



SECTION 2

TEST I SAMPLE QUESTIONS

This section of the Georgia Assessments for the Certification of Educators® (GACE™) Preparation Guide provides sample selected-response questions with an annotated answer key for you to review as part of your preparation for the test. The sample selected-response questions are designed to illustrate the nature of the test questions. Work through the questions carefully before referring to the annotated answer key, which follows the sample selected-response questions. The answer key provides the correct response to each question, describes why each correct response is the best answer, and lists the objective within the test framework to which each question is linked.

QUESTIONS

1. Use the diagram below of a bone to answer the question that follows.



Which of the following best describes the role in human growth and development of the areas labeled X?

- A. The surfaces of the joints are laid down at these areas.
- B. Longitudinal growth of bones takes place at these areas.
- C. Increases in the density of cortical bone take place at these areas.
- D. White and red blood cells are generated at these areas.

2. Alveoli are anatomical structures that provide an interface between which two body systems?
- A. respiratory and circulatory
 - B. respiratory and endocrine
 - C. digestive and circulatory
 - D. digestive and endocrine
3. An adolescent plans to follow a strict vegetarian diet that will not include any meat, eggs, or dairy products. In addition to fruits and vegetables, the diet will include pasta, whole grains, nuts, seeds, legumes, tofu, and soy milk. To maintain optimal health, a nutritionist would most likely recommend that the adolescent supplement this diet with:
- A. potassium and sodium.
 - B. vitamins B₁₂ and D.
 - C. thiamin and beta carotene.
 - D. vitamins E and K.

4. Regularly washing the hands with soap and water is important in preventing infections and illness because it:
- A. helps shed dead skin cells before they break down.
 - B. maintains the health of the skin cells.
 - C. physically removes bacteria and other pathogens.
 - D. kills bacteria and viruses on the skin.
5. Which of the following is one difference in the body's immune response to viral infections (e.g., measles, poliomyelitis) compared with bacterial infections (e.g., bacterial pneumonia, tuberculosis)?
- A. Recovery from viral infectious diseases usually confers some degree of immunity to future infections with that specific virus.
 - B. The immune system is usually not able to eliminate viruses causing a particular infection because access routes are largely unknown.
 - C. Bacteria usually target and suppress the immune system itself before infecting a particular organ or site in the body.
 - D. The immune response to bacterial disease usually involves the development of a high fever.
6. Which of the following best describes how the class of drugs such as amphetamines, methamphetamine, and cocaine produce reactions in the human body?
- A. They depress the central nervous system and slow down messages being sent by the brain, relaxing muscles and producing analgesic effects.
 - B. They release chemicals into the lungs that are then absorbed and bound to cannabinoid receptors in the central nervous system, producing psychoactive effects.
 - C. They contain alkaloid compounds that act on sensory organs and their receptor cells, altering sensory input into the brain and distorting perceptions of reality.
 - D. They act on neurotransmitters such as dopamine and noradrenalin in the brain, prolonging euphoria-producing effects and stimulating the central nervous system.

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7. Joe and his friend Lance, both high school seniors, go to a party together. At the party, Lance begins drinking with some mutual friends. This group attempts to pressure Joe into joining them and, when he refuses, begins taunting him. Which of the following is likely to be the best way for Joe to handle this situation?
- A. avoiding conflict by walking away from the group
 - B. explaining to the group the reasons why he does not drink
 - C. informing the group that the taunting is harming their friendship
 - D. convincing Lance that their friends are actually a bad influence
8. A public service agency is developing an antismoking advertising campaign aimed at teenagers. Which of the following messages would most effectively counter marketing techniques often used by cigarette manufacturers?
- A. Smoking is expensive and will likely require one to forgo satisfying other wants and needs.
 - B. Smoking is for adults only and will likely lead to confrontations with adults in the home and school.
 - C. Smoking is associated with various diseases and will likely lead to health problems in adulthood.
 - D. Smoking is unattractive and is likely to have negative effects on one's social status.
9. Carlos is listening to Rita explain why she has an opinion that is different from his on a subject that is important to both of them. When Rita finishes her explanation, Carlos is still not convinced. Carlos could best indicate that he respects Rita by telling her that:
- A. this is a very important matter, and that he is sorry she doesn't agree with him.
 - B. her argument is too weak to convince him to change his mind.
 - C. he understands her position and will consider it, but at present he still disagrees.
 - D. they should find a third person who can help them decide who is correct.

10. A five-year-old boy has a new baby brother. Which of the following parental strategies is likely to be most effective in helping the five year old feel secure about his place within the family as he adjusts to having a new baby brother?
- A. giving the five year old new toys and telling him they are from the baby brother
 - B. organizing regular activities and special times with just the five year old and one or both parents
 - C. having one parent care for the five year old while the other cares for the baby brother
 - D. giving the five year old responsibility for feeding and changing the baby brother
11. Medicaid is best described as a federal health insurance plan in which:
- A. private health insurance premiums are reimbursed by the federal government.
 - B. health care is provided to people whose income is below a specific minimum level.
 - C. private hospitals are reimbursed for providing health care to the uninsured.
 - D. health care is provided to people over 65 years old who have previously paid into the plan.

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ANNOTATED ANSWER KEY

For question	The correct response is	Reason	Test Objective
1	B	The areas labeled X in the diagram of a human long bone are the epiphyseal plates. During childhood and adolescence, bone formation occurs at these sites, resulting in a collar of cartilage called the epiphyseal, or growth plate. These epiphyseal plates allow longitudinal bone growth.	0001
2	A	The alveoli provide an interface between the respiratory and circulatory systems in the human body. Air is inhaled by the nose and mouth and travels through the pharynx, larynx, trachea, bronchi, and bronchioles before reaching the alveoli, the smallest respiratory structures. The alveoli are the sites of gas exchange between the lungs and the bloodstream.	0002
3	B	A strict vegetarian or vegan diet that includes only foods of plant origin should be supplemented with B ₁₂ and D because these vitamins occur naturally in foods of animal origin such as meat, seafood, poultry, dairy products, and eggs. Another source of vitamin D is sunlight, but this source alone is unlikely to meet an adolescent's needs. The functions of vitamin B ₁₂ include synthesizing new cells, maintaining nerve cells, and helping to break down fatty acids. Vitamin D is essential for calcium absorption and bone metabolism. An adolescent who follows a vegan diet should take vitamin B ₁₂ and D supplements.	0003
4	C	Many studies have shown that washing the hands with plain soap and water significantly eliminates germs from the hands. Hand washing removes bacteria, tiny single-celled organisms, and viruses, the smallest pathogens, that might otherwise invade a susceptible human host. Regular hand washing is a simple and effective personal care strategy for preventing bacterial and viral infections.	0004
5	A	Lasting immunity follows recovery from contagious viral infections such as poliomyelitis and measles (rubeola). When the immune system is challenged by an antigen, such as a polio or measles virus, it "remembers" it. If an individual is exposed to a specific antigen or virus again, his or her immune system recognizes it, responds, and prevents re-infection. The immune system, however, reacts differently to the pathogens in disease-causing bacteria, in that bacterial infections can be treated successfully with antibiotics but can reoccur.	0005

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For question	The correct response is	Reason	Test Objective
6	D	The way in which drugs such as amphetamines, methamphetamine, and cocaine stimulate the brain and central nervous system is by inhibiting the reuptake of neurotransmitters. Amphetamines increase the activity of the neurotransmitter noradrenalin (norepinephrine); the resulting release of noradrenalin by nerve cells interferes with the cells' reuptake and breakdown of the chemical, making it more abundant and prolonging its effects. Cocaine acts by binding to dopamine, serotonin, and noradrenalin proteins in the brain, directly preventing the reuptake of these neurotransmitters into presynaptic neurons.	0006
7	A	In this situation, it is best if Joe avoids a confrontation with Lance and friends by walking away and refusing to participate in the risk-taking behavior of underage drinking. In evaluating the consequences of this action versus other actions, a mature individual would most likely conclude that the best way to avoid conflict and escalation of a risky situation is to simply remove oneself from the situation. This is an effective application of using refusal to manage conflict.	0007
8	D	A critical analysis of cigarette advertisements would reveal that smokers are often depicted as healthy, energetic, attractive, and successful. Tobacco companies promote cigarette-branded accessories and clothing and sponsor product placements in sporting events, movies, and music videos. This type of marketing provides models and behaviors that cigarette manufacturers hope teenagers will emulate. An effective message to counter these marketing techniques, therefore, is one that communicates that smoking is unattractive and socially unacceptable. An antismoking campaign aimed at teenagers should emphasize the negative effects of smoking in relation to two of the major preoccupations of the adolescent stage of development: personal appearance and social standing among peers.	0008
9	C	Listening to another individual's opinion and communicating respect for that opinion, even when it differs from one's own, is a key component of a successful interpersonal relationship. In addition, developing traits such as social responsibility, empathy, and valuing and respecting individual differences are core goals of character education. In this scenario, Carlos could best communicate understanding and respect for Rita's opinion while maintaining integrity by telling Rita that although he values and will consider her position, he also disagrees with it. By doing so, Carlos demonstrates respect in an empathetic, nonconfrontational, and unapologetic way.	0009

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For question	The correct response is	Reason	Test Objective
10	B	When a new child becomes part of a family, it is important to assure young family members that their roles within the family structure will remain the same. In this situation, the five-year-old boy may feel insecure about his place within the family as he adjusts to a new baby brother. The parents will need to devote much time and attention to the new baby; it may be difficult for the five year old to share his parents. A good strategy for reassuring the five year old of his important and continuing role in the family is to organize regular activities, outings, and special times with just the boy. By doing so, the parents can show their love and affection in a concrete way.	0010
11	B	Medicaid is a U.S. government program that was enacted in 1965 to address the health-care needs of low-income persons under the age of 65. It is a federally subsidized health-care resource administered by state governments that provides free and reduced-cost medical benefits to applicants and their families whose incomes and assets fall below certain regulated levels.	0011