CLEP®

Test Information Guide: College-Level Examination Program®

2015-16

Principles of Macroeconomics

CollegeBoard

CLEP TEST INFORMATION GUIDE FOR PRINCIPLES OF MACROECONOMICS

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.
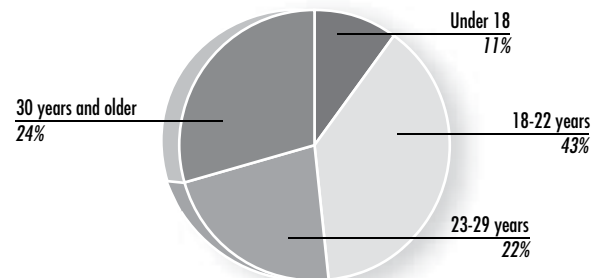
CLEP Participants

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 memb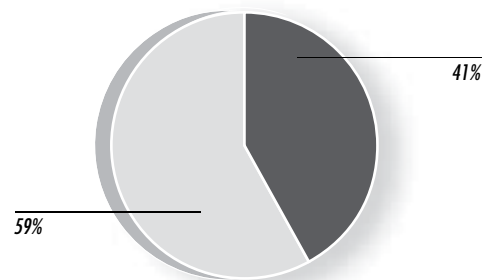ers are fully funded for their CLEP exam fees. Exams are administered at military installations worldwide through computer-based testing programs. Approximately one-third of all CLEP candidates are military service members.

2014-15 National CLEP Candidates by Age*

- Under 18: 11%
- 18-22 years: 43%
- 23-29 years: 22%
- 30 years and older: 24%

* 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

- 41%
- 59%

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 credit-granting decisions (except College Composition, which requires 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.

Kathryn S. Wilson, *Chair*	Kent State University
Samuel Andoh	Southern Connecticut State University
Irene Foster	The George Washington University
Denise Robson	University of Wisconsin — Oshkosh

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 Principles of Macroeconomics 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.

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

Principles of Macroeconomics

Description of the Examination

The Principles of Macroeconomics examination covers material that is usually taught in a one-semester undergraduate course in this subject. This aspect of economics deals with principles of economics that apply to an economy as a whole, particularly the general price level, output and income, and interrelations among sectors of the economy. The test places particular emphasis on the determinants of aggregate demand and aggregate supply, and on monetary and fiscal policy tools that can be used to achieve particular policy objectives. Within this context, candidates are expected to understand basic economic concepts such as scarcity and comparative advantage and measurement concepts such as gross domestic product, consumption, investment, unemployment and inflation. Candidates are also expected to demonstrate knowledge of the institutional structure of the Federal Reserve Bank and the monetary policy tools it uses to stabilize economic fluctuations and promote long-term economic growth, as well as the tools of fiscal policy and their impacts on income, employment, price level, deficits and interest rate. Basic understanding of foreign exchange markets, balance of payments, and effects of currency appreciation and depreciation on a country's imports and exports is also expected.

The examination contains approximately 80 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.

Knowledge and Skills Required

Questions on the Principles of Macroeconomics examination require candidates to demonstrate one or more of the following abilities.

- Understanding of important economic terms and concepts
- Interpretation and manipulation of economic graphs
- Interpretation and evaluation of economic data
- Application of simple economic models

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

I. Basic Economic Concepts (8%–12%)
   A. Scarcity, choice and opportunity costs
   B. Production possibilities curve
   C. Comparative advantage, specialization and exchange
   D. Demand, supply and market equilibrium

II. Measurement of Economic Performance (12%–16%)
   A. National income accounts
      1. Circular flow
      2. Gross domestic product
      3. Components of gross domestic product
      4. Real versus nominal gross domestic product
   B. Inflation measurement and adjustment
      1. Price indices
      2. Nominal and real values
      3. Demand-pull versus cost-push inflation
      4. Costs of inflation
   C. Unemployment
      1. Definition and measurement
      2. Types of unemployment
      3. Natural rate of unemployment

III. National Income and Price Determination (15%–20%)
   A. Aggregate demand
      1. Determinants of aggregate demand
      2. Multiplier and crowding-out effects
   B. Aggregate supply
      1. Short-run and long-run analyses
      2. Sticky versus flexible wages and prices
      3. Determinants of aggregate supply
   C. Macroeconomic equilibrium
      1. Real output and price level
      2. Short and long run
      3. Actual versus full-employment output
      4. Business cycle and economic fluctuations

IV. Financial Sector (15%–20%)

A. Money, banking and financial markets
1. Definition of financial assets: money, stocks, bonds
2. Time value of money (present and future value)
3. Measures of money supply
4. Banks and creation of money
5. Money demand
6. Money market
7. Loanable funds market

B. Central bank and control of the money supply
1. Tools of central bank policy
2. Quantity theory of money
3. Real versus nominal interest rates

V. Inflation, Unemployment and Stabilization Policies (20%–25%)

A. Fiscal and monetary policies
1. Demand-side effects
2. Supply-side effects
3. Policy mix
4. Government deficits and debt

B. Inflation and unemployment
1. The Phillips curve: short run versus long run
2. Role of expectations

VI. Economic Growth and Productivity (5%–10%)

A. Investment in human capital
B. Investment in physical capital
C. Research and development, and technological progress
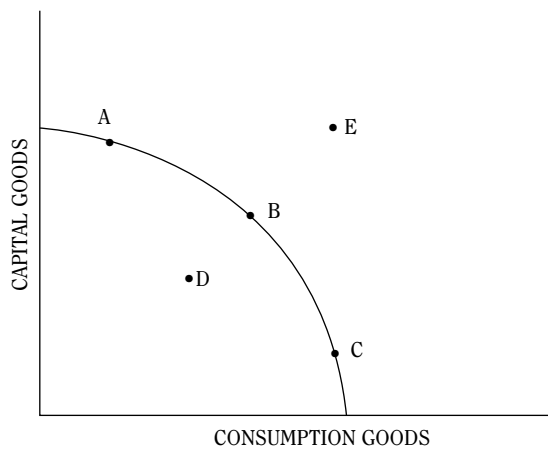D. Growth policy

VII. Open Economy: International Trade and Finance (9%–13%)

A. Balance of payments accounts
1. Balance of trade
2. Current account
3. Financial account (formerly called capital account)

B. Foreign exchange market
1. Demand for and supply of foreign exchange
2. Exchange rate determination
3. Currency appreciation and depreciation
4. Exchange rate policies

C. Inflows, outflows and restrictions
1. Net exports and capital flows
2. Links to financial and goods markets
3. Tariffs and quotas

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.

CONSUMPTION GOODS

1. An economy that is fully employing all its productive resources but allocating less to investment than to consumption will most likely be at which of the following positions on the production possibilities curve shown above?

   (A) A
   (B) B
   (C) C
   (D) D
   (E) E

2. Assume that land can be used either for producing grain or for grazing cattle to produce beef. The opportunity cost of converting an acre from cattle grazing to grain production is the

   (A) market value of the extra grain that is produced
   (B) total amount of beef produced
   (C) number of extra bushels of grain that are produced
   (D) amount by which beef production decreases
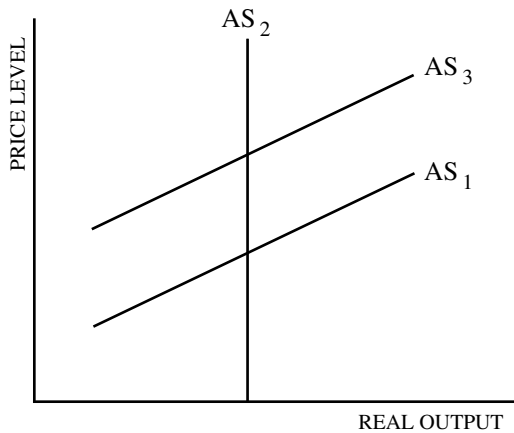   (E) profits generated by the extra production of grain

3. Which of the following will occur as a result of an improvement in technology?

   (A) The aggregate demand curve will shift to the right.
   (B) The aggregate demand curve will shift to the left.
   (C) The aggregate supply curve will shift to the right.
   (D) The aggregate supply curve will shift to the left.
   (E) The production possibilities curve will shift inward.

4. Increases in real income per capita are made possible by

   (A) improved productivity
   (B) a high labor/capital ratio
   (C) large trade surpluses
   (D) stable interest rates
   (E) high protective tariffs

5. Which of the following is included in the investment component of real gross domestic product?

(A) A schoolteacher purchases 10,000 shares of stock in an automobile company.

(B) A family purchases a previously owned home.

(C) A French tourist purchases United States dollars.

(D) A farmer purchases $10,000 worth of government securities.

(E) An apparel company purchases fifteen new sewing machines.

6. The United States Department of Labor defines an individual as unemployed if the person

(A) does not hold a paying job

(B) has been recently fired

(C) works part time but needs full-time work

(D) is without a job but is looking for work

(E) wants a job but is not searching because he or she thinks none is available

7. Assume that a country with an open economy has a fixed exchange-rate system and that its currency is currently overvalued in the foreign exchange market. Which of the following must be true at the official exchange rate?

(A) The quantity of the country's currency supplied is less than the quantity demanded.

(B) The quantity of the country's currency supplied exceeds the quantity demanded.

(C) The demand curve for the country's currency is horizontal.

(D) The supply curve for the country's currency is horizontal.

(E) The domestic interest rate is equal to the interest rate in the rest of the world.

8. Which of the following workers is most likely to be classified as structurally unemployed?

(A) A high school teacher who is unemployed during the summer months

(B) A recent college graduate who is looking for her first job

(C) A teenager who is seeking part-time employment at a fast-food restaurant

(D) A worker who is unemployed because his skills are obsolete

(E) A person who reenters the job market after relocating

9. According to the classical macroeconomic model, an increase in the money supply will result in an increase in which of the following in the long run?

(A) Employment

(B) Unemployment

(C) Real gross domestic product

(D) Nominal gross domestic product

(E) Real wages

10. The diagram above shows aggregate supply curves AS_1, AS_2, and AS_3. Which of the following statements is true?

    (A) AS_2 reflects wage and price rigidity.
    (B) AS_1 reflects greater wage and price flexibility than AS_2.
    (C) AS_2 reflects greater wage and price flexibility than AS_1 and AS_3.
    (D) The shift from AS_1 to AS_3 is due to a decrease in nominal wages.
    (E) The shift from AS_3 to AS_1 is due to an increase in oil prices.

11. An increase in which of the following would cause the long-run aggregate supply curve to shift to the right?

    (A) Corporate income tax rates
    (B) Aggregate demand
    (C) Labor productivity
    (D) The average wage rate
    (E) The price level

12. As income level increases from $500 to $1,000, consumption increases from $700 to $1,100. The marginal propensity to consume is equal to
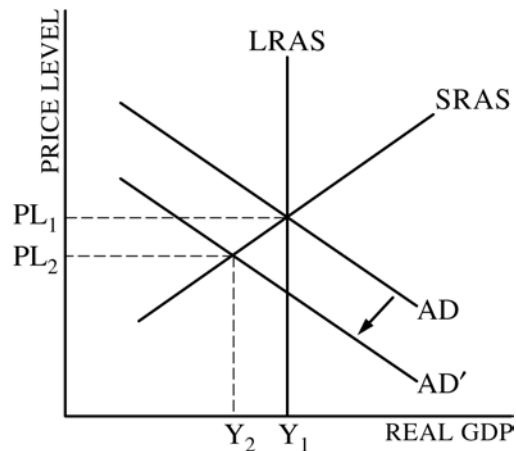
    (A) 1.10
    (B) 0.80
    (C) 0.70
    (D) 0.50
    (E) 0.10

13. Which of the following would represent an injection into the circular flow of income and expenditure?

    (A) Investment spending
    (B) Income tax
    (C) Tariffs
    (D) Savings
    (E) Imports

14. Which of the following would most likely lead to a decrease in aggregate demand?

    (A) A decrease in taxes
    (B) A decrease in interest rates
    (C) An increase in household savings
    (D) An increase in household consumption
    (E) An increase in business firms' purchases of capital equipment from retained earnings

15. The diagram above shows the aggregate demand (AD), short-run aggregate supply (SRAS), and long-run aggregate supply (LRAS) curves for an economy. An increase in which of the following will shift the aggregate demand curve from AD to AD′?

    (A) Money supply
    (B) Income tax rates
    (C) Government purchases
    (D) Transfer payments
    (E) Net exports

16. If the Federal Reserve lowers reserve requirements, which of the following is most likely to happen to interest rates and nominal gross domestic product?

Interest Rates	Nominal Gross Domestic Product
(A) Increase	Decrease
(B) Increase	Increase
(C) Decrease	Decrease
(D) Decrease	Increase
(E) No change	No change

17. If the marginal propensity to consume is 0.9, what is the maximum amount that the equilibrium gross domestic product could change if government expenditures increase by $1 billion?

(A) It could decrease by $9 billion.

(B) It could increase by $0.9 billion.

(C) It could increase by $1 billion.

(D) It could increase by $9 billion.

(E) It could increase by $10 billion.

18. Expansionary fiscal policy will be most effective in increasing real gross domestic product when

(A) the aggregate supply curve is horizontal

(B) the economy is at or above full-employment output

(C) transfer payments are decreased, while taxes remain unchanged

(D) wages and prices are very flexible

(E) the Federal Reserve simultaneously increases the reserve requirement

19. Which of the following would increase the value of the simple spending multiplier?

(A) An increase in government expenditure

(B) An increase in exports

(C) A decrease in government unemployment benefits

(D) A decrease in the marginal propensity to consume

(E) A decrease in the marginal propensity to save

20. Assume that the reserve requirement is 25 percent. If banks have excess reserves of $10,000, which of the following is the maximum amount of additional money that can be created by the banking system through the lending process?

(A) $ 2,500

(B) $ 10,000

(C) $ 40,000

(D) $ 50,000

(E) $250,000

21. An increase in which of the following will most likely reduce the federal government's budget deficit?

(A) Interest rates

(B) Income tax rates

(C) Defense spending

(D) Government transfer payments

(E) Tax credits for investment spending

22. The purchase of government bonds from the public in the open market by the Federal Reserve will

(A) increase the supply of money

(B) increase the interest rate

(C) increase the discount rate

(D) decrease the number of Federal Reserve notes in circulation

(E) decrease the reserve requirement

23. To counteract a recession, the Federal Reserve could

(A) buy government securities on the open market and raise the reserve requirement

(B) buy government securities on the open market and lower the reserve requirement

(C) buy government securities on the open market and raise the discount rate

(D) sell government securities on the open market and raise the discount rate

(E) raise the reserve requirement and lower the discount rate

24. Total spending in the economy is most likely to increase by the largest amount if which of the following occur to government spending and taxes?

	Government Spending	Taxes
(A)	Decrease	Increase
(B)	Decrease	No change
(C)	Increase	Increase
(D)	Increase	Decrease
(E)	No change	Increase

25. An expansionary monetary policy will be most effective in increasing real output if

(A) investment spending is sensitive to changes in interest rates

(B) money demand is sensitive to changes in interest rates

(C) wages and prices are perfectly flexible

(D) corporate income tax rates increase

(E) complete crowding-out occurs

26. Supply-side economists argue that

(A) a cut in high tax rates results in an increased deficit and thus increases aggregate supply

(B) lower tax rates provide positive work incentives and thus shift the aggregate supply curve to the right

(C) the aggregate supply of goods can only be increased if the price level falls

(D) increased government spending should be used to stimulate the economy

(E) the government should regulate the supply of imports

27. Which of the following policies would most likely be recommended in an economy with an annual inflation rate of 3 percent and an unemployment rate of 11 percent?

(A) An increase in transfer payments and an increase in the reserve requirement

(B) An increase in defense spending and an increase in the discount rate

(C) An increase in income tax rates and a decrease in the reserve requirement

(D) A decrease in government spending and the open market sale of government securities

(E) A decrease in the tax rate on corporate profits and a decrease in the discount rate

28. Assume the velocity of money and real gross domestic product are constant. According to the quantity theory of money, an increase in the money supply will result in which of the following?

(A) A decrease in the price level

(B) A decrease in the money multiplier

(C) A decrease in nominal gross domestic product

(D) An increase in the price level

(E) An increase in the money multiplier

29. An expansionary fiscal policy would most likely cause which of the following changes in output and interest rates?

	Output	Interest Rates
(A)	Increase	Increase
(B)	Increase	Decrease
(C)	Decrease	Increase
(D)	Decrease	Decrease
(E)	No change	Decrease

30. Which of the following would result in the largest increase in aggregate demand?

   (A) A $30 billion increase in military expenditure and a $30 billion open market purchase of government securities

   (B) A $30 billion increase in military expenditure and a $30 billion open market sale of government securities

   (C) A $30 billion tax decrease and a $30 billion open market sale of government securities

   (D) A $30 billion tax increase and a $30 billion open market purchase of government securities

   (E) A $30 billion increase in social security payments and a $30 billion open market sale of government securities

31. Which of the following will most likely lead to a decrease in the federal government budget deficit?

   I. An increase in taxes
   II. A decrease in federal government spending
   III. A decrease in interest rates

   (A) I only
   (B) II only
   (C) III only
   (D) I and III only
   (E) I, II, and III

32. Which of the following would most likely be the immediate result if the United States increased tariffs on most foreign goods?

   (A) The United States standard of living would be higher.
   (B) More foreign goods would be purchased by Americans.
   (C) Prices of domestic goods would increase.
   (D) Large numbers of United States workers would be laid off.
   (E) The value of the United States dollar would decrease against foreign currencies.

33. Which of the following is true about bonds?

   (A) Bond prices remain fixed over time.
   (B) Bonds have unlimited profit potential.
   (C) Bonds are generally riskier than stocks.
   (D) Bondholders receive interest payments.
   (E) Bondholders become part owners of the company that issued the bonds.

34. Which of the following would occur if the international value of the United States dollar decreased?

   (A) United States exports would increase.
   (B) More gold would flow into the United States.
   (C) United States demand for foreign currencies would increase.
   (D) The United States trade deficit would increase.
   (E) United States citizens would pay less for foreign goods.

35. If exchange rates are allowed to fluctuate freely and the United States demand for Indian rupees increases, which of the following will most likely occur?

   (A) The dollar price of Indian goods will increase.
   (B) The rupee price of United States goods will increase.
   (C) The United States balance-of-payments deficits will increase.
   (D) The dollar price of rupees will fall.
   (E) The dollar price of Indian goods will fall.

36. A revenue-neutral replacement of some portion of the federal personal income tax with a general sales tax would most likely result in

    (A) greater overall progressivity in the tax structure
    (B) smaller overall progressivity in the tax structure
    (C) stronger automatic stabilization through the business cycle
    (D) a larger budget deficit
    (E) a smaller federal budget deficit

37. A deficit in the United States trade balance can be described as

    (A) an excess of the value of imports over the value of exports
    (B) an excess of the value of exports over the value of imports
    (C) a resulting outcome of the depreciation of the United States dollar in foreign exchange markets
    (D) an almost complete depletion of the gold stock
    (E) an excess of receipts from foreigners over payments to foreigners

38. Which of the following describes a problem that is common to all economic systems?

    (A) How to decentralize markets
    (B) How to become a self-sufficient economy
    (C) How to set government production quotas
    (D) How to equally distribute income among citizens
    (E) How to allocate scarce resources to satisfy unlimited wants

39. An increase in which of the following will cause an increase in the demand for a certain good?

    (A) The price of the good
    (B) The number of sellers of the good
    (C) The price of a complementary good
    (D) The cost of purchasing the good
    (E) The number of buyers of the good

40. If the exchange rate changes from 1 United States dollar = 100 yen to 1 United States dollar = 80 yen, which of the following will happen?

    (A) United States goods will become more expensive to Japanese consumers.
    (B) Japanese goods will become less expensive to United States consumers.
    (C) United States exports to Japan will increase.
    (D) Japanese exports to the United States will increase.
    (E) Japanese imports from the United States will decrease.

41. An increase in which of the following is most likely to cause demand-pull inflation?

    (A) Rental price of capital
    (B) Fuel costs
    (C) Consumer spending
    (D) Income taxes
    (E) Imports of capital goods

42. Assume that last year the consumer price index (CPI) was 150 and a household's nominal income was $30,000. If the CPI this year is 160, to be as well off as last year, the household should have an increase in nominal income of

    (A) $1,800
    (B) $1,875
    (C) $2,000
    (D) $3,000
    (E) $4,800

43. The natural rate of unemployment can be defined as the unemployment rate that exists when the economy

    (A) is neither growing nor shrinking
    (B) has zero inflation
    (C) has only cyclical and structural unemployment
    (D) has no trade deficit or government deficit
    (E) produces at the full-employment output level

44. A fully anticipated expansionary fiscal policy will cause the price level and real output to change in which of the following ways in the long run?

	Price Level	Real Output
(A)	Increase	Increase
(B)	Increase	Not change
(C)	Not change	Not change
(D)	Decrease	Increase
(E)	Decrease	Decrease

45. If the nominal gross domestic product is $8 trillion and the money supply is $2 trillion, the velocity of money is

    (A) 2
    (B) 4
    (C) 6
    (D) 10
    (E) 16

46. Which of the following is NOT true of the Federal Reserve?

    (A) It serves as a lender of last resort for member banks.
    (B) It supervises member banks.
    (C) It provides check-clearing services.
    (D) It issues debit cards.
    (E) It controls the money supply.

47. Which of the following best describes the cause of crowding out?

    (A) Competition between the government and private borrowers for loanable funds results in an increase in interest rates.
    (B) Increases in the costs of inputs lead to decreases in domestic production.
    (C) The Federal Reserve's open-market operations decrease the amount of funds banks have available for lending.
    (D) Reductions in the government's budget deficit lead to fewer Treasury bonds being issued.
    (E) The scarcity of funds forces Congress to decrease spending on critical public works programs.

48. Suppose that the economy is operating at full employment. If the government wants to discourage consumption spending, stimulate investment spending, and maintain full-employment output, which of the following combinations of monetary and fiscal policies would most likely achieve these goals?

	Monetary Policy	Fiscal Policy
(A)	Increase money supply	Increase government spending
(B)	Increase money supply	Increase personal income taxes
(C)	Decrease money supply	Increase government spending
(D)	Decrease money supply	Increase personal income taxes
(E)	Decrease money supply	Decrease personal income taxes

49. If the Federal Reserve suddenly increases the growth rate of the money supply from 4 percent to 8 percent per year, interest rates, aggregate demand, and nominal gross domestic product (GDP) will most likely change in which of the following ways in the short run?

	Interest Rates	Aggregate Demand	Nominal GDP
(A)	Increase	Increase	Increase
(B)	Increase	Decrease	Increase
(C)	Decrease	Increase	Increase
(D)	Decrease	Increase	Decrease
(E)	Decrease	Decrease	Increase

50. The United States federal government budget deficits tend to be large when which of the following is low?

(A) The interest rate on government bonds

(B) The growth rate of the economy

(C) The unemployment rate

(D) The inflation rate

(E) The international value of the United States dollar

51. Using the same amount of resources, Betaland can produce 80 tons of corn or 80 tons of wheat and Alphaland can produce 40 tons of corn or 20 tons of wheat. Which of the following statements is true?

(A) The opportunity cost of producing a ton of corn in Betaland is two tons of wheat.

(B) The opportunity cost of producing a ton of corn in Betaland is a ton of wheat.

(C) The opportunity cost of producing a ton of corn in Alphaland is two tons of wheat.

(D) Betaland has both the absolute and comparative advantage in producing corn.

(E) Alphaland has the comparative advantage in producing wheat.

52. If the required reserve ratio is 0.20 and the Federal Reserve buys $200 worth of securities, the maximum increase in the money supply will be

(A) $ 200
(B) $ 400
(C) $ 600
(D) $ 800
(E) $1,000

Assets	**Liabilities**
Reserves $4,000	Demand deposits $10,000
Loans $6,000	

53. The table above shows the T-account entries of a bank. If the required reserve ratio is 0.20, what is the maximum amount of additional loans that this bank can make from its current reserves?

(A) $ 0
(B) $ 2,000
(C) $ 2,500
(D) $ 4,000
(E) $10,000

54. Which of the following explains why the aggregate demand curve is downward sloping?

(A) Sticky wages
(B) Money illusion
(C) The Fisher effect
(D) The wealth effect
(E) Speculative demand for money

55. According to the short-run Phillips curve, which of the following will occur when the Federal Reserve increases the money supply?

    (A) Both the unemployment rate and the inflation rate will increase.

    (B) Both the unemployment rate and the inflation rate will decrease.

    (C) The unemployment rate will increase, and the inflation rate will decrease.

    (D) The unemployment rate will decrease, and the inflation rate will increase.

    (E) The inflation rate will increase, but the unemployment rate will remain constant.

56. Which of the following is true if there is a current account deficit in the United States balance-of-payments accounts?

    (A) There is a corresponding deficit in the financial account.

    (B) There is a corresponding surplus in the financial account.

    (C) There is an offsetting surplus in the government's budget.

    (D) There is an offsetting increase in net exports.

    (E) The United States dollar appreciates in the foreign exchange market.

57. An increase in national saving will cause the real interest rate and investment spending to change in which of the following ways?

	Real Interest Rate	Investment
(A)	Increase	Increase
(B)	Increase	Decrease
(C)	Increase	Not change
(D)	Decrease	Increase
(E)	Decrease	Not change

58. To raise its long-run rate of economic growth, a country should design and implement policies that do which of the following?

    (A) Encourage current consumption over saving

    (B) Encourage saving and investment

    (C) Increase the price level and profits

    (D) Increase government transfer payments

    (E) Limit business activities to protect the environment

59. With a constant money supply, an increase in the demand for money will affect interest rates and bond prices in which of the following ways?

	Interest Rates	Bond Prices
(A)	Increase	Increase
(B)	Increase	Decrease
(C)	Increase	Not change
(D)	Decrease	Increase
(E)	Not change	Increase

60. According to the quantity theory of money, an increase in the money supply results in an increase in which of the following?

    (A) Interest rate

    (B) Unemployment

    (C) Nominal gross domestic product

    (D) The government's budget deficit

    (E) The value of the dollar on the foreign exchange market

61. Which of the following policies will most likely lead to a reduction in the natural rate of unemployment?

    (A) Increasing government purchases of goods and services

    (B) Providing more job-training programs to help the less skilled

    (C) Increasing the duration of unemployment compensation

    (D) Raising the minimum wage

    (E) Increasing the money supply

62. Assume that an economy produces only two goods, computers and gasoline. The quantity and price of each are given in the table below.

Year	Price of Computers	Quantity of Computers (in millions)	Price of Gasoline	Quantity of Gasoline (in millions)
2000	$1,000	5	$1	500
2004	$500	10	$2	250

If the base year is 2000, how do nominal and real gross domestic product (GDP) change between 2000 and 2004?

	Nominal GDP	Real GDP
(A)	No change	Increase
(B)	No change	Decrease
(C)	Increase	No change
(D)	Increase	Increase
(E)	Increase	Decrease

63. Assuming that the expected inflation rate is stable, an increase in interest rates will lead to

(A) an increase in bond prices
(B) an increase in the demand for money as an asset
(C) an increase in aggregate demand
(D) a decrease in private investment
(E) a decrease in capital inflows

64. An increase in income tax rates with no change in government spending will result in which of the following?

(A) A decrease in private savings
(B) An increase in private savings
(C) An increase in the real interest rate
(D) An increase in the demand for loanable funds
(E) An increase in the budget deficit

65. Which of the following is true of the long-run Phillips curve?

(A) It shows the trade-off between the price level and the money supply.
(B) It shows that lower unemployment can be gained only at the expense of higher inflation.
(C) It shows that unemployment is a monetary issue.
(D) It is vertical at the natural rate of unemployment.
(E) It is U-shaped over all possible ranges of unemployment.

66. Economics is best defined as the study of how

(A) markets allocate resources efficiently
(B) businesses make investments to maximize profits
(C) public goods and services are produced
(D) society chooses to allocate its scarce resources
(E) the invisible hand of the market works

67. Human capital refers to which of the following?

(A) The acquisition of plant and equipment by workers
(B) The amount of financial investment made by individuals
(C) The labor force requirement for sustained economic growth
(D) The education and experience of the labor force
(E) The technology available to individual workers

68. Which of the following will lower inflationary expectations?

(A) The government's announcement that it will increase spending on infrastructure
(B) The Federal Reserve's announcement that it will steadily raise the federal funds rate
(C) An increase in the value of stocks
(D) An increase in consumer and business optimism
(E) An increase in the money supply

69. An increase in national saving will affect the supply of loanable funds and the real interest rate in which of the following ways?

Supply of Loanable Funds	Real Interest Rate
(A) Increase	Increase
(B) Increase	Decrease
(C) Increase	No change
(D) Decrease	Increase
(E) Decrease	Decrease

70. Which of the following will cause the short-run aggregate supply curve to shift to the left?

(A) An increase in the price level
(B) A decrease in the price level
(C) An increase in trade deficits
(D) An increase in nominal wages
(E) An increase in productivity

71. Which of the following policies will most likely stimulate economic growth?

(A) A tax credit on investment spending
(B) Elimination of copyright and patent protection laws
(C) A reduction in funding for education
(D) Change of the Social Security retirement age from sixty-five to fifty-eight
(E) Increased government regulations for research and development

72. The real interest rate for a consumer loan is 5 percent, and the expected inflation rate is 2 percent. What is the nominal interest rate on the consumer loan?

(A) 2.5 percent
(B)   3 percent
(C)   5 percent
(D)   7 percent
(E) 10 percent

73. Which of the following groups is most likely to benefit from unanticipated inflation?

(A) Creditors
(B) Fixed income earners
(C) Consumers
(D) Debtors
(E) Savers

74. Assume that there are only two countries—Eland and Zland—that produce only two goods—X and Y. The table below shows units of each good that each country can produce using one hour of labor.

	Good X		Good Y
Eland	5	or	3
Zland	8	or	4

Which of the following statements is correct?

(A) Eland has a comparative advantage in producing both goods.
(B) Zland has an absolute advantage in producing both goods.
(C) Eland's opportunity cost for good Y is 5 units of good X.
(D) Zland's opportunity cost for good X is 2 units of good Y.
(E) Zland should not trade with Eland because Eland produces both goods at lower costs.

75. If both the demand for and the supply of coffee increase, what will happen to the equilibrium price and quantity in the coffee market?

Price	Quantity
(A) Increase	Increase
(B) Increase	Indeterminate
(C) Decrease	Decrease
(D) Decrease	Increase
(E) Indeterminate	Increase

76. Which of the following would cause a country's production possibilities curve to shift outward?

    (A) A decrease in the unemployment rate
    (B) A technological advance
    (C) An increase in government transfer payments
    (D) A reallocation of economic resources
    (E) A decline in population

77. Which of the following is true about economic growth?

    (A) It occurs in big countries more often than it does in small countries.
    (B) It occurs more often in countries with closed economies than in those with open economies.
    (C) It is positively related to a country's investment in human capital.
    (D) It is negatively related to a country's capital stock.
    (E) It is negatively related to a country's standard of living.

78. The M1 measure of the money supply primarily consists of which of the following?

    (A) Checking accounts and credit cards
    (B) Noncheckable savings and credit cards
    (C) Currency in circulation and checkable bank deposits
    (D) Noncheckable savings and small-denomination time deposits
    (E) Savings bonds and savings accounts

79. If a country's consumer price index was 200 last year and is 190 this year, which of the following must be true for the country from last year to this year?

    (A) The quantity of goods produced has decreased.
    (B) The average quality of the goods produced has increased.
    (C) The inflation rate has increased by 5 percent.
    (D) The price level has decreased by 5 percent.
    (E) The unemployment rate has decreased by 5 percent.

80. The national debt of the United States is the

    (A) accumulated government spending, less the interest paid on bonds
    (B) accumulation of all past government deficits
    (C) difference between government tax revenues and government spending during a fiscal year
    (D) money owed to the Federal Reserve for reimbursement of domestic bondholders
    (E) annual amount borrowed by local, state, and federal governments to provide public goods to all citizens

81. Gross domestic product is defined as which of the following?

    (A) The total amount of output produced by an economy in a given time period
    (B) The total market value of all output produced by an economy in a given time period
    (C) The total market value of all final goods and services produced by an economy in a given time period
    (D) The total value of all final goods and services sold in the domestic market in a given time period
    (E) The total market value of all final goods and services produced by an economy minus the market value of final goods and services exported to other nations in a given time period

82. If central banks in Asia reduce the supply of their own currencies on the foreign-exchange market relative to the United States dollar, which of the following will occur?

    (A) Asian currencies will depreciate.
    (B) The United States dollar will appreciate.
    (C) Asian goods will be more expensive for United States consumers.
    (D) United States goods will be more expensive for Asian consumers.
    (E) United States private investment in Asia will increase.

83. Which of the following policy actions could the Federal Reserve use to combat inflation?

    (A) Selling government bonds to reduce the money supply
    (B) Buying government bonds to reduce the amount of loanable funds
    (C) Raising taxes to reduce the interest rate
    (D) Cutting the reserve requirement to reduce the amount of excess reserves held by banks
    (E) Cutting the discount rate to decrease the availability of loans to banks

84. Jamal lost his computer programming job when it was outsourced to a company abroad. After looking unsuccessfully for several months for another job, he gave up and is currently attending school. Currently Jamal is classified as

    (A) structurally unemployed
    (B) frictionally unemployed
    (C) cyclically unemployed
    (D) underemployed
    (E) not in the labor force

85. Which of the following will decrease gross domestic product by the greatest amount?

    (A) $20 billion increases in both government spending and taxes
    (B) $20 billion decreases in both government spending and taxes
    (C) A $20 billion increase in taxes
    (D) A $20 billion decrease in government spending
    (E) A $20 billion increase in net exports

Study Resources

Most textbooks used in college-level introductory macroeconomics 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 Principles of Macroeconomics 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.

There are many introductory economics textbooks that vary greatly in difficulty. Most books are published in one-volume editions, which cover both microeconomics and macroeconomics; some are published in two-volume editions, with one volume covering macroeconomics and the other microeconomics. A companion study guide/ workbook is available for most textbooks. The study guides typically include brief reviews, definitions of key concepts, problem sets and multiple-choice test questions with answers. Many publishers also make available companion websites, links to other resources or computer-assisted learning packages.

To broaden your knowledge of economic issues, you may read relevant articles published in the economics periodicals that are available in most college libraries — for example, *The Economist*, *The Wall Street Journal* and the *New York Times*, along with local papers, may also enhance your understanding of economic issues.

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

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 2005. 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:

Komi Ameganvi	Oklahoma State University
Stephen Baker	Capital University
Richard Brunelle	Fitchburg State College
Charles Callahan	SUNY Brockport
Kelly Chaston	Davidson College
Paul Copley	Lewis and Clark College
George Davis	Lincoln Memorial University
Abdelaziz Farah	SUNY Orange
Cole Gustafson	North Dakota State University
Patricia Herrmann	Coastal Bend College
Miren Ivankovic	Southern Wesleyan University
Jean Kiekel	McPherson College
Jessica McCraw	Texas Christian University
Diego Mendez-Carbaj	Illinois Wesleyan University
Terry Monson	Michigan Technological University
Lawrence Moore	Potomac State College
Odili Onianwa	Alabama A&M University
Gregory Rabb	Jamestown Community College
Denise Robson	University of Wisconsin — Oshkosh
Kristin Vangaasbeck	California State University — Sacramento

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: Principles of Macroeconomics
Interpretive Score Data

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

Course Grade	Scaled Score	Number Correct
	80	70
	79	69
	78	67-68
	77	66
	76	65
	75	64
	74	63
	73	61-62
	72	60-61
	71	59-60
	70	58-59
	69	57-58
	68	56-57
	67	55-56
	66	54-55
	65	53-54
	64	52-53
	63	51-52
B	**62**	**50-51**
	61	49-50
	60	48-49
	59	47-48
	58	46-47
	57	45-46
	56	44-45
	55	43-44
	54	42-43
	53	41-42
	52	40-41
	51	39-40
C	**50***	**38-39**
	49	37-38
	48	36-37
	47	35-36
	46	34-35
	45	33-34
	44	32-33
	43	32
	42	31
	41	30
	40	29
	39	28
	38	27
	37	26
	36	25
	35	24-25
	34	23-24
	33	22-23
	32	21-22
	31	20-21
	30	20
	29	19
	28	18
	27	17
	26	16
	25	15
	24	14
	23	13
	22	12-13
	21	11-12
	20	0-11

*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 Principles of Macroeconomics examination selected the content of the test to reflect the content of Principles of Macroeconomics 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.[1] 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 Principles of Macroeconomics are estimated to have a reliability coefficient of 0.90. The standard error of measurement is 3.51 scaled-score points. The conditional standard error of measurement at the recommended C-level credit-granting score is 3.87 scaled-score points.

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