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**Note:** After clicking on a link, right click and select "Previous View" to go back to original text.
The GACE Health and Physical Education assessment is designed to measure the professional knowledge of prospective teachers of Health and Physical Education in the state of Georgia.

The fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5) was published in May 2013 with revisions to the criteria for the diagnosis and classifications of mental disorders. In the interest of fairness, and to allow time for educator preparation programs to integrate such changes into their curricula, test materials for this assessment will continue to reference the terminology, criteria, and classifications referred to in the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR) until further notice.

This assessment includes two tests. You may take either test individually or the full assessment in a single session. The testing time is the amount of time you will have to answer the questions on the test. Test duration includes time for tutorials and directional screens that may be included in the test. The questions in this assessment assess both basic knowledge across content areas and the ability to apply principles.

The total number of questions that are scored is typically smaller than the total number of questions on the test. Most tests that contain selected-response questions also include embedded pretest questions, which are not used in calculating your score. By including pretest questions in the assessment, ETS is able to analyze actual test-taker performance on proposed new questions and determine whether they should be included in future versions of the test.

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Content Specifications

Each test in this assessment is organized into content **subareas**. Each subarea is further defined by a set of **objectives** and their **knowledge statements**.

- The objectives broadly define what an entry-level educator in this field in Georgia public schools should know and be able to do.
- The knowledge statements describe in greater detail the knowledge and skills eligible for testing.
- Some tests also include content material at the evidence level. This content serves as descriptors of what each knowledge statement encompasses.

See a breakdown of the subareas and objectives for the tests in this assessment on the following pages.
Test I Subareas

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Approx. Percentage of Test</th>
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</thead>
<tbody>
<tr>
<td>I. Mental and Emotional Health/Professional Issues</td>
<td>25%</td>
</tr>
<tr>
<td>II. Personal Health and Wellness, Sexual Health, and Nutrition</td>
<td>40%</td>
</tr>
<tr>
<td>III. Safety and Injury Prevention, and Alcohol, Tobacco, and Other Drugs</td>
<td>35%</td>
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Test I Objectives

Subarea I: Mental and Emotional Health/Professional Issues

Objective 1: Understands the issues related to mental and emotional health

The beginning Health and Physical Education teacher:

A. Understands psychosocial development/emotional well-being
B. Knows the causes/consequences of mental/emotional health issues
C. Knows the consequences of risk-taking behaviors
D. Understands stress management skills
E. Knows how to identify factors that promote positive self-concept and self-esteem
F. Understands factors affecting healthy and unhealthy relationships
G. Understands strategies for coping with changes in families
H. Understands the concepts of interpersonal communication
I. Understands skills promoting healthy interactions
J. Understands the functions of various types of interpersonal relationships
K. Understands group dynamics
L. Knows the social/cultural influences on communication
M. Understands factors affecting decisions about dating
N. Understands the causes of conflict among youth
O. Knows the signs, symptoms, causes, and effects of self-destructive behavior
**Objective 2: Understands the professional issues related to health education**

The beginning Health and Physical Education teacher:

A. Knows the opportunities available for health education advocacy
B. Understands how to implement curricular and extracurricular programs
C. Understands the role of health educator as a liaison
D. Understands the factors influencing the content of health education
E. Knows how to locate and use valid sources of health information
F. Knows how to recognize and use effective peer leadership intervention, resistance, and refusal skills
G. Understands goal-setting and decision making
H. Understands risk factors and protective factors related to personal health and safety practices
I. Knows the components of the Whole School, Whole Community, Whole Child (WSCC) model, formerly the coordinated school health (CSH) approach

**Subarea II: Personal Health and Wellness, Sexual Health, and Nutrition**

**Objective 1: Understands the principles of personal health and wellness**

The beginning Health and Physical Education teacher:

A. Knows the concepts of personal hygiene
B. Understands the concepts of anatomy and physiology and body system interrelationships
C. Knows the patterns and stages of physical, cognitive, social, and emotional growth and development
D. Understands various factors that affect physical, cognitive, social, and emotional growth and development
E. Knows how to describe disease etiology and prevention/treatment
F. Understands the difference between communicable and non-communicable diseases
G. Understands the role of the body’s immune system
Objective 2: Understands the issues related to sexual health

The beginning Health and Physical Education teacher:

A. Knows the anatomy/physiology of the human reproductive system
B. Understands the decision-making process and considerations related to planning a family
C. Knows the stages that occur during pregnancy and childbirth
D. Knows the factors that influence sexual decisions
E. Knows the causes of HIV/AIDS
F. Knows the methods for preventing pregnancy, STDs, and HIV/AIDS

Objective 3: Understands the principles of nutrition

The beginning Health and Physical Education teacher:

A. Knows how to identify the functions and sources of nutrients
B. Understands the components of My Plate and Dietary Guidelines for Americans
C. Knows the components of a balanced diet
D. Understands principles for planning nutritious meals
E. Understands factors affecting food choices and eating habits
F. Knows dietary disorders and health issues
G. Knows how to evaluate diets relative to personal needs

Subarea III: Safety and Injury Prevention, and Alcohol, Tobacco, and other Drugs

Objective 1: Understands the issues related to safety and injury prevention

The beginning Health and Physical Education teacher:

A. Understands weather emergencies
B. Knows methods for promoting self care, safe behaviors, and injury prevention
C. Knows appropriate ways to respond to accidents
D. Understands threats to personal safety
E. Knows the legislation, agencies, and policies that support community health
F. Knows the characteristics of safe and unsafe places for play, travel, and recreation
G. Understands the causes, consequences, and prevention of different types of abuse and violence
H. Understands common causes and effects of accidents

Note: After clicking on a link, right click and select "Previous View" to go back to original text.
Objective 2: Understands the issues related to the use of alcohol, tobacco, and other drugs

The beginning Health and Physical Education teacher:

A. Understands the effects of substance use and abuse
B. Knows the appropriate uses of medicines
C. Knows the classifications of alcohol, tobacco, and other drugs
D. Understands the factors contributing to health risks associated with the use of alcohol, tobacco, and other drugs
E. Knows how the use of alcohol, tobacco, and other drugs affect personal goals
F. Understands how adolescent and teen drug use contributes to accidents, crime, suicide, mortality, and sexual activity
G. Understands that alcohol, tobacco, and drug dependencies are treatable diseases
H. Knows how to analyze alcohol, tobacco, and drug advertisements
Test II Subareas

<table>
<thead>
<tr>
<th>Subarea</th>
<th>Approx. Percentage of Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Basic Sciences of Physical Education</td>
<td>20%</td>
</tr>
<tr>
<td>II. Motor Learning and Motor Development</td>
<td>15%</td>
</tr>
<tr>
<td>III. Sports, Activities, and Fitness</td>
<td>30%</td>
</tr>
<tr>
<td>IV. Instructional Principles and Professionalism in Physical Education</td>
<td>35%</td>
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</tbody>
</table>

Test II Objectives

Subarea I: Basic Sciences of Physical Education

Objective 1: Understands how the applied sciences are related to physical education

The beginning Health and Physical Education teacher:

A. Understands biomechanics and kinesiology
B. Understands exercise physiology and fitness

Objective 2: Understands the principles of anatomy and physiology as related to physical education

The beginning Health and Physical Education teacher:

A. Understands anatomy and physiology
B. Understands the components of flexibility
C. Knows the major muscle groups
Subarea II: Motor Learning and Motor Development

Objective 1: Understands the principles of motor learning

The beginning Health and Physical Education teacher:

A. Understands principles, stages, sequences, and characteristics of motor development and learning
B. Understands factors influencing motor development and learning
C. Understands motor-learning concepts
D. Knows instructional prompts and cues for providing motor performance feedback
E. Understands skill themes and ways to promote movement concepts

Objective 2: Understands the principles of motor development

The beginning Health and Physical Education teacher:

A. Knows how to apply movement concepts
B. Understands movement principles and their application
C. Knows critical elements of movement patterns
D. Understands how to combine locomotor, nonlocomotor, and manipulative skills and patterns
E. Knows how to select developmentally appropriate techniques, skills, sequences, equipment, and materials for complex rhythmic, aerobic, and dance activities

Subarea III: Sports, Activities, and Fitness

Objective 1: Understands the principles of individual, dual, team, and lifetime sports or activities

The beginning Health and Physical Education teacher:

A. Knows the skills, rules, strategies, sequences, and performance assessment techniques for individual, dual, team, and lifetime sports, dance, and other activities
B. Understands critical elements essential to competent performance in individual, dual, and lifetime sports
C. Understands critical elements essential to competent performance in team sports
D. Understands critical elements of outdoor, adventure, and cooperative activities
E. Understands critical elements essential to competent performance in creative movement and dance
Objective 2: Understands fitness as it relates to training, fitness plans, sports, and activities

The beginning Health and Physical Education teacher:

A. Understands principles of training and conditioning
B. Knows principles and techniques for designing a fitness plan
C. Knows the effect of participation in sports and activities
D. Knows the appropriate etiquette, interactions, care of equipment, safety practices, and environmental considerations

Subarea IV: Instructional Principles and Professionalism in Physical Education

Objective 1: Understands management and motivation as it relates to physical education

The beginning Health and Physical Education teacher:

A. Knows the principles of classroom management
B. Understands the psychological and social factors that affect individual and group learning
C. Knows how to manage resources
D. Knows how to motivate students
E. Knows how to promote positive relationships
F. Knows how to use rules and routines to create a safe and effective learning environment
G. Knows how to promote self-management skills

Objective 2: Understands communication and collaboration as related to physical education

The beginning Health and Physical Education teacher:

A. Understands effective verbal and nonverbal communication
B. Knows how to provide appropriate instructional feedback
C. Knows how to deliver effective demonstrations and explanations
D. Knows how to integrate knowledge and skills from multiple subject areas in physical education
E. Knows how to promote opportunities to be physically active

Note: After clicking on a link, right click and select "Previous View" to go back to original text.
Objective 3: Understands the principles involved in physical education planning and instruction

The beginning Health and Physical Education teacher:

A. Knows how to achieve and maintain a health-enhancing level of fitness in a physical education program
B. Knows how to design and sequence activities for skill development
C. Knows how to design and sequence activities for health and skill-related fitness
D. Knows how to integrate information technology
E. Knows how to use technology in physical education

Objective 4: Understands the principles of student assessment, adapted physical education, and professionalism

The beginning Health and Physical Education teacher:

A. Knows how to plan and adapt instruction for special need students
B. Knows how to assess individuals with disabilities
C. Knows how to gather and assess data for skill performance
D. Knows the goals and purposes of the various fitness assessments
E. Knows how to demonstrate and support the concept that all students can become physically educated individuals
F. Knows the historical, philosophical, social, and legal issues in physical education
G. Understands liability and legal considerations pertaining to use of equipment, class organization, supervision, program selection, gender, and disability
H. Understands the factors affecting participation in physical activity

Note: After clicking on a link, right click and select "Previous View" to go back to original text.
Practice Questions

The practice questions in this study companion are designed to familiarize you with the types of questions you may see on the assessment. While they illustrate some of the formats and types of questions you will see on the test, your performance on these sample questions should not be viewed as a predictor of your performance on the actual test. Fundamentally, the most important component in ensuring your success is familiarity with the content that is covered on the assessment.

To respond to a practice question, choose one of the answer options listed. Be sure to read the directions carefully to ensure that you know what is required for each question. You may find it helpful to time yourself to simulate actual testing conditions. A correct answer and a rationale for each sample test question are in the section following the practice questions.

Keep in mind that the test you take at an actual administration will have different questions, although the proportion of questions in each subarea will be approximately the same. You should not expect the percentage of questions you answer correctly in these practice questions to be exactly the same as when you take the test at an actual administration, since numerous factors affect a person’s performance in any given testing situation.
Directions: Each of the questions or incomplete statements below is followed by suggested answers or completions. Select the best option or options in each case.

1. Essential amino acids are best described as those amino acids that are
   A. required for protein synthesis but cannot be made by the body.
   B. naturally occurring substances that help fight infection.
   C. important components of carbohydrates, fats, and proteins.
   D. high-energy nutrients that promote growth and development.

Answer and Rationale

2. Which of the following students is most likely to lose weight safely?

<table>
<thead>
<tr>
<th>Name</th>
<th>Daily Intake (calories)</th>
<th>Daily Expenditure (calories)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Robert</td>
<td>3,000</td>
<td>3,000</td>
</tr>
<tr>
<td>B. Judy</td>
<td>3,000</td>
<td>2,000</td>
</tr>
<tr>
<td>C. Tim</td>
<td>2,000</td>
<td>2,800</td>
</tr>
<tr>
<td>D. Alice</td>
<td>1,000</td>
<td>4,000</td>
</tr>
</tbody>
</table>

Answer and Rationale

3. Which of the following can be used most effectively to determine an individual’s body fat composition?
   A. Scales and a height-weight chart
   B. A skinfold caliper
   C. Measurements of the circumference of the individual’s waist, hips, thighs, and arms
   D. Hydrostatic weighing

Answer and Rationale
4. The presence of the ozone layer in the upper atmosphere is important because it
   A. enhances the greenhouse effect.
   B. has led to sharp increases in skin cancers.
   C. absorbs harmful ultraviolet radiation.
   D. reduces acid rain and urban smog.

Answer and Rationale

5. Approval of AZT for use in treating AIDS came under the jurisdiction of which of the
   following agencies?
   A. Federal Trade Commission
   B. United States Consumer Product Safety Commission
   C. State-level offices of consumer affairs
   D. United States Food and Drug Administration

Answer and Rationale

6. Fetal alcohol syndrome is associated with which of the following?
   A. Phenylketonuria
   B. Leukemia
   C. Hepatitis
   D. Developmental disabilities

Answer and Rationale

Note: After clicking on a link, right click and select "Previous View" to go back to original text.
7. Which of the following correctly describes the usual pathway of sperm through the female reproductive tract to the site of fertilization?

A. Vagina, cervix, fallopian tube, uterus  
B. Vagina, uterus, fallopian tube, cervix  
C. Vagina, cervix, uterus, fallopian tube  
D. Urethra, vagina, fallopian tube, uterus

Answer and Rationale

8. Amniocentesis is most often used to

A. facilitate artificial insemination.  
B. measure immune-response capability in transplant recipients.  
C. determine the presence of certain disorders in the fetus.  
D. estimate the mother’s potential for maintaining a pregnancy to term.

Answer and Rationale

9. Compared to younger women, women over age 35 have an increased risk of giving birth to children with which of the following genetic disorders?

A. Cystic fibrosis  
B. Down syndrome  
C. Hemophilia  
D. Sickle-cell anemia

Answer and Rationale
10. The Whole School, Whole Community, Whole Child (WSCC) model, formerly the coordinated school health (CSH) approach, includes which THREE of the following?

A. Comprehensive school health education  
B. Physical education and physical activity  
C. Nutrition environment and services  
D. Health newsletters

Answer and Rationale

11. A high school has had a series of incidents of sexual harassment in the hallways. One of the health education teachers assigns students to create posters in class encouraging positive peer pressure to prevent sexual harassment. The teacher’s assignment is contributing to the school’s

A. healthy environment.  
B. health services.  
C. family and community involvement.  
D. counseling services.

Answer and Rationale

12. HIV may be transmitted from one individual to another in which of the following ways? Select all that apply.

A. Through contact made during oral sex  
B. By an infected mother feeding breast milk to an infant  
C. Perinatally from an infected mother to her fetus  
D. Genetically from parent to child

Answer and Rationale

Note: After clicking on a link, right click and select “Previous View” to go back to original text.
13. In which of the following activities can a teacher best observe students demonstrating refusal skills?

   A. Having students interact outside of class
   B. Having students role-play
   C. Having students read from the textbook
   D. Having students create a poster

**Answer and Rationale**

14. When designing activities to address the different learning styles of students within the integrated health classroom, the health teacher should consider the theory of multiple intelligences suggested by

   A. Howard Gardner.
   B. John Dewey.
   C. Robert Marzano.
   D. Madeline Hunter.

**Answer and Rationale**

15. Which of the following neurotransmitters is affected by the antidepressant Prozac®?

   A. Adrenaline
   B. Serotonin
   C. Epinephrine
   D. Cortisol

**Answer and Rationale**
16. Which of the following environmental problems is most lethal to people worldwide?

   A. Acid rain
   B. Air pollution
   C. Ozone depletion
   D. Water pollution

**Answer and Rationale**

17. According to the Centers for Disease Control and Prevention (CDC), which of the following are among the top four causes of death for young people ages 15 to 24 in the United States?

   Select all that apply.

   A. Suicide
   B. Motor vehicle injuries
   C. Homicide
   D. Diabetes

**Answer and Rationale**

18. When planning goals for lessons in health class, which of the following should be a teacher’s primary concern?

   Select all that apply.

   A. How easily the material can be presented in class
   B. How the information presented is relevant to the learner
   C. What motivates enthusiasm for the subject in the learner
   D. What types of learners make up the class population

**Answer and Rationale**
19. Which of the following best describes a formative evaluation?

A. Documenting the feasibility of implementing a student exercise program  
B. Determining the effectiveness of a school system’s HIV-prevention initiative  
C. Documenting the level of dissemination of a research-based curriculum within a state  
D. Monitoring progress in completing plans for a tobacco-use prevention training event

**Answer and Rationale**

20. Hib is best described as a type of

A. bacteria.  
B. immune disorder.  
C. health information system.  
D. behavioral disorder.

**Answer and Rationale**

21. The affective domain of Bloom’s taxonomy includes which of the following types of behavior?

Select all that apply.

A. Analyzing  
B. Receiving  
C. Responding  
D. Valuing

**Answer and Rationale**
22. Which of the following can be obtained only with a prescription from a licensed physician?

A. Vitamin supplements
B. Birth control pills
C. Diet pills
D. Weight training supplements

Answer and Rationale

23. Which THREE of the following are major components of the Whole School, Whole Community, Whole Child (WSCC) model, formerly the coordinated school health (CSH) approach?

A. Employee wellness
B. Comprehensive school health education
C. Health insurance for students
D. Community involvement

Answer and Rationale

24. A negative energy balance of which of the following is required to lose one pound per week?

A. 4,500 calories
B. 3,500 calories
C. 2,500 calories
D. 1,500 calories

Answer and Rationale
25. An increase in the risk of heart disease is associated with an increase in which of the following?

Select all that apply.

A. Blood pressure
B. Serum cholesterol
C. Low-density lipoprotein
D. High-density lipoprotein

Answer and Rationale

26. Which of the following most accurately represents the number of extra calories a pregnant woman should consume per day to prepare for a healthy birth?

A. 200-300
B. 1,000-1,200
C. 1,500-2,000
D. Double her normal caloric intake

Answer and Rationale

27. Which of the following is a respiratory condition characterized by inflammation, excessive mucus production, and the constriction of the bronchi?

A. Allergic rhinitis
B. Emphysema
C. Sleep apnea
D. Asthma

Answer and Rationale
28. Some people feel an improvement in their health after taking a remedy that has no proven scientific effect on health status. This is an example of which of the following?

   A. A medical breakthrough
   B. A suppressant benefit
   C. Positive visualization
   D. The placebo effect

Answer and Rationale

29. The hormone released by the hypothalamus in both males and females at the onset of sexual maturity is

   A. norepinephrine.
   B. adrenaline.
   C. progesterone.
   D. gonadotropin-releasing hormone (GnRH).

Answer and Rationale

30. The primary means of managing diabetes is to keep

   A. cholesterol levels low.
   B. sodium levels low.
   C. blood sugar levels stable.
   D. blood pressure stable.

Answer and Rationale
31. In which of the following locomotor skills does a foot complete two tasks before the weight is transferred to the other foot?

A. Galloping  
B. Running  
C. Walking  
D. Skipping

**Answer and Rationale**

32. Which of the following is a problem most characteristic of performing a forward roll?

A. Keeping the chin tucked  
B. Keeping the knees and hips flexed  
C. Losing the curl  
D. Using the hands to cushion the head contact

**Answer and Rationale**

33. Which of the following actions are characteristic of a correct mature form for striking a ball with a racket?

Select all that apply.

A. Taking a forward step with the foot opposite the striking arm  
B. Coiling and rotating the body forward as the racket is swung  
C. Putting weight on the back foot and then shifting to the front foot as the racket is swung  
D. Stopping the racket at the point of contact with the ball

**Answer and Rationale**

**Note:** After clicking on a link, right click and select "Previous View" to go back to original text.
34. When dribbling a soccer ball in a restricted space, a player should attempt to do which of the following?

Select all that apply.

A. Keep the ball close to the feet  
B. Stay in a slightly crouched position  
C. Use body feints and changes of speed  
D. Use only the dominant foot for better control

**Answer and Rationale**

35. According to legend, the Greek athlete Milo of Croton lifted a newborn calf onto his shoulders every day until the calf became a fully mature ox. Milo followed what two principles of modern muscle strength and endurance conditioning?

A. Progression and overload  
B. Variable resistance and overload  
C. Frequency and progression  
D. Intensity and retention

**Answer and Rationale**

36. Which of the following is a list of physiological factors that are all related to oxygen consumption, both linearly and proportionately?

A. Cardiac output, diastolic blood pressure, heart rate  
B. Cardiac output, heart rate, work rate  
C. Core temperature, red blood cell count, work rate  
D. Minute ventilation, red blood cell count, respiration rate

**Answer and Rationale**
37. In the late 1800s, the greatest influence on the direction of physical education came from individuals with a background in which of the following?

   A. Medicine
   B. Professional sport
   C. Intercollegiate sport
   D. Nutrition

**Answer and Rationale**

38. Most sport sociologists describe sport as primarily what type of activity?

   A. Idealized
   B. Institutionalized
   C. Generalized
   D. Professionalized

**Answer and Rationale**

39. Angular motion is represented by which of the following?

   Select all that apply.

   A. The knees of a cyclist
   B. The legs of a runner
   C. The arms of a swimmer

**Answer and Rationale**
40. The correct racing posture for swimmers, cyclists, and downhill skiers minimizes the effect of

   A. lift.
   B. propulsion.
   C. turbulence.
   D. gravity.

   **Answer and Rationale**

41. Which of the following practice alternatives would best promote motor learning and safety for potentially injurious sports such as pole vaulting and downhill skiing?

   A. Whole
   B. Part
   C. Progressive-part
   D. Distributed

   **Answer and Rationale**

42. Which of the following are direct physiological outcomes of cool-down activities following vigorous physical activity?

   Select all that apply.

   A. Preventing blood from pooling in the legs
   B. Increasing the rate of lactic acid removal from the blood and skeletal muscles
   C. Promoting the reduction of cholesterol in the blood
   D. Reducing the risk of cardiac irregularities

   **Answer and Rationale**
43. Which of the following are examples of static balance?

Select all that apply.

A. Standing in place on a balance beam
B. Maintaining a handstand position
C. Skipping across a gymnasium
D. Placing three limbs inside an exercise ring for five seconds

Answer and Rationale

44. Which of the following is the best example of a target game?

A. Basketball
B. Lacrosse
C. Bocce
D. Badminton

Answer and Rationale

45. In teaching a closed skill, a teacher initially should provide which of the following?

A. A stable environment with varying rates of skill performance
B. A stable environment with a stable rate of skill performance
C. A varying environment with varying rates of skill performance
D. A varying environment with a stable rate of skill performance

Answer and Rationale
46. Which of the following statements are most appropriate to include in a manual of safety procedures for a physical education program?

Select all that apply.

A. Teachers must personally inspect playing fields before soccer classes.
B. Teachers must clearly mark appropriate traffic patterns around the throwing area in javelin classes.
C. Students must read and sign a copy of the rules for archery classes.
D. Students must exercise at or below 50 percent of their maximal heart rate during aerobic fitness activities.

Answer and Rationale

47. During a physical education unit focusing on the development of health-related fitness, a teacher asks students to keep a journal about how they personally felt about each activity. Which of the following best describes the activity of keeping a journal?

A. Criterion-referenced grading
B. Differentiated instruction
C. Identification and recall of information
D. Standards-based instruction

Answer and Rationale

48. Learning about the rules, traditions, history, and etiquette of sports falls under which of the following domains of learning?

A. Affective
B. Cognitive
C. Psychomotor
D. Associative

Answer and Rationale
49. Which of the following applications of technology will best help a wrestler learn a new takedown technique?

A. Reading about the proper technique and procedure on the Internet  
B. Viewing recordings of his or her own wrestling performances  
C. Viewing a series of pictures of proper execution on a video screen  
D. Exchanging e-mail messages with other wrestlers about their experience of learning the technique  

Answer and Rationale

50. The Society of Health and Physical Educators (SHAPE America) is an important resource for beginning physical educators because

A. it provides liability insurance for physical educators in case of a problem.  
B. its website contains all the lesson plans a physical education teacher needs.  
C. it disseminates current information to enhance physical education knowledge and improve practice.  
D. it allows access to a blog that allows teachers, students, and parents to collaborate with each other.

Answer and Rationale

51. The best fitness test for a teacher to use to assess the fitness of students with disabilities is the

A. Brockport Physical Fitness Test (BPFT).  
B. Fitnessgram.  
C. President’s Challenge.  
D. ActivityGram.

Answer and Rationale
52. Of the following, which lists the best practices for a physical education teacher to follow in the beginning of the school year to establish good classroom management?

A. Establishing rules and reviewing them with students, creating a record-keeping system, and teaching students a predetermined signal to stop activity
B. Posting rules on the wall, not smiling, and learning students’ names
C. Learning students’ names, teaching the class how to do warm-ups, and playing fun games with the students
D. Having an open gym period, posting rules on the wall, and creating a record-keeping system

Answer and Rationale

53. Of the following, which best exemplifies authentic assessment for a basketball skills unit?

A. Using standardized instruments on basketball skills at the end of the unit
B. Using district-devised assessments of skills at the end of the unit
C. Developing a rubric to assess learners as they move through the unit
D. Counting the number of baskets made in a class game

Answer and Rationale

54. Which of the following best expresses the percentage of maximum heart rate that should characterize students' exercise for health-related fitness in physical education class?

A. 25–40% of maximum heart rate
B. 40–60% of maximum heart rate
C. 60–85% of maximum heart rate
D. 85–100% of maximum heart rate

Answer and Rationale
55. The exercise system known as plyometrics was designed to meet which of the following objectives?

A. Cardiovascular fitness  
B. Explosive power training  
C. Improved flexibility  
D. Muscular endurance

**Answer and Rationale**

56. The speed of an object thrown overhand is most affected by which of the following?

A. Wrist flexion  
B. Hip rotation  
C. Grip release  
D. Hand-head proximity

**Answer and Rationale**

57. Which of the following activities is most aerobically demanding in relation to kcal/hour burned?

A. Bowling  
B. Volleyball  
C. Walking  
D. Cross-country skiing

**Answer and Rationale**
58. Swimming one-half mile four times a week is most likely to develop which of the following?

   A. Aerobic fitness
   B. Balance
   C. Flexibility
   D. Agility

Answer and Rationale

59. Which of the following faults are commonly exhibited by a beginning swimmer who is learning the breaststroke?

   Select all that apply.

   A. Failing to relax
   B. Moving the arms too fast
   C. Pulling the arms back too far
   D. Using improper timing between movements of the legs and arms

Answer and Rationale
# Answer Key and Rationales

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<tr>
<th>Question Number</th>
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<th>Rationale</th>
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<tbody>
<tr>
<td>1</td>
<td>A</td>
<td><strong>Option A is correct</strong> because amino acids are the building blocks of proteins. Of the 20 amino acids required for protein synthesis, nine cannot be produced by the human body. These must be supplied by the diet.</td>
</tr>
<tr>
<td>2</td>
<td>C</td>
<td><strong>Option C is correct</strong> because to reduce body weight, more calories must be expended than are taken in. With a daily expenditure of 800 calories above intake, Tim would lose approximately two pounds per week. Alice (option D) with a calorie expenditure so much greater than her calorie intake, is at risk of ketosis due to carbohydrate deficiency.</td>
</tr>
<tr>
<td>3</td>
<td>D</td>
<td><strong>Option D is correct</strong> because underwater weighing identifies the proportion of body fat accurately by calculating specific gravity. The higher the specific gravity, the lower the fat composition.</td>
</tr>
</tbody>
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<tr>
<td>4</td>
<td>C</td>
<td><strong>Option C is correct</strong> because the ozone layer is a region of the upper atmosphere that forms a protective layer that prevents the sun’s most harmful ultraviolet radiation from reaching earth’s surface. The depletion of the ozone layer has resulted in dramatic increases in skin cancers.</td>
</tr>
<tr>
<td>5</td>
<td>D</td>
<td><strong>Option D is correct</strong> because the Food and Drug Administration is responsible for approval of medicines.</td>
</tr>
<tr>
<td>6</td>
<td>D</td>
<td><strong>Option D is correct</strong> because fetal exposure to alcohol is a leading cause of developmental disabilities.</td>
</tr>
<tr>
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<tr>
<td>7</td>
<td>C</td>
<td><strong>Option C is correct</strong> because the ovum enters the flared opening of the fallopian tube after it is released from the follicle in the ovary. At ejaculation, the sperm enter the vagina and, within 15 minutes to an hour, move into the cervix, through the uterus to the fallopian tube.</td>
</tr>
<tr>
<td>8</td>
<td>C</td>
<td><strong>Option C is correct</strong> because amniocentesis involves the removal and examination of a small sample of cells from the amniotic cavity, enabling doctors to detect genetic disorders.</td>
</tr>
<tr>
<td>9</td>
<td>B</td>
<td><strong>Option B is correct</strong> because the incidence of Down syndrome increases with the age of the mother. In the United States, for example, among mothers in the age range 20-30, about one in 800 newborns has Down syndrome, whereas the incidence of Down syndrome in newborns of mothers over age 40 is one in 100.</td>
</tr>
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<td>10</td>
<td>A, B, C</td>
<td><strong>Options A, B, and C are correct</strong> because this list makes up three of the ten components of the Whole School, Whole Community, Whole Child (WSCC) model, formerly the coordinated school health (CSH) approach. The other seven are: employee wellness, social and emotional school climate, physical environment, health services, counseling, psychological and social services, community involvement, and family engagement. Health newsletters are not a part of the components of WSCC.</td>
</tr>
<tr>
<td>11</td>
<td>A</td>
<td><strong>Option A is correct</strong> because a healthy school environment fosters a psychosocial climate that helps maximize the health and safety of students and staff.</td>
</tr>
<tr>
<td>12</td>
<td>A, B, C</td>
<td><strong>Options A, B, and C are correct</strong> because HIV cannot be transmitted genetically.</td>
</tr>
<tr>
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<tr>
<td>13</td>
<td>B</td>
<td><strong>Option B is correct</strong> because role-playing in class is the most appropriate way for students to demonstrate refusal skills. Teachers would most likely not be able to observe students using refusal skills outside of class. Reading from a textbook and creating a poster could teach students what refusal skills are, but would not allow students to perform a demonstration in real-life situations.</td>
</tr>
<tr>
<td>14</td>
<td>A</td>
<td><strong>Option A is correct</strong> because Howard Gardner is a Harvard professor who developed the theory of multiple intelligences, which is based on the idea that children have different learning styles.</td>
</tr>
<tr>
<td>15</td>
<td>B</td>
<td><strong>Option B is correct</strong> because depression is caused by low levels of serotonin in the brain.</td>
</tr>
<tr>
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<tr>
<td>16</td>
<td>D</td>
<td><strong>Option D is correct</strong> because, according to the World Health Organization, between five and 10 million people worldwide die each year from exposure to polluted water.</td>
</tr>
<tr>
<td>17</td>
<td>A, B, C</td>
<td><strong>Options A, B, and C are correct</strong> because, according to data from the Centers for Disease Control and Prevention (CDC), motor vehicle injuries are the leading cause of death of young American’s ages 15-24, followed by homicide, and suicide. Diabetes is not included on the list.</td>
</tr>
<tr>
<td>18</td>
<td>B, C, D</td>
<td><strong>Options B, C, and D are correct</strong> because the ease with which the material can be presented should not be a concern to the teacher.</td>
</tr>
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<tr>
<td>19</td>
<td>A</td>
<td><strong>Option A is correct</strong> because all are examples of process evaluations, whereas option A is a formative evaluation. Back to Question</td>
</tr>
<tr>
<td>20</td>
<td>A</td>
<td><strong>Option A is correct</strong> because Hib stands for Haemophilus influenza type B, which is a type of bacteria. Most strains of Hib are opportunistic pathogens that usually live in their host without causing disease; they cause problems only when other viral infections or reduced immune function create an opportunity. Back to Question</td>
</tr>
<tr>
<td>21</td>
<td>B, C, D</td>
<td><strong>Options B, C, and D are correct</strong> because there are five major categories in the affective domain of Bloom's taxonomy: receiving, responding, valuing, organization, and characterizing. Analyzing (option A) is not one of the five major categories in the affective domain of Bloom's taxonomy. Back to Question</td>
</tr>
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<td>22</td>
<td>B</td>
<td><strong>Option B is correct</strong> because birth control pills are the only item listed that requires a doctor’s prescription. All others are available over-the-counter.</td>
</tr>
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<td>Back to Question</td>
</tr>
<tr>
<td>23</td>
<td>A, B, D</td>
<td><strong>Options A, B, and D are correct</strong> because there are ten components of the Whole School, Whole Community, Whole Child (WSCC) model: health education, nutrition environment and services, employee wellness, social and emotional school climate, physical environment, health services, counseling, psychological and social services, community involvement, family engagement, and physical education and physical activity.</td>
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<td>Back to Question</td>
</tr>
<tr>
<td>24</td>
<td>B</td>
<td><strong>Option B is correct</strong> because a pound of body fat equals 3,500 calories. By reducing intake of food, as in dieting or burning more calories in exercise, a negative energy balance is created. An individual wishing to lose one pound per week needs to maintain a negative energy balance of 3,500 calories per week.</td>
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<td>25</td>
<td>A, B, D</td>
<td><strong>Options A, B, and D are correct</strong> because high concentrations of low-density lipoprotein (LDL), especially under high (blood) pressure and in the presence of high serum cholesterol, are the major factors associated with the artery-narrowing process known as atherosclerosis. While LDL carries cholesterol to the tissues of the body, high-density lipoprotein (HDL) is thought to act as a scavenger, gathering cholesterol from cells and returning it to the liver to be processed to bile. A high HDL ratio to LDL in overall serum cholesterol is a desirable trait.</td>
</tr>
<tr>
<td>26</td>
<td>A</td>
<td><strong>Option A is correct</strong> because during the course of a pregnancy, the fetus weighs anywhere from a few ounces to a few pounds. The mother’s body needs only between 200 and 300 extra calories per day during the pregnancy. This is the amount of calories in one cooked chicken breast, without the skin.</td>
</tr>
<tr>
<td>27</td>
<td>D</td>
<td><strong>Option D is correct</strong> because an asthma episode is a series of events that result in narrowed airways. These include: swelling of lining, tightening of muscles, and increases secretion of mucus in the airway. Allergic rhinitis is an allergy caused by the pollens of certain seasonal plants. Sleep apnea is a sleep disorder involving pauses in breathing during sleep. Emphysema is a pulmonary disease caused by exposure to toxic chemicals or tobacco smoke.</td>
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<td>28</td>
<td>D</td>
<td><strong>Option D is correct</strong> because the placebo effect is created when, in a controlled environment, a patient is given an inert pill and not told it is inert. The patient then describes the improvement the inert pill is causing, thus showing that the improvement is mental and not medical. This is also true in an uncontrolled environment as illustrated in the question.</td>
</tr>
<tr>
<td>29</td>
<td>D</td>
<td><strong>Option D is correct</strong> because GnRH activity is very low during childhood and rises at puberty. During the reproductive years, the release of GnRH in higher quantities is critical for successful reproductive function in both males and females. Norepinephrine and adrenaline are stress hormones that are located in the adrenal medulla in both males and females. Progesterone is a female steroid sex hormone located in the corpus luteum.</td>
</tr>
<tr>
<td>30</td>
<td>C</td>
<td><strong>Option C is correct</strong> because diabetes is a condition in which blood sugar levels are high due to the body’s inability to process the blood sugar correctly; therefore, keeping blood sugar levels stable is the best way to manage diabetes.</td>
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<tr>
<td>31</td>
<td>D</td>
<td><strong>Option D is correct</strong> because in walking and running, each foot performs a single task before the other foot takes over. In galloping, each foot performs a single task, but one foot walks while the other foot leaps. In skipping, each foot both walks and hops before the other foot takes over.</td>
</tr>
<tr>
<td>32</td>
<td>C</td>
<td><strong>Option C is correct</strong> because options A, B, and D are all characteristic of intermediate or advanced levels of performing the forward roll. Option C is characteristic of early or primitive stages of performing the forward roll, and is therefore the correct answer.</td>
</tr>
<tr>
<td>33</td>
<td>A, B, C</td>
<td><strong>Options A, B, and C are correct</strong> because they are all generally accepted as elements of a mature striking form. Following through with the swing is also an essential element, eliminating option D as a correct answer.</td>
</tr>
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<tr>
<td>34</td>
<td>A, B, C</td>
<td><strong>Options A, B, and C are correct</strong> because although most players, even at fairly advanced levels, will have better control with the dominant foot than with the nondominant foot, it is still essential that practice in dribbling emphasize the use of both feet. The ball should be kept close to the feet, the player should be in a slightly crouched position, and should use body feints and changes of speed to fake opponents.</td>
</tr>
<tr>
<td>35</td>
<td>A</td>
<td><strong>Option A is correct</strong> because progression and overload are the terms used in discussions of fitness that refer to adjusting the amount of exercise to a person's present capacity (overload) and gradually increasing the amount of exercise over time to improve the level of fitness (progression).</td>
</tr>
<tr>
<td>36</td>
<td>B</td>
<td><strong>Option B is correct</strong> because cardiac output, heart rate, and work rate all relate to oxygen consumption, whereas the other options contain elements that do not relate to oxygen consumption.</td>
</tr>
<tr>
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<tr>
<td>37</td>
<td>A</td>
<td><strong>Option A is correct</strong> because the primary role in the development of physical education in the 19th Century was played by physicians interested in anthropometric measurement and other medically related subjects.</td>
</tr>
<tr>
<td>38</td>
<td>B</td>
<td><strong>Option B is correct</strong> because a sport is described by most sociologists as an institutionalized activity. An activity becomes a sport after undergoing a process through which behaviors and organization become standardized over time. As a sport, the activity takes on fundamental characteristics, such as official rule enforcement, equipment regulations, and formalized skills.</td>
</tr>
<tr>
<td>39</td>
<td>A, B, C</td>
<td><strong>Options A, B, and C are correct</strong> because the definition of angular motion clearly covers all three of the movements listed.</td>
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<tr>
<td>40</td>
<td>C</td>
<td><strong>Option C is correct</strong> because all three activities require that their participants maintain a compact arrangement of the body so that it can move smoothly through the medium (air or water) that is involved. Option C also is the correct answer because the failure to observe this compact bodily arrangement would hinder movement by creating turbulence.</td>
</tr>
<tr>
<td>41</td>
<td>C</td>
<td><strong>Option C is correct</strong> because it describes a method of practice that involves working on specific elements of a skill in isolation. This method allows those elements of a skill that present the greatest risk of injury to be mastered under controlled conditions before the skill is attempted “whole” and under real conditions.</td>
</tr>
<tr>
<td>42</td>
<td>A, B, D</td>
<td><strong>Options A, B, and D are correct</strong> because the question is based on a standard textbook discussion of the rationale for warm-down following vigorous physical activity which clearly establishes options A, B, and D as real effects of proper warm-down procedures. Option C is not such an effect and is thus an incorrect answer.</td>
</tr>
<tr>
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<tr>
<td>43</td>
<td>A, B, D</td>
<td><strong>Options A, B, and D are correct</strong> because static balance means to hold the position in place. A student who is skipping across a gymnasium is using movement to propel themselves from one place to another. The correct choices describe a person holding the position in place.</td>
</tr>
<tr>
<td>44</td>
<td>C</td>
<td><strong>Option C is correct</strong> because Bocce is truly a target game. Basketball and lacrosse both involve shooting the ball at a target or goal, but because of the nature of offensive and defensive play, they are considered invasion games. Badminton is a net/wall game in the same class as tennis, volleyball, racquetball, and handball.</td>
</tr>
<tr>
<td>45</td>
<td>B</td>
<td><strong>Option B is correct</strong> because a closed skill is one in which the environment remains stable and predictable, and the performer knows what to do and when to do it. Option B allows the performer to practice the skill at a stable rate, moving to varying rates as mastery is attained. Closed skills are habitual and follow set patterns from beginning to end. Options C and D are incorrect because they call for a varying environment.</td>
</tr>
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46  A, B, C  **Options A, B, and C are correct** because the least appropriate among the choices is to have students exercise at or below 50 percent of maximal heart rate. The way to maintain or increase fitness is to exercise in the target heart rate zone. Students in physical education classes should be exercising this way. Safety procedures for a physical education program include inspection of facilities, marking areas for safety, and having students read and know rules for activities.

Back to Question

47  B  **Option B is correct** because differentiated instruction allows students to use different avenues to access information. It addresses the multiple learning styles that students have. In physical education, a writing assignment would integrate writing skills into the lessons instead of only using physical ability and effort to assess students. In this activity there is no set criterion to compare to, there is no recall of information, and this activity, as is, would not be characterized as standards-based.

Back to Question

48  B  **Option B is correct** because the cognitive domain deals with the acquisition of knowledge and the development of intellectual skills. Affective deals with people’s feelings, psychomotor deals with physical manipulations, and associative is not a domain within Bloom’s taxonomy.

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<tr>
<td>49</td>
<td>B</td>
<td><strong>Option B is correct</strong> because by using a video camera, students are able to check their technique against a properly executed technique, detect the differences, and make corrections.</td>
</tr>
<tr>
<td>50</td>
<td>C</td>
<td><strong>Option C is correct</strong> because SHAPE America’s mission is to advance professional practice and promote research related to health and physical education, physical activity, dance, and sport.</td>
</tr>
<tr>
<td>51</td>
<td>A</td>
<td><strong>Option A is correct</strong> because the Brockport Physical Fitness Test (BPFT) is a criterion-referenced, health-related test of physical fitness appropriate for students with disabilities. The BPFT is customized to meet the needs of all students with varying abilities.</td>
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<td>52</td>
<td>A</td>
<td><strong>Option A is correct</strong> because all three items in option A are critical when implementing a classroom management plan. All of the other different strategies listed in options B, C, and D are either not critical or have nothing to do with classroom management.</td>
</tr>
<tr>
<td>53</td>
<td>C</td>
<td><strong>Option C is correct</strong> because authentic assessment uses a rubric. Options A and B are incorrect because neither mentions the use of a rubric, while option D is not a recommended best practice in physical education.</td>
</tr>
<tr>
<td>54</td>
<td>C</td>
<td><strong>Option C is correct</strong> because training at a level between about 60 percent and 85 percent of maximal heart rate increases the benefit of the exercise and decreases the chances of developing cardiac diseases if the exercise is done on a regular basis.</td>
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<tr>
<td>55</td>
<td>B</td>
<td><strong>Option B is correct</strong> because exercise training drills termed plyometrics, or explosive jump training, are used for football, volleyball, sprinting, basketball, and other sports requiring explosive power.</td>
</tr>
<tr>
<td>56</td>
<td>B</td>
<td><strong>Option B is correct</strong> because the speed of a thrown object is related to the amount of torque created by the rotation of the hips added to the action of the arm. The body as a whole, therefore, throws the object, hip rotation being a commonly observed attribute of the mature overhand throw.</td>
</tr>
<tr>
<td>57</td>
<td>D</td>
<td><strong>Option D is correct</strong> because for a 150-pound person, bowling burns about 140–280 kcal/hour, walking burns 222–300 kcal/hour, and cross-country skiing burns 420–840 kcal/hour, making skiing the most demanding of the choices on one’s aerobic capacity. Volleyball involves less energy expenditure than either walking or cross-country skiing.</td>
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<tr>
<td>58</td>
<td>A</td>
<td><strong>Option A is correct</strong> because swimming a distance such as one-half mile would increase cardiovascular fitness just as distance running would. Swimming may help maintain flexibility but would not develop agility or balance.</td>
</tr>
<tr>
<td>59</td>
<td>C, D</td>
<td><strong>Options C and D are correct</strong> because the swimmer’s arms should not be drawn back beyond the shoulders, making option C a common fault. The pull, kick, glide sequence must also be executed in the proper order, making option D the second most common fault.</td>
</tr>
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</table>
Preparation Resources

The resources listed below may help you prepare for the GACE assessment in this field. These preparation resources have been identified by content experts in the field to provide up-to-date information that relates to the field in general. You may wish to use current issues or editions of these materials to obtain information on specific topics for study and review.

Guide to Taking a GACE Computer-delivered Assessment

This guide explains how to navigate through a GACE assessment and how to answer different types of test questions. This free download is available in the Test Preparation Resources section of the GACE website at www.gace.ets.org/prepare.

Reducing Test Anxiety

This guide provides practical help for people who suffer from test anxiety. Designed specifically for GACE test takers, but useful to anyone who has to take tests, this guide reviews the major causes of test anxiety and offers practical advice for how to counter each one. Download this guide for free from the Test Preparation Resources section of the GACE website at www.gace.ets.org/prepare.

Study Tips: Preparing for a GACE Assessment

This document contains useful information on preparing for selected-response and constructed-response tests. The instruction, tips, and suggestions can help you become a better-prepared test taker. See the Test Preparation Resources section of the GACE website at www.gace.ets.org/prepare for this free download.

Journals


Strategies, American Alliance for Health, Physical Education, Recreation, and Dance.

Other Resources


Note: After clicking on a link, right click and select "Previous View" to go back to original text.


**Online Resources**

American Association of Active Lifestyles and Fitness — [www.aaalf.org](http://www.aaalf.org)

American Red Cross — [www.redcross.org](http://www.redcross.org)

American College of Sports Medicine — [www.acsm.org](http://www.acsm.org)

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