, behavioral activation). CBT is empirically supported for anxiety, depression, and other disorders.

#### **50. D - Interaction of biological, psychological, and social factors**

The biopsychosocial model (Engel) views health and illness as resulting from complex interactions among biological (genetic, physiological), psychological (thoughts, emotions, behaviors), and social

(relationships, culture, socioeconomic status) factors. This holistic approach contrasts with purely biomedical models.

### **51. B - Overemphasizing dispositional factors in explaining others' behavior**

The fundamental attribution error is the tendency to overattribute others' behavior to internal characteristics (personality, traits) while underestimating situational influences. Example: assuming someone who cut you off in traffic is rude (disposition) rather than rushing to emergency (situation). We're more situational when explaining our own behavior.

### **52. C - Attitudes and behaviors conflict**

Cognitive dissonance (Festinger) is psychological discomfort from holding contradictory beliefs or when attitudes and behaviors conflict. People reduce dissonance by changing attitudes, changing behaviors, or adding justifications. Example: smoker knowing smoking is harmful may quit, deny risks, or rationalize ("everyone dies anyway").

### **53. B - Making small request followed by larger request**

The foot-in-the-door technique involves gaining compliance with small request first, then making larger request. People who agree to small requests are more likely to agree to subsequent larger ones to maintain consistency. Example: signing petition, then donating money.

### **54. D - Cohesive groups seek consensus without critical evaluation**

Groupthink (Janis) occurs when desire for harmony in cohesive groups leads to irrational decision-making. Members suppress dissent, fail to critically evaluate alternatives, and achieve consensus without adequate consideration. Factors: high cohesion, isolation, directive leadership, stress. Prevention: encourage dissent, devil's advocate.

### **55. D - Presence of others enhances performance on simple tasks**

Social facilitation (Zajonc) states that presence of others enhances performance on simple/well-learned tasks but impairs performance on complex/novel tasks. Arousal from others' presence strengthens dominant response (correct for easy tasks, incorrect for difficult ones).

### **56. D - More bystanders decrease likelihood of helping**

The bystander effect shows that individuals are less likely to help when others are present. Diffusion of responsibility (others will help), social influence (others not helping suggests no emergency), and evaluation apprehension (fear of looking foolish) all reduce helping. Kitty Genovese case famously illustrated this.

### **57. C - Unjustified negative attitude toward a group**

Prejudice is an unjustified (usually negative) attitude toward a group and its members. It involves stereotypes (beliefs), negative feelings, and behavioral tendencies. It can be explicit (conscious) or implicit (unconscious). Discrimination is the behavioral component - unfair treatment based on group membership.

### **58. D - Generalized beliefs about group members**

Stereotypes are generalized beliefs about characteristics of group members. They can be positive, negative, or neutral but oversimplify reality and ignore individual variation. Stereotypes influence perception and memory, creating self-fulfilling prophecies. They're resistant to change even when faced with contradictory evidence.

### **59. A - Favoring one's own group**

In-group bias (in-group favoritism) is the tendency to favor members of one's own group over out-group members in judgments, allocations, and evaluations. It contributes to intergroup conflict and discrimination. Social identity theory explains this as enhancing self-esteem through group membership.

### **60. D - Repeated exposure increases liking**

The mere exposure effect (Zajonc) demonstrates that repeated exposure to neutral stimuli increases liking for them. Simply encountering something multiple times makes it more familiar and preferred. This applies to faces, sounds, words, and objects. It operates even without conscious awareness.

### **61. D - Rewards exceed costs**

Social exchange theory proposes that relationships are maintained when rewards (emotional support, companionship, resources) exceed costs (time, effort, stress). People evaluate relationships through a cost-benefit lens, staying when the balance is positive and outcomes meet or exceed comparison levels.

### **62. D - Decreased self-awareness and increased impulsive behavior**

Deindividuation occurs when individuals in groups lose self-awareness and personal accountability, leading to impulsive, sometimes antisocial behavior. Anonymity, arousal, and group immersion reduce normal restraints. Examples: mob behavior, online trolling. Factors: large groups, anonymity, altered consciousness.

### **63. C - Asch's line judgment studies**

Solomon Asch's conformity experiments had participants judge line lengths in presence of confederates giving wrong answers. About 75% of participants conformed at least once, demonstrating powerful social pressure even when correct answer was obvious. Conformity increased with group size (up to ~4) and unanimity.

### **64. D - Milgram's shock experiments**

Stanley Milgram's obedience studies had participants administer apparently painful electric shocks to learners (confederates) when instructed by authority figure. About 65% delivered maximum 450-volt shock, demonstrating disturbing willingness to obey authority even when causing apparent harm. Raised ethical concerns but revealed important insights.

### **65. B - Expectations influence behavior to confirm the expectation**

Self-fulfilling prophecy occurs when expectations about someone lead to behaviors that cause the person to confirm those expectations. Rosenthal's Pygmalion effect showed teachers' expectations affected student performance. Expectations → behaviors → confirmation, creating a cycle that reinforces initial beliefs.

### **66. B - Explain behavior causes**

Attribution theory examines how people explain behavior causes - whether they attribute behavior to internal dispositions or external situations. Heider, Jones, and Kelley developed attribution models. Key dimensions: internal/external, stable/unstable, controllable/uncontrollable. Attributions affect emotions, expectations, and future behavior.

### **67. B - Central and peripheral routes**

The elaboration likelihood model (Petty & Cacioppo) proposes two persuasion routes: Central route involves careful consideration of arguments (requires motivation and ability) leading to lasting attitude change. Peripheral route uses superficial cues (attractiveness, number of arguments) requiring less effort but producing temporary change.

### **68. C - Individuals exert less effort in groups**

Social loafing is reduced individual effort when working in groups compared to working alone. People feel less accountable in groups, leading to diffusion of responsibility. It's reduced when individual contributions are identifiable, tasks are meaningful, or group members are valued. Opposite of social facilitation.

### **69. D - Attribute successes to internal factors and failures to external factors**

The self-serving bias leads people to take credit for successes (internal attribution: "I'm smart") while blaming failures on external factors (situational attribution: "The test was unfair"). This protects self-esteem and maintains positive self-image. Group-serving bias extends this to in-groups.

### **70. A - People should help those who help them**

The reciprocity norm is the social expectation to help those who have helped us and to avoid harming those who have helped us. It's a universal social rule promoting cooperation and social cohesion. People feel obligated to return favors. Used in persuasion techniques (door-in-the-face).

### **71. C - Selfless concern for others' welfare**

Altruism is selfless concern for others' welfare - helping without expecting personal benefit. Debate exists whether truly selfless altruism exists (versus egoistic motivation like feeling good). Evolutionary explanations include kin selection and reciprocal altruism. Empathy-altruism hypothesis (Batson) proposes empathy motivates genuine altruism.

#### **72. D - Frustration or provocation is present**

Aggression is more likely when frustration, provocation, pain, heat, overcrowding, or alcohol is present. Frustration-aggression hypothesis proposes frustration increases aggression likelihood. General aggression model integrates personal factors (traits, attitudes) with situational factors (provocation, cues) influencing aggression through cognitive, affective, and arousal routes.

#### **73. D - Part of self-concept comes from group memberships**

Social identity theory (Tajfel & Turner) proposes that part of self-concept derives from group memberships (social identity) along with personal characteristics (personal identity). People categorize themselves and others into groups, identify with in-groups, and compare groups favorably to enhance self-esteem.

#### **74. D - Judging other cultures by one's own cultural standards**

Ethnocentrism is evaluating other cultures using one's own culture as the standard, typically viewing one's own culture as superior. It leads to cultural insensitivity and conflict. Cultural relativism is the alternative approach - understanding cultures within their own context without judgment.

#### **75. D - Equal-status contact under supportive conditions**

Contact hypothesis (Allport) proposes that prejudice can be reduced through intergroup contact under optimal conditions: equal status, common goals, intergroup cooperation, and institutional support. Mere contact isn't sufficient - these conditions are necessary for positive effects. Casual contact without these features can increase prejudice.

#### **76. C - Hierarchical arrangement of individuals into social classes**

Social stratification is society's hierarchical ranking of people into social classes or strata based on wealth, power, and prestige. Stratification systems include caste (rigid, ascribed) and class (more fluid, achieved and ascribed). Marx analyzed class based on economic production; Weber added status and power dimensions.

#### **77. B - Changes in social status or class position**

Social mobility refers to movement between social positions/classes. Types include: vertical (upward or downward in stratification), horizontal (same level but different position), intergenerational (between generations), and intragenerational (within one's lifetime). Structural mobility results from economic changes; exchange mobility from individual movement.

### **78. D - Knowledge, skills, and education conferring social status**

Bourdieu's cultural capital includes knowledge, skills, education, and cultural competencies that confer social status and advantage. Forms include embodied (internalized knowledge, dispositions), objectified (cultural goods), and institutionalized (credentials). Cultural capital reproduces class advantage across generations and affects educational and economic opportunities.

### **79. A - The income threshold below which a family is considered poor**

The poverty line (poverty threshold) is the minimum income level needed to meet basic needs. It's adjusted for family size and composition. Critics note it doesn't account for geographic cost variations, hasn't kept pace with living costs, and doesn't measure relative poverty or deprivation.

### **80. B - Defining non-medical issues as medical problems**

Medicalization is the process by which non-medical problems become defined and treated as medical conditions. Examples: childbirth, ADHD, erectile dysfunction, aging. It can provide helpful treatment but also creates markets for pharmaceuticals, pathologizes normal variation, and may obscure social causes of problems.

### **81. D - Exemption from normal responsibilities and seeking medical help**

Parsons' sick role concept describes expected behaviors when ill: (1) exemption from normal responsibilities, (2) not held responsible for condition, (3) must try to get well, and (4) must seek competent medical help. This legitimizes illness but also controls deviation. Not all illnesses fit this model (chronic conditions, stigmatized illnesses).

### **82. B - How social factors affect health and disease distribution**

Social epidemiology studies how social, economic, and cultural factors affect disease patterns and health outcomes in populations. It examines relationships between socioeconomic status, race/ethnicity, gender, social networks, neighborhoods, and health. Identifies social determinants of health and health disparities.

### **83. C - Between different population groups**

Health disparities are differences in disease burden, mortality, or health outcomes between population groups defined by socioeconomic status, race/ethnicity, gender, geography, or other social categories. They're often preventable and reflect systematic inequities in health determinants and healthcare access.

### **84. B - Personal troubles and public issues**

C. Wright Mills' sociological imagination connects personal experiences (private troubles) to broader social structures and historical forces (public issues). It allows seeing how individual biography intersects with history and social structure. Example: individual unemployment (trouble) related to economic recession (issue).

### **85. C - Population shift from rural to urban areas**

Urbanization is the increasing proportion of population living in urban areas through rural-to-urban migration and natural increase. Accompanies industrialization and economic development. Creates opportunities (jobs, services, culture) but also challenges (overcrowding, pollution, inequality). Global urbanization continues, especially in developing countries.

### **86. D - Population changes as societies develop economically**

Demographic transition theory describes population changes accompanying economic development: Stage 1 (high birth and death rates, stable population), Stage 2 (declining death rate, high birth rate, rapid growth), Stage 3 (declining birth rate, slowing growth), Stage 4 (low birth and death rates, stable population). Some add Stage 5 (declining population).

### **87. B - Number of live births per woman**

Fertility rate (total fertility rate, TFR) measures the average number of live births per woman during her reproductive years. Replacement-level fertility is ~2.1 in developed countries. Rates vary globally - highest in sub-Saharan Africa, lowest in developed countries and East Asia. Affected by socioeconomic development, education, contraception access, and cultural factors.

### **88. D - Systematic discrimination embedded in social institutions**

Institutional discrimination is systematic discrimination built into organizational policies, practices, and structures. It doesn't require individual prejudice - discriminatory outcomes result from institutional functioning. Examples: redlining, racial disparities in criminal justice, unequal school funding. Contrasts with individual discrimination.

### **89. D - Meanings people create through social interaction**

Symbolic interactionism (Mead, Blumer) focuses on micro-level interactions and how people create shared meanings through symbols (language, gestures). Reality is socially constructed through interaction. People act based on meanings, which arise through interaction and are modified through interpretation. Emphasizes agency and meaning-making.

### **90. D - Many aspects of reality are socially created**

Social constructionism argues that many aspects of reality are socially created through human interaction and agreement rather than existing objectively. This includes categories, meanings, institutions, and social problems. Doesn't deny physical reality but emphasizes that interpretation, significance, and response are socially constructed.

### **91. C - Defining deviance as medical conditions**

Medicalization of deviance redefines deviant behaviors as medical conditions requiring treatment rather than punishment. Examples: alcoholism as disease, ADHD, homosexuality (formerly). Can reduce stigma

and provide treatment but also increases social control through medicine and may ignore social factors contributing to behaviors.

### **92. C - Societal reactions and labels create deviance**

Labeling theory (Lemert, Becker) proposes that deviance isn't inherent in acts but results from societal reactions and labels. Primary deviance is initial violation; secondary deviance emerges when labeled "deviant" becomes master status affecting identity and behavior. Labels create stigma, limit opportunities, and can lead to self-fulfilling prophecies.

### **93. D - Implicit lessons about social norms and values**

The hidden curriculum refers to lessons schools teach beyond official academic content - social norms, values, behaviors, and expectations. Includes punctuality, obedience, competition, social roles. It socializes students into social structures and can reproduce inequality by teaching different lessons to different groups.

### **94. D - Minority groups adopt majority culture**

Assimilation is the process by which minority groups adopt the cultural practices, values, and identity of the dominant/majority culture, often losing their original culture. Contrasts with multiculturalism (maintaining distinct cultures) and pluralism (multiple cultures coexisting). Can be voluntary or forced. Straight-line assimilation assumes complete adoption over generations.

### **95. C - Coexistence and appreciation of diverse cultures**

Multiculturalism promotes recognition, acceptance, and appreciation of cultural diversity within society. Different cultures maintain distinctiveness while coexisting. Policies support cultural expression, accommodate differences, and challenge discrimination. Debates concern limits, integration, and whether it promotes division or enrichment.

### **96. D - Declining religious influence in society**

Secularization is the process by which religion loses social and cultural significance in society. Indicators include declining religious participation, religious institutions losing authority in politics and education, and increasing religious pluralism and tolerance. Secularization thesis is debated - some see continued religious vitality, especially globally.

### **97. D - Gender inequality and women's experiences**

Feminist theory examines gender inequality, patriarchy, and women's experiences. It analyzes how gender shapes social institutions, identities, and power relations. Perspectives include liberal (equality through reform), radical (patriarchy as fundamental oppression), socialist (gender and class intersect), and intersectional (gender with race, class, sexuality). Seeks understanding and social change.

### **98. B - Networks and relationships providing value**

Social capital refers to resources accessible through social networks and relationships. Bourdieu emphasized how social connections provide advantages. Putnam distinguished bonding capital (close ties) from bridging capital (diverse connections). Coleman emphasized how social capital facilitates cooperation and collective action. Affects health, education, and economic outcomes.

### **99. D - Increasing interconnection of world economies and cultures**

Globalization is the increasing economic, political, cultural, and social interconnection across the world. Facilitated by technology, transportation, and communication. Effects include economic integration, cultural exchange/homogenization, migration, and environmental impacts. Debates concern winners/losers, sovereignty, and cultural preservation.

### **100. D - Socioeconomic status, healthcare access, and environmental factors**

Life expectancy is influenced by multiple factors: genetics, individual behaviors (diet, exercise, smoking), socioeconomic status (income, education, occupation), healthcare access and quality, environmental conditions, and social policies. Disparities in life expectancy between and within countries reflect health inequalities stemming from these social determinants of health.