Test Information Guide: College-Level Examination Program®

2015-16

Introductory Psychology



CLEP TEST INFORMATION GUIDE FOR INTRODUCTORY PSYCHOLOGY

History of CLEP

Since 1967, the College-Level Examination Program (CLEP®) has provided over six million people with the opportunity to reach their educational goals. CLEP participants have received college credit for knowledge and expertise they have gained through prior course work, independent study or work and life experience.

Over the years, the CLEP examinations have evolved to keep pace with changing curricula and pedagogy. Typically, the examinations represent material taught in introductory college-level courses from all areas of the college curriculum. Students may choose from 33 different subject areas in which to demonstrate their mastery of college-level material.

Today, more than 2,900 colleges and universities recognize and grant credit for CLEP.

Philosophy of CLEP

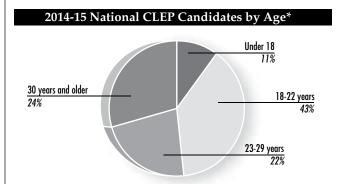
Promoting access to higher education is CLEP's foundation. CLEP offers students an opportunity to demonstrate and receive validation of their college-level skills and knowledge. Students who achieve an appropriate score on a CLEP exam can enrich their college experience with higher-level courses in their major field of study, expand their horizons by taking a wider array of electives and avoid repetition of material that they already know.

CLEP Participants

CLEP's test-taking population includes people of all ages and walks of life. Traditional 18- to 22-year-old students, adults just entering or returning to school, high-school students, home-schoolers and international students who need to quantify their knowledge have all been assisted by CLEP in earning their college degrees. Currently, 59 percent of CLEP's National (civilian) test-takers are women and 46 percent are 23 years of age or older.

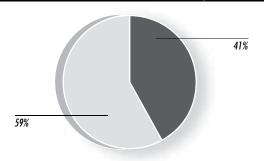
For over 30 years, the College Board has worked to provide government-funded credit-by-exam opportunities to the military through CLEP. Military service members are fully funded for their CLEP exam fees. Exams are administered at military installations

worldwide through computer-based testing programs. Approximately one-third of all CLEP candidates are military service members.



* These data are based on 100% of CLEP test-takers who responded to this survey question during their examinations.

2014-15 National CLEP Candidates by Gender



Computer-Based CLEP Testing

The computer-based format of CLEP exams allows for a number of key features. These include:

- a variety of question formats that ensure effective assessment
- real-time score reporting that gives students and colleges the ability to make immediate creditgranting decisions (except for English Composition with Essay and, beginning July 2010, College Composition, which require faculty scoring of essays twice a month)
- a uniform recommended credit-granting score of 50 for all exams
- "rights-only" scoring, which awards one point per correct answer
- pretest questions that are not scored but provide current candidate population data and allow for rapid expansion of question pools

CLEP Exam Development

Content development for each of the CLEP exams is directed by a test development committee. Each committee is composed of faculty from a wide variety of institutions who are currently teaching the relevant college undergraduate courses. The committee members establish the test specifications based on feedback from a national curriculum survey; recommend credit-granting scores and standards; develop and select test questions; review statistical data and prepare descriptive material for use by faculty (*Test Information Guides*) and students planning to take the tests (*CLEP Official Study Guide*).

College faculty also participate in CLEP in other ways: they convene periodically as part of standard-setting panels to determine the recommended level of student competency for the granting of college credit; they are called upon to write exam questions and to review exam forms; and they help to ensure the continuing relevance of the CLEP examinations through the curriculum surveys.

The Curriculum Survey

The first step in the construction of a CLEP exam is a curriculum survey. Its main purpose is to obtain information needed to develop test-content specifications that reflect the current college curriculum and to recognize anticipated changes in the field. The surveys of college faculty are conducted in each subject every few years depending on the discipline. Specifically, the survey gathers information on:

- the major content and skill areas covered in the equivalent course and the proportion of the course devoted to each area
- specific topics taught and the emphasis given to each topic
- specific skills students are expected to acquire and the relative emphasis given to them
- recent and anticipated changes in course content, skills and topics
- the primary textbooks and supplementary learning resources used
- titles and lengths of college courses that correspond to the CLEP exam

The Committee

The College Board appoints standing committees of college faculty for each test title in the CLEP battery. Committee members usually serve a term of up to four years. Each committee works with content specialists at Educational Testing Service to establish test specifications and develop the tests. Listed below are the current committee members and their institutional affiliations.

Andrew Johnson, Park University

Chair

Arlin James University of Arkansas —

Benjamin, Jr. Fort Smith

R. Todd Coy Colby-Sawyer College

The primary objective of the committee is to produce tests with good content validity. CLEP tests must be rigorous and relevant to the discipline and the appropriate courses. While the consensus of the committee members is that this test has high content validity for a typical Introductory Psychology course or curriculum, the validity of the content for a specific course or curriculum is best determined locally through careful review and comparison of test content, with instructional content covered in a particular course or curriculum.

The Committee Meeting

The exam is developed from a pool of questions written by committee members and outside question writers. All questions that will be scored on a CLEP exam have been pretested; those that pass a rigorous statistical analysis for content relevance, difficulty, fairness and correlation with assessment criteria are added to the pool. These questions are compiled by test development specialists according to the test specifications, and are presented to all the committee members for a final review. Before convening at a two- or three-day committee meeting, the members have a chance to review the test specifications and the pool of questions available for possible inclusion in the exam.

At the meeting, the committee determines whether the questions are appropriate for the test and, if not, whether they need to be reworked and pretested again to ensure that they are accurate and unambiguous. Finally, draft forms of the exam are reviewed to ensure comparable levels of difficulty and content specifications on the various test forms. The committee is also responsible for writing and developing pretest questions. These questions are administered to candidates who take the examination and provide valuable statistical feedback on student performance under operational conditions.

Once the questions are developed and pretested, tests are assembled in one of two ways. In some cases, test forms are assembled in their entirety. These forms are of comparable difficulty and are therefore interchangeable. More commonly, questions are assembled into smaller, content-specific units called testlets, which can then be combined in different ways to create multiple test forms. This method allows many different forms to be assembled from a pool of questions.

Test Specifications

Test content specifications are determined primarily through the curriculum survey, the expertise of the committee and test development specialists, the recommendations of appropriate councils and conferences, textbook reviews and other appropriate sources of information. Content specifications take into account:

- the purpose of the test
- the intended test-taker population
- the titles and descriptions of courses the test is designed to reflect
- the specific subject matter and abilities to be tested
- the length of the test, types of questions and instructions to be used

Recommendation of the American Council on Education (ACE)

The American Council on Education's College Credit Recommendation Service (ACE CREDIT) has evaluated CLEP processes and procedures for developing, administering and scoring the exams. Effective July 2001, ACE recommended a uniform credit-granting score of 50 across all subjects (with additional Level-2 recommendations for the world language examinations), representing the performance of students who earn a grade of C in the corresponding course. Every test title has a minimum score of 20, a maximum score of 80 and a cut score of **50**. However, these score values cannot be compared across exams. The score scale is set so that a score of **50** represents the performance expected of a typical C student, which may differ from one subject to another. The score scale is not based on actual performance of test-takers. It is derived from the judgment of a panel of experts (college faculty who teach an equivalent course) who provide information on the level of student performance that would be necessary to receive college credit in the course.

Over the years, the CLEP examinations have been adapted to adjust to changes in curricula and pedagogy. As academic disciplines evolve, college faculty incorporate new methods and theory into their courses. CLEP examinations are revised to reflect those changes so the examinations continue to meet the needs of colleges and students. The CLEP program's most recent ACE CREDIT review was held in June 2015.

The American Council on Education, the major coordinating body for all the nation's higher education institutions, seeks to provide leadership and a unifying voice on key higher education issues and to influence public policy through advocacy, research and program initiatives. For more information, visit the ACE CREDIT website at www.acenet.edu/acecredit.

CLEP Credit Granting

CLEP uses a common recommended credit-granting score of 50 for all CLEP exams.

This common credit-granting score does not mean, however, that the standards for all CLEP exams are the same. When a new or revised version of a test is introduced, the program conducts a standard setting to determine the recommended credit-granting score ("cut score").

A standard-setting panel, consisting of 15–20 faculty members from colleges and universities across the country who are currently teaching the course, is appointed to give its expert judgment on the level of student performance that would be necessary to receive college credit in the course. The panel reviews the test and test specifications and defines

the capabilities of the typical A student, as well as those of the typical B, C and D students.* Expected individual student performance is rated by each panelist on each question. The combined average of the ratings is used to determine a recommended number of examination questions that must be answered correctly to mirror classroom performance of typical B and C students in the related course. The panel's findings are given to members of the test development committee who, with the help of Educational Testing Service and College Board psychometric specialists, make a final determination on which raw scores are equivalent to B and C levels of performance.

^{*}Student performance for the language exams (French, German and Spanish) is defined only at the B and C levels.

Introductory Psychology

Description of the Examination

The Introductory Psychology examination covers material that is usually taught in a one-semester undergraduate course in introductory psychology. It stresses basic facts, concepts and generally accepted principles in the thirteen areas listed in the following section.

The examination contains approximately 95 questions to be answered in 90 minutes. Some of these are pretest questions that will not be scored. Any time candidates spend on tutorials and providing personal information is in addition to the actual testing time.

Please note that the questions on the CLEP Introductory Psychology exam will continue to adhere to 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.

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 publishers to integrate such changes into pertinent sections of textbooks, the College Board has decided to align the tests with the DSM-IV-TR.

Knowledge and Skills Required

Questions on the Introductory Psychology examination require candidates to demonstrate one or more of the following abilities.

- Knowledge of terminology, principles and theory
- Ability to comprehend, evaluate and analyze problem situations
- Ability to apply knowledge to new situations

The subject matter of the Introductory Psychology examination is drawn from the following topics. The percentages next to the main topics indicate the approximate percentage of exam questions on that topic.

8%–9% History, Approaches, Methods

History of psychology

Approaches: biological, behavioral, cognitive, humanistic, psychodynamic

Research methods: experimental,

clinical, correlational

Ethics in research

8%-9% Biological Bases of Behavior

Endocrine system

Etiology

Functional organization of the nervous system

Genetics

Neuroanatomy

Physiological techniques

7%–8% Sensation and Perception

Attention

Other senses: somesthesis, olfaction, gustation, vestibular system

Perceptual development

Perceptual processes

Receptor processes: vision, audition

Sensory mechanisms: thresholds, adaptation

5%-6% States of Consciousness

Hypnosis and meditation Psychoactive drug effects Sleep and dreaming

10%–11% Learning

Biological bases Classical conditioning Cognitive process in learning Observational learning Operant conditioning

8%-9% Cognition

Intelligence and creativity

Language

Memory

Thinking and problem solving

7%–8% Motivation and Emotion

Biological bases

Hunger, thirst, sex, pain

Social motivation

Theories of emotion

Theories of motivation

8%–9% Developmental Psychology

Dimensions of development: physical,

cognitive, social, moral

Gender identity and sex roles

Heredity-environment issues

Research methods: longitudinal,

cross-sectional

Theories of development

7%-8% Personality

Assessment techniques

Growth and adjustment

Personality theories and approaches

Research methods: idiographic,

nomothetic

Self-concept, self-esteem

8%–9% Psychological Disorders and Health

Affective disorders

Anxiety disorders

Dissociative disorders

Health, stress and coping

Personality disorders

Psychoses

Somatoform disorders

Theories of psychopathology

7%–8% Treatment of Psychological Disorders

Behavioral therapies

Biological and drug therapies

Cognitive therapies

Community and preventive approaches

Insight therapies: psychodynamic and

humanistic approaches

7%–8% Social Psychology

Aggression/antisocial behavior

Attitudes and attitude change

Attribution processes

Conformity, compliance, obedience

Group dynamics

Interpersonal perception

3%-4% Statistics, Tests and Measurement

Descriptive statistics

Inferential statistics

Measurement of intelligence

Mental handicapping conditions

Reliability and validity

Samples, populations, norms

Types of tests

Sample Test Questions

The following sample questions do not appear on an actual CLEP examination. They are intended to give potential test-takers an indication of the format and difficulty level of the examination and to provide content for practice and review. Knowing the correct answers to all of the sample questions is not a guarantee of satisfactory performance on the exam.

Directions: Each of the questions or incomplete statements below is followed by five suggested answers or completions. Select the one that is best in each case.

1. "The focus of psychological science is the attempt to relate overt responses to observable environmental stimuli."

This statement is most closely associated with which of the following approaches?

- (A) Cognitive
- (B) Behavioral
- (C) Biological
- (D) Humanistic
- (E) Psychodynamic
- 2. Which of the following types of research design is most appropriate for establishing a cause-and-effect relationship between two variables?
 - (A) Correlational
 - (B) Naturalistic observation
 - (C) Participant observation
 - (D) Experimental
 - (E) Case study
- 3. The science of psychology is typically dated from the establishment of the late-nineteenth-century Leipzig laboratory of
 - (A) Hermann Ebbinghaus
 - (B) Hermann von Helmholtz
 - (C) William James
 - (D) Wilhelm Wundt
 - (E) John Locke

- 4. The requirement that prospective participants know the general nature of a study so that they can decide whether to participate is a major part of
 - (A) reciprocal determinism
 - (B) confidentiality
 - (C) informed consent
 - (D) duty to inform
 - (E) debriefing
- 5. The statement "Response latency is the number of seconds that elapses between the stimulus and the response" is an example of
 - (A) introspection
 - (B) a description of an interaction
 - (C) a deduction
 - (D) an operational definition
 - (E) free association
- 6. The release of a neurotransmitter into the synaptic cleft is caused by which of the following?
 - (A) An extended refractory period
 - (B) An action potential
 - (C) Reuptake of the neurotransmitter
 - (D) Binding of the neurotransmitter to a postsynaptic cell membrane
 - (E) Migration of vesicles into the synaptic cleft
- 7. A neuron is said to be polarized when
 - (A) it is in the refractory period
 - (B) it is in a resting state
 - (C) it is about to undergo an action potential
 - (D) the synaptic terminals release chemicals into the synaptic gap
 - (E) chemicals outside the cell body cross the cell membrane

- 8. Down syndrome is caused by
 - (A) an extra chromosome
 - (B) an imbalance of neurotransmitters
 - (C) a tumor in the parietal lobe
 - (D) a nutritional deficiency
 - (E) a viral infection in the third trimester of pregnancy
- 9. How many pairs of chromosomes are contained in most human cells?
 - (A) 7
 - (B) 10
 - (C) 16
 - (D) 23
 - (E) 31
- 10. Damage to an individual's parietal lobes is most likely to result in
 - (A) a heightened sense of smell
 - (B) reduced sensitivity to touch
 - (C) decreased reaction time
 - (D) a loss in the ability to understand spoken language
 - (E) difficulty discriminating between the four primary tastes
- 11. In adults, total sensory deprivation for long periods of time produces
 - (A) a feeling of well-being similar to that achieved through meditation
 - (B) no change in emotions or cognition, provided the participant was mentally stable before the deprivation
 - (C) increased efficiency in the senses of sight, hearing, and touch
 - (D) profound apathy and a subjective sensation of powerlessness
 - (E) hallucinations and impaired efficiency in all areas of intellectual functioning

- 12. According to the activation-synthesis hypothesis of dreaming, dreams serve which of the following purposes?
 - (A) To protect the ego from the unconscious struggles of the mind
 - (B) To make sense of random neural activity during sleep
 - (C) To provide unfiltered problem solving of encounters that occurred while awake
 - (D) To provide a window into the unconscious, revealing true wishes and desires
 - (E) To provide learning and rehearsal of material encountered while a person is awake
- 13. The opponent-process theory in vision best explains which of the following?
 - (A) Size constancy
 - (B) Color afterimages
 - (C) Superior visual acuity in the fovea
 - (D) Depth perception using monocular cues
 - (E) Illusory movement
- 14. The receptors for hearing are the
 - (A) ossicles in the middle ear
 - (B) otoliths in the semicircular canals
 - (C) hair cells on the basilar membrane
 - (D) specialized cells on the tympanic membrane
 - (E) cells in the lining of the auditory canal



- 15. The picture above of a road receding in the distance represents the depth perception cue known as
 - (A) accommodation
 - (B) retinal disparity
 - (C) texture gradient
 - (D) relative size
 - (E) linear perspective

- 16. Brain waves during REM sleep generally appear as
 - (A) alternating high- and low-amplitude waves
 - (B) rapid low-amplitude waves
 - (C) irregular medium-amplitude waves
 - (D) slow low-amplitude waves
 - (E) slow high-amplitude waves
- 17. Which of the following is a type of sleep pattern that becomes less prevalent as one moves from infancy to adulthood?
 - (A) Alpha
 - (B) Beta
 - (C) Gamma
 - (D) Theta
 - (E) REM
- 18. According to current psychological research, hypnosis is most useful for which of the following purposes?
 - (A) Pain control
 - (B) Age regression
 - (C) Treatment of psychotic behavior
 - (D) Treatment of a memory disorder
 - (E) Treatment of a personality disorder
- 19. Checking the coin return every time one passes a vending machine is a type of behavior probably being maintained by which of the following schedules of reinforcement?
 - (A) Fixed interval only
 - (B) Fixed ratio only
 - (C) Variable ratio only
 - (D) Variable interval and fixed ratio
 - (E) Fixed interval and variable ratio

- 20. Making the amount of time a child can spend playing video games contingent on the amount of time the child spends practicing the piano is an illustration of
 - (A) frequency theory
 - (B) the law of association
 - (C) aversive conditioning
 - (D) classical conditioning
 - (E) operant conditioning
- 21. Which of the following strategies undermines the effectiveness of punishment?
 - (A) Delaying punishment
 - (B) Using punishment just severe enough to be effective
 - (C) Making punishment consistent
 - (D) Explaining punishment
 - (E) Minimizing dependence on physical punishment
- 22. A teacher tells a child to sit down in class. Over the course of several days, the child stands up more and more frequently, only to be told to sit down each time. It is most likely that the teacher's reprimands are serving as
 - (A) a punishment
 - (B) approval
 - (C) a reinforcer
 - (D) an aversive stimulus
 - (E) a conditioned stimulus
- 23. Which of the following is a secondary reinforcer?
 - (A) Food
 - (B) Warmth
 - (C) Water
 - (D) Money
 - (E) Sex

- 24. Shortly after learning to associate the word "dog" with certain four-legged furry animals, young children will frequently misidentify a cow or a horse as a dog. This phenomenon is best viewed as an example of
 - (A) differentiation
 - (B) negative transfer
 - (C) imprinting
 - (D) overextension
 - (E) linear perspective
- 25. If on the last day of a psychology class a student is asked to remember what was done in class each day during the term, she will likely be able to remember best the activities of the first and last class meetings. This situation is an example of
 - (A) retroactive interference
 - (B) positive transfer
 - (C) the serial position effect
 - (D) proactive interference
 - (E) short-term memory
- 26. Proactive interference describes a process by which
 - (A) people remember digits better than words
 - (B) people remember images better than words
 - (C) people remember elements in pairs
 - (D) prior learning interferes with subsequent learning
 - (E) subsequent learning interferes with prior learning
- 27. Research has shown that students generally perform better if tested in the same room where they originally learned the material. This shows the importance of which of the following in memory?
 - (A) Insight
 - (B) Preparedness
 - (C) Context
 - (D) Invariance
 - (E) Rehearsal

- 28. Which of the following is true of recall performance on a typical forgetting curve?
 - (A) It decreases rapidly at first, and then it levels off.
 - (B) It decreases slowly at first, and then it drops off quite sharply.
 - (C) It decreases at a steady rate until it reaches a near-zero level.
 - (D) It remains steady for about the first week, and then it begins a gradual decline.
 - (E) It increases for the first few hours after learning, and then it decreases very slowly over the next few weeks.
- 29. According to information processing theory, information is progressively processed by
 - (A) long-term memory, short-term memory, and then sensory memory
 - (B) sensory memory, short-term memory, and then long-term memory
 - (C) sensory memory, semantic memory, and then long-term memory
 - (D) short-term memory, semantic memory, and then long-term memory
 - (E) short-term memory, long-term memory, and then sensory memory
- 30. In problem solving, which of the following approaches almost always guarantees a correct solution?
 - (A) Insight
 - (B) Heuristic
 - (C) Algorithm
 - (D) Critical thinking
 - (E) Convergent thinking

- 31. One theory of the effects of arousal holds that efficiency of behavior can be described as an inverted U-shaped function of increasing arousal. Which of the following accurately describes this relationship?
 - (A) Greater arousal leads to better performance.
 - (B) Greater arousal leads to poorer performance.
 - (C) Low and high levels of arousal lead to poorest performance.
 - (D) Overarousal leads to performance efficiency.
 - (E) Underarousal leads to performance efficiency.
- 32. Which of the following illustrates drive reduction?
 - (A) A person wins five dollars in the lottery.
 - (B) A dog burned by a hot stove avoids the stove thereafter.
 - (C) A child who likes music turns up the volume of the radio.
 - (D) A dog salivates at the sound of a tone previously paired with fresh meat.
 - (E) A woman who is cold puts on a warm coat.
- 33. Which of the following presents a pair of needs from Abraham Maslow's hierarchical need structure, in order from lower to higher need?
 - (A) Belongingness, safety
 - (B) Self-actualization, physiological needs
 - (C) Physiological needs, safety
 - (D) Esteem, belongingness
 - (E) Self-actualization, esteem
- 34. Which of the following drugs is most likely to cause hyperalertness, agitation, and general euphoria?
 - (A) A barbiturate
 - (B) A stimulant
 - (C) A hallucinogen
 - (D) An antidepressant
 - (E) An antipsychotic

- 35. In which of the following areas does research show most clearly that girls develop earlier than boys?
 - (A) Independence from parents
 - (B) Athletic competence
 - (C) Intellectual achievement
 - (D) Adolescent physical growth spurt
 - (E) Self-actualization
- 36. Developmental psychologists are most likely to prefer longitudinal research designs to cross-sectional research designs because longitudinal designs
 - (A) usually yield results much more quickly
 - (B) offer the advantage of between-subjects comparisons
 - (C) are much less likely to be influenced by cultural changes that occur over time
 - (D) utilize the participants as their own experimental controls
 - (E) are more valid
- 37. A young child breaks her cookie into a number of pieces and asserts that "now there is more to eat." In Jean Piaget's analysis, the child's behavior is evidence of
 - (A) formal operations
 - (B) concrete operations
 - (C) conservation
 - (D) preoperational thought
 - (E) sensorimotor behavior

- 38. A school psychologist informs a ninth-grade teacher that Jimmy identifies with his twelfth-grade brother. What the psychologist means is that Jimmy tends to
 - (A) feel inferior to his brother
 - (B) envy and be jealous of his brother
 - (C) influence the way his brother views the world
 - (D) understand that his brother's experiences are different from his own
 - (E) accept his brother's values and to imitate his behavior
- 39. According to Elisabeth Kübler-Ross's original theory, what is the correct order of the stages for confronting impending death?
 - (A) Anger, denial, bargaining, depression, acceptance
 - (B) Bargaining, anger, depression, denial, acceptance
 - (C) Denial, anger, bargaining, depression, acceptance
 - (D) Depression, anger, denial, bargaining, acceptance
 - (E) Depression, denial, anger, bargaining, acceptance
- 40. When preschool children see the world only from their point of view, they are displaying
 - (A) accommodation
 - (B) assimilation
 - (C) egocentric thinking
 - (D) deductive reasoning
 - (E) object permanence

- 41. When insulted by a friend, Sally's first impulse was to strike him. Instead, she yelled loudly and kicked a door several times. This means of reducing aggressive impulses exemplifies which of the following?
 - (A) Repression
 - (B) Fixation
 - (C) Displacement
 - (D) Conservation
 - (E) Sublimation
- 42. If the null hypothesis is rejected, a researcher can conclude that the
 - (A) treatment effect was significant
 - (B) theory must be modified, a new hypothesis formed, and the experimental procedure revised
 - (C) theory does not need modification, but the hypothesis and the experimental procedure need revision
 - (D) theory and hypothesis do not need modification, but the experimental procedure needs revision
 - (E) hypothesis is false
- 43. Erik Erikson's and Sigmund Freud's theories of personality development are most similar in that both
 - (A) emphasize the libido
 - (B) focus on adult development
 - (C) discount the importance of culture
 - (D) are based on stages
 - (E) view behavior as a continuum
- 44. The use of projective tests is associated with which of the following psychological approaches?
 - (A) Behaviorism
 - (B) Psychoanalysis
 - (C) Cognitive behaviorism
 - (D) Humanism
 - (E) Functionalism

- 45. Lawrence is pessimistic and moody. In terms of Hans Eysenck's personality dimensions, Lawrence is classified as
 - (A) independent-dependent
 - (B) stable-extraverted
 - (C) internal-external
 - (D) unstable-introverted
 - (E) passive-aggressive
- 46. The key distinction between a personality trait and an attitude is
 - (A) centrality
 - (B) salience
 - (C) durability
 - (D) direction
 - (E) valence
- 47. A diagnosis of schizophrenia typically includes which of the following symptoms?
 - (A) Delusions
 - (B) Panic attacks
 - (C) Hypochondriasis
 - (D) Multiple personalities
 - (E) Psychosexual dysfunction
- 48. The term "etiology" refers to the study of which of the following aspects of an illness?
 - (A) Origins and causes
 - (B) Characteristic symptoms
 - (C) Expected outcome following treatment
 - (D) Frequency of occurrence
 - (E) Level of contagiousness
- 49. An obsession is defined as
 - (A) a senseless ritual
 - (B) a hallucination
 - (C) a delusion
 - (D) an unwanted thought
 - (E) a panic attack

- 50. A somatization disorder is characterized chiefly by
 - (A) changes in mood
 - (B) panic attacks
 - (C) agoraphobia
 - (D) changes in eating behavior
 - (E) physical complaints
- 51. Personality disorders are characterized by which of the following?
 - (A) A fear of public places, frequently accompanied by panic attacks
 - (B) Problematic social relationships and inflexible and maladaptive responses to stress
 - (C) A successful response to neuroleptic drugs
 - (D) A deficiency of acetylcholine in the brain
 - (E) An increased level of serotonin in the brain
- 52. Research on the effectiveness of psychotherapy has indicated that
 - (A) certain therapeutic methods have been shown to be especially effective for particular psychological disorders
 - (B) nondirective techniques are generally superior to directive ones
 - (C) the effectiveness of a method depends on the length of time a therapist was trained in the method
 - (D) psychoanalysis is the most effective technique for eliminating behavior disorders
 - (E) psychoanalysis is the most effective technique for curing anxiety disorders
- 53. Which of the following kinds of therapy attempts to correct irrational beliefs that lead to psychological distress?
 - (A) Behavioral
 - (B) Cognitive
 - (C) Existential
 - (D) Gestalt
 - (E) Psychoanalytic

- 54. An individual undergoing psychotherapy shows improvement due only to that person's belief in the therapy and not because of the therapy itself. This result illustrates
 - (A) a transference effect
 - (B) a placebo effect
 - (C) the misinformation effect
 - (D) a positive correlation
 - (E) a conditioned response
- 55. Which of the following can be a significant side effect of electroconvulsive therapy?
 - (A) Aphasia
 - (B) Sustained convulsions
 - (C) Muscle tremors
 - (D) Loss of muscle control
 - (E) Temporary loss of memory
- 56. Selective serotonin reuptake inhibitors (SSRIs) are used primarily in the treatment of which of the following?
 - (A) Antisocial personality disorder
 - (B) Schizophrenia
 - (C) Depression
 - (D) Mania
 - (E) Sleep disorders
- 57. Similarity, proximity, and familiarity are important determinants of
 - (A) observational learning
 - (B) attraction
 - (C) sexual orientation
 - (D) aggression
 - (E) imprinting

- 58. All of the following are true about altruism EXCEPT:
 - (A) It is more common in small towns and rural areas than in cities.
 - (B) It is more likely to be inherited than is aggressive behavior.
 - (C) A person is more likely to perform an altruistic act when another person has modeled altruistic behavior.
 - (D) A person is more likely to perform an altruistic act when another person has pointed out the need.
 - (E) A person is more likely to be altruistic when not in a hurry.
- 59. The bystander effect has been explained by which of the following?
 - (A) Empathy
 - (B) Diffusion of responsibility
 - (C) Social facilitation
 - (D) Reactive devaluation
 - (E) Defective schemas
- 60. According to Robert Sternberg, love is composed of which of the following?
 - (A) Maturity, romance, liking
 - (B) Assimilation, accommodation, altruism
 - (C) Intimacy, passion, commitment
 - (D) Selflessness, agape, companionship
 - (E) Tolerance, humility, trust
- 61. Job satisfaction has an inverse relationship with
 - (A) productivity
 - (B) career interest
 - (C) turnover
 - (D) age
 - (E) skill level

- 62. An attribution that focuses on an individual's ability or personality characteristics is described as
 - (A) situational
 - (B) collectivist
 - (C) dispositional
 - (D) stereotypic
 - (E) homogeneous
- 63. Which of the following terms refers to the strategy of making a small request to gain listeners' compliance, then making a larger request?
 - (A) Door-in-the-face
 - (B) Foot-in-the-door
 - (C) Social facilitation
 - (D) Matching
 - (E) Overjustification
- 64. Which of the following is a true statement about the relationship between test validity and test reliability?
 - (A) A test can be reliable without being valid.
 - (B) A test that has high content validity will have high reliability.
 - (C) A test that has low content validity will have low reliability.
 - (D) The higher the test's validity, the lower its reliability will be.
 - (E) The validity of a test always exceeds its reliability.
- 65. Which of the following statistics indicates the distribution with the greatest variability?
 - (A) A variance of 30.6
 - (B) A standard deviation of 11.2
 - (C) A range of 6
 - (D) A mean of 61.5
 - (E) A median of 38

- 66. Which of the following techniques is most useful for a researcher studying focal brain activity while a participant generates words?
 - (A) Computed tomography (CT)
 - (B) Positron-emission tomography (PET)
 - (C) Magnetic resonance imaging (MRI)
 - (D) Electrooculography (EOG)
 - (E) Electroencephalography (EEG)
- 67. The case study method of conducting research is justifiably criticized because
 - (A) the researcher cannot focus on a specific individual
 - (B) the researcher cannot collect detailed observations
 - (C) the results are difficult to generalize to a larger population
 - (D) it does not allow for the generation of hypotheses that can be tested in future experiments
 - (E) it does not allow for the examination of unusual cases
- 68. A person who wants to see an object in low light conditions should focus the object on
 - (A) the fovea because that is where the cones are more densely packed
 - (B) the fovea because that is where the rods are more densely packed
 - (C) the periphery of the retina because that is where the cones are more densely packed
 - (D) the periphery of the retina because that is where the rods are more densely packed
 - (E) both the fovea and the periphery of the retina to optimize the use of both rods and cones

- 69. A man's life has been filled with misfortune and tragic experiences that were unexpected, unavoidable, and unpredictable. He is depressed and tells his therapist that he feels he cannot control the outcome of the events in his life. Which of the following best explains his depression?
 - (A) Learned helplessness
 - (B) Repression
 - (C) Operant conditioning
 - (D) Classical conditioning
 - (E) Biological rhythms
- 70. Which of the following is a measure of central tendency that can be easily distorted by unusually high or low scores?
 - (A) Mean
 - (B) Mode
 - (C) Median
 - (D) Range
 - (E) Standard deviation
- 71. Stimulation of the lateral hypothalamus will result in which of the following behaviors in laboratory rats?
 - (A) An increase in sexual behavior
 - (B) An increase in eating behavior
 - (C) An increase in visual processing speed
 - (D) A decrease in auditory perception
 - (E) A decrease in memory functioning
- 72. Stella Chess and Alexander Thomas have classified temperament into which of the following clusters?
 - (A) Sensorimotor, preoperational, concrete operational
 - (B) Easy, difficult, slow to warm up
 - (C) Secure, insecure, resilient
 - (D) Authoritarian, authoritative, indulgent
 - (E) Preconventional, conventional, postconventional

- 73. Every day when Carlos leaves his apartment, he locks the door, walks to the corner, turns around, and returns to his apartment in order to check that the door is locked. He returns to check the door several times before finally crossing the street and going about his day. Carlos would most likely be diagnosed with which of the following conditions?
 - (A) Narcissistic personality disorder
 - (B) Panic disorder
 - (C) Generalized anxiety disorder
 - (D) Bipolar disorder
 - (E) Obsessive-compulsive disorder
- 74. A treatment technique, often used to treat phobias, that builds upon the principles of classical conditioning is
 - (A) token economy
 - (B) rational-emotive behavior therapy
 - (C) systematic desensitization
 - (D) the placebo effect
 - (E) dream analysis
- 75. Tameka regularly sets goals, plans for attaining those goals, and monitors her progress. Her activities are most closely associated with
 - (A) high extrinsic motivation
 - (B) high achievement motivation
 - (C) high extraversion
 - (D) low extrinsic motivation
 - (E) low achievement motivation
- 76. While sitting home one night reading a book and relaxing, Kyle suddenly realized that his heart rate was increasing, he was breathing faster, and his palms were sweating. Based on this response, Kyle concluded that he was scared. This is an example of which of the following theories?
 - (A) James-Lange
 - (B) Cannon-Bard
 - (C) Schachter-Singer
 - (D) Information processing
 - (E) Equity

- 77. A participant learns a new behavior but does not demonstrate the behavior until a reward is offered for doing so. This is an example of which of the following types of learning?
 - (A) Chaining
 - (B) Latent
 - (C) Social
 - (D) Shaping
 - (E) Classical conditioning
- 78. With regard to understanding human behavior, the humanistic approaches emphasize
 - (A) unconscious forces
 - (B) free will
 - (C) determinism
 - (D) inborn traits
 - (E) stimulus-response relationships
- 79. When a nurse touches the cheek of an infant and the infant turns her head toward the touch and opens her mouth, the nurse has elicited the
 - (A) rooting reflex
 - (B) Babinski reflex
 - (C) withdrawal reflex
 - (D) sucking reflex
 - (E) Moro reflex
- 80. In which of the following situations is a student using echoic memory?
 - (A) Remembering what he ate for dinner last night
 - (B) Studying vocabulary words for his Spanish course
 - (C) Trying to replay the last few notes his piano teacher just played
 - (D) Looking briefly at a picture his friend has taken of him
 - (E) Recalling the score of last week's basketball game

- 81. Which of the following theories best supports the idea that people are genetically predisposed to live in groups because it contributes to the survival of the species?
 - (A) Arousal
 - (B) Evolutionary
 - (C) Incentive
 - (D) Set point
 - (E) Social learning
- 82. Which of the following is a sleep disorder characterized by uncontrollable sleep attacks at inappropriate times?
 - (A) Sleep apnea
 - (B) REM rebound
 - (C) Narcolepsy
 - (D) Paradoxical sleep
 - (E) Sleep terror
- 83. Albert Bandura conducted a study in which a child viewed an adult playing with toys. The adult stood up and kicked and yelled at an inflated doll. The child was then taken to another room containing toys. When left alone, the child lashed out at a similar doll in the room. The child's behavior toward the doll is most likely a result of
 - (A) observational learning
 - (B) operant conditioning
 - (C) classical conditioning
 - (D) authoritative parenting
 - (E) authoritarian parenting
- 84. Lila thinks the new student in her study group is in a fraternity because, to her, he looks like other students who are in fraternities. Lila's decision about the new student is most likely the result of the
 - (A) anchoring and adjusting heuristic
 - (B) availability heuristic
 - (C) conjunction fallacy
 - (D) representativeness heuristic
 - (E) confirmation bias

- 85. Which of the following scenarios best illustrates the facial feedback hypothesis of emotion?
 - (A) Bill is a good card player who shows no emotion in his face that would reveal what he is thinking.
 - (B) Ellen says that hanging up the laundry on a clothesline makes her feel happy; she holds the clothespins in her teeth as she hangs each piece of clothing.
 - (C) Juanita fakes a smile to make her friends think she is happy.
 - (D) Paul has been blind from birth and has never seen emotional faces, but he has emotional facial expressions similar to those of a sighted person.
 - (E) As a result of Raj smiling at his customers, they smile at him.
- 86. Pedro just returned home from seeing a horror film at a movie theater. As he settles into bed, he hears a noise downstairs and perceives it to be an intruder. This interpretation of the sensory input is best explained by which of the following?
 - (A) Figure-ground discrimination
 - (B) Depth perception
 - (C) Perceptual constancy
 - (D) Bottom-up processing
 - (E) Top-down processing
- 87. To help Lauren learn to play the violin, her string teacher first provides praise when Lauren plays the correct notes. Then the teacher only provides praise when Lauren plays the correct notes and the correct rhythm. Finally, the teacher only praises Lauren when she plays the correct notes, the correct rhythm, and the correct tempo. Which of the following learning techniques is Lauren's teacher using?
 - (A) Positive punishment
 - (B) Elaborative rehearsal
 - (C) Generalization
 - (D) Chunking
 - (E) Shaping

- 88. Toddlers experience a growth spurt in vocabulary because of a process called
 - (A) babbling
 - (B) overregularization
 - (C) telegraphic speech
 - (D) fast mapping
 - (E) underextension
- 89. A psychologist using Carl Rogers' person-centered therapy strives to ensure that clients
 - (A) understand unconscious influences affecting their behavior
 - (B) develop positive thought patterns
 - (C) develop and use effective behavioral techniques
 - (D) receive unconditional positive regard
 - (E) understand their irrational beliefs
- 90. Schizophrenia is similar to Parkinson's disease because both disorders
 - (A) are classified as psychotic
 - (B) involve an imbalance of the neurotransmitter dopamine
 - (C) are treated with selective serotonin reuptake inhibitors (SSRIs)
 - (D) are caused by viral infections during infancy
 - (E) feature enlarged lateral ventricles

Study Resources

Most textbooks used in college-level introductory psychology courses cover the topics in the outline given earlier, but the approaches to certain topics and the emphases given to them may differ. To prepare for the Introductory Psychology exam, it is advisable to study one or more college textbooks, which can be found in most college bookstores. When selecting a textbook, check the table of contents against the knowledge and skills required for this test.

You may also find it helpful to supplement your reading with books listed in the bibliographies that can be found in most psychology textbooks.

Visit clep.collegeboard.org/test-preparation for additional psychology resources. You can also find suggestions for exam preparation in Chapter IV of the *Official Study Guide*. In addition, many college faculty post their course materials on their schools' websites.

Answer Key

1.	В	46.	C	
2.	D	47.	A	
3.	D	48.	A	
<i>4</i> .	C	49.	D	
5.	D	50.	E	
<i>5</i> . 6.	В	51.	В	
7.	В	52.	A	
7. 8.		53.	B	
	A			
9.	D	54.	В	
10.	В	55.	E	
11.	Е	56.	C	
12.	В	57.	В	
13.	В	58.	В	
14.	C	59.	В	
15.	E	60.	C	
16.	В	61.	C	
17.	E	62.	C	
18.	A	63.	В	
19.	C	64.	A	
20.	E	65.	В	
21.	A	66.	B	
22.	C	67.	C	
23.	D	68.	D	
24.	D	69.	A	
25.	C	70.	A	
26.	D	71.	В	
27.	C	72.	В	
28.	A	73.	E	
29.	В	74.	C	
30.	C	75.	В	
31.	C	76.	A	
32.	E	77.	В	
33.	C	78.	В	
34.	В	79.	A	
35.	D	80.	C	
36.	D	81.	В	
37.	D	82.	C	
38.	E	83.	A	
39.	C	84.	D	
40.	C	85.	В	
41.	C	86.	E	
42.	A	87.	E	
43.	D	88.	D	
44.	В	89.	D	
45.	D	90.	В	
		1		

Test Measurement Overview

Format

There are multiple forms of the computer-based test, each containing a predetermined set of scored questions. The examinations are not adaptive. There may be some overlap between different forms of a test: any of the forms may have a few questions, many questions, or no questions in common. Some overlap may be necessary for statistical reasons.

In the computer-based test, not all questions contribute to the candidate's score. Some of the questions presented to the candidate are being pretested for use in future editions of the tests and will not count toward his or her score.

Scoring Information

CLEP examinations are scored without a penalty for incorrect guessing. The candidate's raw score is simply the number of questions answered correctly. However, this raw score is not reported; the raw scores are translated into a scaled score by a process that adjusts for differences in the difficulty of the questions on the various forms of the test.

Scaled Scores

The scaled scores are reported on a scale of 20–80. Because the different forms of the tests are not always exactly equal in difficulty, raw-to-scale conversions may in some cases differ from form to form. The easier a form is judged to be, the higher the raw score required to attain a given scaled score. **Table 1** indicates the relationship between number correct (raw score) and scaled score across all forms.

The Recommended Credit-Granting Score

Table 1 also indicates the recommended credit-granting score, which represents the performance of students earning a grade of C in the corresponding course. The recommended B-level score represents B-level performance in equivalent course work. These scores were established as the result of a Standard Setting Study, the most recent having been conducted in 2003. The recommended credit-granting scores are based upon the judgments of a panel of experts currently teaching equivalent

courses at various colleges and universities. These experts evaluate each question in order to determine the raw scores that would correspond to B and C levels of performance. Their judgments are then reviewed by a test development committee, which, in consultation with test content and psychometric specialists, makes a final determination. The standard-setting study is described more fully in the earlier section entitled "CLEP Credit Granting" on page 5.

Panel members participating in the most recent study were:

William Addison Suzanne Baker Sheree Barron **Barney Beins** David Brackin Nancy Breland Stephen Chew Donna Dahlgren Christopher Hakala Roderick Hetzel **David Johnson** Wesley Jordan Kenneth Keith Eric Landrum Maureen McCarthy Cheryl Rickabaugh Richard Seefeldt

Timothy Shearon Lisa Valentino John Velasquez Robert Wildblood

Heidi Shaw

Eastern Illinois University James Madison University Georgia College & State University Ithaca College Young Harris College The College of New Jersey Samford University Indiana University Southeast Western New England College LeTourneau University John Brown University St. Mary's College of Maryland University of San Diego **Boise State University** Austin Peay State University University of Redlands University of Wisconsin — River Falls Yakima Valley Community College Albertson College of Idaho Seminole Community College University of the Incarnate Word

Indiana University Kokomo

After the recommended credit-granting scores are determined, a statistical procedure called scaling is applied to establish the exact correspondences between raw and scaled scores. Note that a scaled score of 50 is assigned to the raw score that corresponds to the recommended credit-granting score for C-level performance, and a high but usually less-than-perfect raw score is selected and assigned a scaled score of 80.

Table 1: Introductory Psychology Interpretive Score Data

American Council on Education (ACE) Recommended Number of Semester Hours of Credit: 3

Course Grade	Scaled Score	Number Correct
	80	82-85
	79	81-82
	78	79-80
	77	78-79
	76	76-77
	75	75-76
	74	73-74
	73	72-73
	72	70-72
	71	69-70
	70	68-69
	69	66-67
	68	65-66
	67	63-64
	66	62-63
	65	61-62
	64	59-60
	63	58-59
	62	56-57
	61	55-56
	60	54-55
В	59	52-53
_	58	51-52
	57	50
	56	48-49
	55	47-48
	54	45-46
	53	44-45
	52	43
		41-42
C	51	41-42 40-41
C	51 50 *	40-41
C	51 50* 49	40-41 39
С	51 50 *	40-41 39 37-38
С	51 50* 49 48 47	40-41 39 37-38 36-37
С	51 50* 49 48	40-41 39 37-38 36-37 34-35
C	51 50* 49 48 47 46	40-41 39 37-38 36-37 34-35 33-34
C	51 50* 49 48 47 46 45 44	40-41 39 37-38 36-37 34-35 33-34 32
C	51 50* 49 48 47 46 45	39 37-38 36-37 34-35 33-34 32 30-31
C	51 50* 49 48 47 46 45 44 43 42	39 37-38 36-37 34-35 33-34 32 30-31 29-30
C	51 50* 49 48 47 46 45 44 43 42 41	39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28
C	51 50* 49 48 47 46 45 44 43 42 41 40	39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27
C	51 50* 49 48 47 46 45 44 43 42 41 40 39	39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38	39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12 10-11
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12 10-11 9-10
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12 10-11 9-10 8
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12 10-11 9-10 8 6-7
C	51 50* 49 48 47 46 45 444 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12 10-11 9-10 8 6-7 5-6
C	51 50* 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12 10-11 9-10 8 6-7 5-6 4-5
C	51 50* 49 48 47 46 45 444 43 42 41 40 39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24	40-41 39 37-38 36-37 34-35 33-34 32 30-31 29-30 27-28 26-27 25-26 23-24 22-23 21-22 19-20 18-19 17-18 15-16 14-15 13-14 11-12 10-11 9-10 8 6-7 5-6

*Credit-granting score recommended by ACE.

Note: The number-correct scores for each scaled score on different forms may vary depending on form difficulty.

Validity

Validity is a characteristic of a particular use of the test scores of a group of examinees. If the scores are used to make inferences about the examinees' knowledge of a particular subject, the validity of the scores for that purpose is the extent to which those inferences can be trusted to be accurate.

One type of evidence for the validity of test scores is called content-related evidence of validity. It is usually based upon the judgments of a set of experts who evaluate the extent to which the content of the test is appropriate for the inferences to be made about the examinees' knowledge. The committee that developed the CLEP Introductory Psychology examination selected the content of the test to reflect the content of Introductory Psychology courses at most colleges, as determined by a curriculum survey. Since colleges differ somewhat in the content of the courses they offer, faculty members should, and are urged to, review the content outline and the sample questions to ensure that the test covers core content appropriate to the courses at their college.

Another type of evidence for test-score validity is called criterion-related evidence of validity. It consists of statistical evidence that examinees who score high on the test also do well on other measures of the knowledge or skills the test is being used to measure. Criterion-related evidence for the validity of CLEP scores can be obtained by studies comparing students' CLEP scores with the grades they received in corresponding classes, or other measures of achievement or ability. CLEP and the College Board conduct these studies, called Admitted Class Evaluation Service or ACES, for individual colleges that meet certain criteria at the college's request. Please contact CLEP for more information.

Reliability

The reliability of the test scores of a group of examinees is commonly described by two statistics: the reliability coefficient and the standard error of measurement (SEM). The reliability coefficient is the correlation between the scores those examinees get (or would get) on two independent replications of the measurement process. The reliability coefficient is intended to indicate the

stability/consistency of the candidates' test scores, and is often expressed as a number ranging from .00 to 1.00. A value of .00 indicates total lack of stability, while a value of 1.00 indicates perfect stability. The reliability coefficient can be interpreted as the correlation between the scores examinees would earn on two forms of the test that had no questions in common.

Statisticians use an internal-consistency measure to calculate the reliability coefficients for the CLEP exam. This involves looking at the statistical relationships among responses to individual multiple-choice questions to estimate the reliability of the total test score. The SEM is an estimate of the amount by which a typical test-taker's score differs from the average of the scores that a test-taker would have gotten on all possible editions of the test. It is expressed in score units of the test. Intervals extending one standard error above and below the true score for a test-taker will include 68 percent of that test-taker's obtained scores. Similarly, intervals extending two standard errors above and below the true score will include 95 percent of the test-taker's obtained scores. The standard error of measurement is inversely related to the reliability coefficient. If the reliability of the test were 1.00 (if it perfectly measured the candidate's knowledge), the standard error of measurement would be zero.

An additional index of reliability is the conditional standard of error of measurement (CSEM). Since different editions of this exam contain different questions, a test-taker's score would not be exactly the same on all possible editions of the exam. The CSEM indicates how much those scores would vary. It is the typical distance of those scores (all for the same test-taker) from their average. A test-taker's CSEM on a test cannot be computed, but by using the data from many test-takers, it can be estimated. The CSEM estimate reported here is for a test-taker whose average score, over all possible forms of the exam, would be equal to the recommended C-level credit-granting score.

Scores on the CLEP examination in Introductory Psychology are estimated to have a reliability coefficient of 0.89. The standard error of measurement is 2.87 scaled-score points. The conditional standard error of measurement at the recommended C-level credit-granting score is 3.20 scaled-score points.

The formula used is known as Kuder-Richardson 20, or KR-20, which is equivalent to a more general formula called coefficient alpha.