Overview
This NES Profile provides information about the test, including the approximate percentage of the total test score derived from each content domain. The complete set of the content domains, the test framework, is provided here and contains all of the competencies and descriptive statements that define the content of the test.

This NES Profile includes the following materials:

- the test competencies associated with each content domain
- a set of descriptive statements that further explain each competency
- sample test questions aligned to the competencies
- any applicable reference materials, as noted below

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<thead>
<tr>
<th>Test Field</th>
<th>Business Education (309)</th>
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<tr>
<td>Test Format</td>
<td>Multiple-choice questions</td>
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<tr>
<td>Number of Questions</td>
<td>Approximately 150</td>
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<td>Test Duration</td>
<td>Up to 3 hours</td>
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<td>Reference Materials</td>
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<table>
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Content Domain I: Business Management, Law, and Ethics

Competencies:

0001 Understand functions, principles, and methods of organizational management.

Descriptive Statements:

- Analyze theories and methods of organizational management; management functions, such as planning, controlling, leading, and organizing; and the roles of management in business organizations.
- Apply basic principles of financial management and the preparation of budgets.
- Apply principles and methods for managing change, making decisions, solving problems, and achieving innovations within business organizations.
- Apply strategies, procedures, and techniques for managing business operations to enhance productivity, add value, and increase profitability.
- Compare types of organizational structures, including the advantages and disadvantages of each type.

Sample Item:

Which of the following actions by a manager best illustrates the management function of controlling?

A. delivering an inspirational speech to new employees during a company meeting
B. assessing whether short-term goals for developing a new product line have been met
C. analyzing data to help determine consumer buying trends for the next quarter
D. assigning employees to a team that will develop marketing strategies for new products

Correct Response and Explanation

B. This question requires the examinee to analyze management functions, such as planning, controlling, leading, and organizing. The management function of controlling is often defined as the process of monitoring performance and taking action to ensure desired results. Conducting an assessment to determine whether short-term goals for developing a new product line have been met is a good example of the monitoring performance aspect of this definition.

0002 Understand principles of human resources management.

Descriptive Statements:

- Apply knowledge of procedures for staffing a business, including employee recruitment, selection, training, evaluation, and termination.
- Analyze individual behavior and group dynamics, factors that influence employee motivation and morale, strategies for increasing job satisfaction, and conflict resolution in organizations.
- Apply strategies for managing employee compensation and benefits, including strategies for establishing compensation and managing retirement plans, benefit plans, unemployment insurance, and workers’ compensation.
Analyze laws and policies related to human resources management, including those related to discrimination, sexual harassment, collective bargaining, family medical leave, and workplace safety.

Sample Item:

The human resources manager of a small software development firm is attempting to predict hiring needs for the next few years. Which of the following types of data would be most useful for accomplishing this task?

A. statistical analyses of the number of college graduates over the next few years who will have degrees in software development

B. current industry-wide figures for turnover rate and productivity for software developers

C. estimates of the number of individuals who have degrees in software development and are currently unemployed

D. projections of increases in demand for the company's products over the next few years

Correct Response and Explanation

D. This question requires the examinee to apply knowledge for staffing a business. Being able to accurately predict future hiring needs is an important part of staffing a business. For a small software development company, future hiring needs are most likely to be correlated with production levels. Production increases are likely to be a function of increased demand. Therefore, one way to predict future hiring needs is to project increases in demand for the company's product over the next few years.

0003 Understand business law and issues related to ethics and social responsibility in business.

Descriptive Statements:

» Apply basic knowledge of the structure and operation of the U.S. legal system, legal terminology, and principles of law relevant to business operations.

» Apply basic knowledge of laws and regulations, including the Uniform Commercial Code and other contract, property, tax, bankruptcy, copyright, and antitrust laws, and of government agencies related to business operations and the regulation of competition.

» Apply knowledge of laws, regulations, and government agencies related to consumer protection, product testing and safety, and environmental protection.

» Examine issues related to ethics and social responsibility in business.

Sample Item:

Which of the following is the best example of an action based on a tort?

A. An accountant is charged with embezzling money from the firm where the accountant works.

B. A supplier sues a company for breach of contract after the company cancels an order of custom-made parts.

C. A homeowner sues an appliance manufacturer after a faulty toaster causes an electrical fire.

D. A jeweler is charged with fraud after selling glass rings to customers who had paid for diamond rings.
Correct Response and Explanation

C. This question requires the examinee to apply basic knowledge of legal terminology. A tort is commonly defined as an intentional or unintentional wrong done by one entity (e.g., a person, a corporation) to another. Torts are adjudicated in civil courts, where the aggrieved party (the plaintiff) sues the party accused of the wrong (the defendant) for damages. Tort law is distinguished from criminal law, which pits the state against the individual accused of breaking the law. A good example of a tort is a lawsuit by an individual against a manufacturer whose product has caused the individual to be harmed.
Content Domain II: Accounting, Personal Financial Management, and Quantitative Analysis

Competencies:

0004 Understand business accounting.

Descriptive Statements:

» Apply knowledge of basic terminology, principles, and methods of business accounting, including the accounting equation, and the types, characteristics, and purposes of various accounting documents.

» Apply knowledge of the steps of the accounting cycle and the use of computerized software in accounting.

» Apply procedures for generating and interpreting financial statements, calculating and interpreting financial ratios, and managing cash flow.

» Apply methods and procedures used in payroll and inventory accounting.

» Apply methods and procedures used in management accounting and evaluation of the financial performance of organizations.

Sample Item:

The table below shows the income statement for the Shamrock Bakery for the year ending December 31.

<table>
<thead>
<tr>
<th>Shamrock Bakery Income Statement Year Ending December 31</th>
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<tbody>
<tr>
<td>Net Sales</td>
</tr>
<tr>
<td>Cost of Goods Sold</td>
</tr>
<tr>
<td>Gross Margin</td>
</tr>
<tr>
<td>Operating Expenses</td>
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<tr>
<td>Selling Expenses</td>
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<tr>
<td>General and Administrative Expenses</td>
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<tr>
<td>Total Operating Expenses</td>
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<tr>
<td>Income from Operations</td>
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<tr>
<td>Other Revenue and Expenses</td>
</tr>
<tr>
<td>Interest Income</td>
</tr>
<tr>
<td>Interest Expenses</td>
</tr>
<tr>
<td>Excess of Other Expenses over Other Revenues</td>
</tr>
<tr>
<td>Income Before Income Taxes</td>
</tr>
<tr>
<td>Income Taxes</td>
</tr>
<tr>
<td>Net Income</td>
</tr>
</tbody>
</table>

According to the statement above, what is the approximate profit margin for the Shamrock Bakery for the past year?

A. 20%  
B. 25%
C. 40%

D. 50%

**Correct Response and Explanation**

A. This question requires the examinee to apply procedures for interpreting financial statements. An income statement provides information regarding a company's net sales, income from various sources, and expenses. The profit margin of a company is defined as its net income divided by its net sales. In this case, the profit margin for Shamrock Bakery is the net income of $75,072 divided by net sales of $375,390, or 20%.

0005 Understand personal finance and principles of consumer economics.

**Descriptive Statements:**

» Apply principles of personal financial management and financial planning, including types, characteristics, advantages, and disadvantages of various investment options.

» Analyze factors that affect the use of credit and strategies for personal credit management.

» Apply knowledge of strategies for personal risk management and the types, characteristics, advantages, and disadvantages of various insurance products.

» Apply knowledge of consumer economics and factors that affect employment opportunities, cost of living, and personal income.

**Sample Item:**

An individual charges a total of $1,800 on one credit card during a one-month period. The credit card account has an APR of 16%. Which of the following represents the interest that the individual owes at the end of the month for these charges?

A. $24  
B. $29  
C. $96  
D. $288

**Correct Response and Explanation**

A. This question requires the examinee to analyze strategies for personal credit management. The monthly interest that an individual is charged on his or her credit statement can be calculated by dividing the annual percentage rate (APR) by 12 and multiplying that number by the charges on the card for that month. In this case, the APR is 16%, so the monthly interest rate is 1.33%. The charges for the month are $1,800, so the interest on these charges would be .0133 × $1,800, or approximately $24.
Understand basic techniques of computation and quantitative analysis in business.

**Descriptive Statements:**

- Apply basic computational skills and statistical principles and techniques in various business contexts.
- Interpret charts, tables, and graphs in various business contexts.
- Apply basic principles of measurement, algebra, mathematical formulae, and other quantitative techniques in various business contexts.

**Sample Item:**

A salesclerk who sells farm machinery receives a wage of $7.50 per hour plus a commission of 1.5% of the retail value of each item that he sells. During one week, he works 36 hours and sells three pieces of machinery for $28,000, $15,000, and $33,000. How much money will the salesclerk earn for that week?

A. $870  
B. $1,140  
C. $1,410  
D. $2,700

**Correct Response and Explanation**

C. This question requires the examinee to apply basic computational skills in a business context. In this question, a salesclerk is paid both by the hour and on commission. The salesclerk works 36 hours during a week at a wage of $7.50 per hour. Therefore, the salesclerk's income for the week from this hourly wage is $7.50 × 36, or $270. During the week, the salesclerk sells three pieces of machinery for $28,000, $15,000, and $33,000 for a total of $76,000 in sales. The salesclerk earns a commission of 1.5% on his or her retail sales, so the commission earned for the week is .015 × $76,000, or $1,140. When added to the $270 in wages earned for the week, the salesclerk has earned a total of $1,410.
Content Domain III: Economics and International Business

Competencies:

**0007** Understand fundamental principles of microeconomics.

Descriptive Statements:

» Demonstrate knowledge of basic terminology, concepts, and theories of microeconomics.

» Apply concepts related to business economics, including opportunity costs, supply and demand, and the law of diminishing returns.

» Analyze principles and theories of competition and characteristics of different types of competitive systems.

» Analyze concepts related to the factors of production.

Sample Item:

The graph below shows the supply and demand curves for chicken.

Which of the following graphs best illustrates the likely change in the supply and/or demand curves for chicken shortly after a sharp decrease in the price of fish?

A.
Correct Response and Explanation

C. This question requires the examinee to apply concepts related to business economics, such as supply and demand. Supply and demand curves illustrate how demand for the item and the supply of the item affect the item's price. As demand increases for an item, price will also increase, and the demand curve will move to the right. As demand decreases, price will decrease, and the demand curve will move to the left. The price for a particular item may also be sensitive to the supply and demand of a related item. In this case, a sharp decrease in the price of fish is likely to increase the demand for fish. Since fish often competes with chicken for a place at the family dinner table, the increased demand for fish should lead to decreased demand for chicken, which will lead to a reduction in the price of chicken and movement of the demand curve to the left.
0008 Understand fundamental principles of macroeconomics.

**Descriptive Statements:**

» Demonstrate knowledge of basic terminology, concepts, and theories of macroeconomics.
» Compare different economic and political systems.
» Analyze macroeconomic factors that influence economic growth and the business cycle.
» Apply economic indicators to assess the state of an economy.
» Analyze government, monetary, and fiscal policy and how these policies affect the U.S. economy.

**Sample Item:**

The Federal Reserve Board would be most likely to recommend a series of interest rate cuts in order to help accomplish which of the following goals?

A. bringing the economy out of a recession  
B. preventing devaluation of the dollar  
C. slowing down a too-rapid expansion of the economy  
D. reducing inflation

**Correct Response and Explanation**

A. This question requires the examinee to analyze government monetary policy. The Federal Reserve Board uses its power to set certain interest rates to affect the rate of economic growth and the rate of inflation. By reducing interest rates, the Federal Reserve makes it easier for both businesses and consumers to borrow money. Easy credit allows businesses to expand, production to increase, and more workers to be hired, thus initiating the growth phase of the business cycle and helping to bring the national economy out of recession.

0009 Understand international business, marketing, and trade.

**Descriptive Statements:**

» Analyze major concepts, historical patterns, and current trends in international trade and business.
» Analyze factors that affect international trade, domestic production, and the economies of the United States and other nations.
» Examine the roles of trade agreements, international agencies, and international financial institutions in expanding global commerce and promoting global economic integration.
» Analyze organizational structures and forms of international business ownership and how cultural, sociopolitical, economic, and language differences affect business operations and marketing in other countries.
Sample Item:

Which of the following changes in the U.S. economy would most likely lead to a decrease in exports from the United States to other countries?

A. a rise in the value of the U.S. dollar relative to other currencies
B. an increase in the productivity of U.S. workers
C. a decrease in the unemployment rate of U.S. workers
D. a reduction in short-term interest rates charged by U.S. banks

Correct Response and Explanation

A. This question requires the examinee to analyze factors that affect international trade and the economy of the United States. One important factor that helps determine the success of a nation in exporting its goods and services is the price of those goods and services in other countries. Many factors influence the prices of a nation's goods and services, including the value of the nation's currency relative to the currencies of other nations. A rise in the value of the U.S. dollar relative to the European euro, for example, would lead to higher prices for U.S. goods and services on European markets. Demand for U.S. goods and services in Europe would fall and the amount of U.S. exports to Europe would decrease.
Content Domain IV: Marketing, E-Commerce, and Entrepreneurship

Competencies:

0010 Understand basic principles of marketing, marketing research, and product/service planning and placement.

Descriptive Statements:

» Apply basic marketing principles, including the four Ps of product, placement, price, and promotion.
» Apply strategies for conducting market research, collecting and interpreting marketing data, and developing a marketing plan.
» Analyze marketing strategies, including market segmentation; factors affecting marketing decisions; and methods of evaluating markets and forecasting sales.
» Analyze the role of marketing in product/service design and development, the product life cycle, and strategies for determining the product mix.
» Apply principles and procedures related to product/service placement and distribution.
» Apply knowledge of consumer behavior and consumer decision making, the selling process, and strategies for increasing customer satisfaction.

Sample Item:

At which of the following stages in the product life cycle would a marketing strategy of differentiating the product by producing related product lines be most advantageous?

A. Introduction
B. Growth
C. Maturity
D. Decline

Correct Response and Explanation

C. This question requires the examinee to analyze the product life cycle and strategies for determining the product mix. Differentiating a product by producing related product lines is most advantageous during the Maturity phase of a product's life cycle. During the Maturity phase, the product is well established, but sales are no longer increasing and will likely begin to decline as competing products capture a larger share of the market. Differentiating the product breaks up the target market for the product into a number of smaller niche markets, each with its own, more narrowly targeted, product. Although sales of each element of the product line will likely be less than those of the original product, the line of related products as a group may enter a new period of sales growth.

0011 Understand principles and procedures related to e-commerce and Internet marketing.

Descriptive Statements:

» Demonstrate knowledge of types of e-commerce, the impact of e-commerce on the global economy, and the advantages and disadvantages of marketing goods and services over the Internet.
» Analyze market research, marketing strategies, product/service planning and placement, and product distribution for Internet businesses.
» Compare e-commerce and conventional business characteristics, tactics, and strategies.
» Analyze strategies and issues related to starting an Internet business and factors that influence the success or failure of Internet start-ups.

Sample Item:

Which of the following best describes one use of e-commerce for one-to-one marketing?

A. Banner ads for health supplements appear on the pages of a Web site that deals with fitness and health issues.
B. Users logging on to a store's Web site are greeted by product recommendations based on previous purchases from that store.
C. Several companies that sell different products to the same target audience place links to one another's Web sites on their own Web sites.
D. E-mails advertising a sale at a regional department store chain are sent to people living in the store's geographical region.

Correct Response and Explanation

B. This question requires the examinee to demonstrate knowledge of types of e-commerce. E-commerce marketing efforts may target very wide audiences (e.g., pop-ups) or very narrow audiences (e.g., narrowly targeted e-mails). Internet technology allows a company to collect data about a customer's purchases from a Web site and analyze those purchases to develop a profile of the customer's preferences. The company can use this profile to suggest products that the customer might be interested in when he or she logs on to the site in the future. This is an example of extremely narrow, essentially one-to-one marketing, where a company's marketing message is tailored to fit each customer's demonstrated preferences.

0012 Understand entrepreneurship and business plan development.

Descriptive Statements:

» Analyze the role of entrepreneurs in business, the characteristics of successful entrepreneurs, and the advantages and disadvantages of business ownership.
» Identify types of business ownership and the characteristics, advantages, and disadvantages of each type.
» Analyze factors, procedures, and issues related to starting a new business and developing a business plan for a new business.

Sample Item:

Which of the following best describes one role of venture capitalists in U.S. business?

A. providing funds to start up new businesses
B. serving as intermediaries between buyers and sellers of stocks
C. purchasing assets of bankrupt companies
D. providing short-term loans to established businesses

Correct Response and Explanation

A. This question requires the examinee to analyze factors and issues related to starting a new business. Starting a new business requires access to sufficient capital to get the business off the ground and offset expected losses until the business is well established. Unless the entrepreneur uses personal capital, he or she will have to approach other individuals, banks, or other lending institutions for funds. Unlike banks, venture capitalists provide capital to start a business in return for a stake in the business, rather than for a guaranteed return in the form of interest on a loan.
**Content Domain V: Business Communications, Technology, Career Development, and Professionalism**

**Competencies:**

**0013** Understand principles and procedures related to business communication.

**Descriptive Statements:**

- Demonstrate knowledge of effective communication skills and proper etiquette in personal and professional situations.
- Demonstrate knowledge of specific business terminology, appropriate style, and standard English for written business communications.
- Examine strategies and technologies used for preparing and delivering presentations to diverse audiences.
- Demonstrate knowledge of terminology, components, procedures, and business applications related to the use of electronic communications systems.

**Sample Item:**

**In which of the following situations would it be most important for participants to communicate in a face-to-face meeting?**

A. A manager wishes to inform a subordinate of topics that will be discussed at an upcoming meeting.
B. An entrepreneur wishes to persuade a potential investor to back a business start-up.
C. A team leader wishes to inform members of the team about specifications for an assigned task.
D. A human resources director wishes to persuade employees to use company e-mail solely for business purposes.

**Correct Response and Explanation**

B. This question requires the examinee to demonstrate knowledge of effective communication skills in professional situations. Face-to-face communication allows each participant to send and receive both verbal messages and nonverbal messages in the form of body language, facial expressions, and gestures. Compared with other forms of communication (e.g., writing, telephone) face-to-face communication allows greater amounts and more subtle types of information to be sent and received. This makes face-to-face communication especially useful during interactions in which the information exchanged is complex or nuanced, as in persuading a potential investor to back a business start-up.

**0014** Understand information systems in business.

**Descriptive Statements:**

- Demonstrate knowledge of the impact of information technology on business and society.
- Examine strategies for planning the selection and acquisition of information technologies.
- Demonstrate knowledge of basic principles and terminology associated with the use of computer technology in business.
» Apply knowledge of how to use the Internet and systems networking.
» Demonstrate knowledge of principles, procedures, and issues related to laws, ethics, and security in technology systems.
» Demonstrate knowledge of the use of computer technology in production systems.

Sample Item:

A business is looking for a commercial Internet server to host its Web site. It is most likely to need a server offering SQL capabilities if it intends to offer its Web site users:

A. video streaming.
B. database access.
C. site searches.
D. interactive forms.

Correct Response and Explanation

B. This question requires the examinee to apply knowledge of how to use the Internet. Structured Query Language (SQL) is a computer language for inserting, retrieving, modifying, updating and deleting data from databases. A business Web site would need a server that offers SQL capabilities if it intends to offer visitors to the Web site access to databases.

0015 Understand information processing and computer technology applications in business.

Descriptive Statements:

» Identify methods for developing the skills and knowledge of technology users in a business.
» Apply knowledge of components and operations of computer systems.
» Apply knowledge of principles and procedures related to software applications used for information processing.
» Demonstrate knowledge of skills and techniques used for data input technology and information processing.
An incomplete spreadsheet for a business is shown below.

What formula should be inserted in cell C9?

A. B5 + B12  
B. SUM(B5:B7)  
C. B15 + B21  
D. SUM(C15:C21)

Correct Response and Explanation

B. This question requires the examinee to apply knowledge of principles and procedures related to software applications used for information processing. A spreadsheet is a computer application that consists of a grid of cells that may contain alphanumeric text, as in column A of the spreadsheet shown, or numerals, as in columns B and C. A spreadsheet cell may also contain a formula that specifies how the content of that cell is to be calculated from the contents of other cells. In the spreadsheet shown, column C of the balance sheet represents the total of each of the categories (assets, liabilities, owner's equity) of the balance sheet. The highlighted cell represents total assets, and the formula for calculating the cell's content would be SUM(B5:B7).
Understand career development and professionalism.

**Descriptive Statements:**

- Identify career opportunities in business; sources of information about business careers; and personal interests, education, and experience needed for business careers.
- Apply knowledge of career-planning strategies and skills related to job search and job acquisition.
- Demonstrate knowledge of career, technical, student, and professional organizations related to business education.

**Sample Item:**

*Which of the following steps should a person take *first* when choosing a career?*

A. assessing short- and long-term prospects for employment in various fields
B. identifying one's own personal characteristics and career objectives
C. reviewing strategies for writing an effective résumé and application letter
D. gathering information about academic requirements for various professions

**Correct Response and Explanation**

B. This question requires the examinee to apply knowledge of career-planning strategies and skills related to job search and job acquisition. A primary objective of the career-planning process is to identify potential careers that match the individual's goals, values, and personal strengths. This requires both a knowledge of the characteristics of a variety of careers and a knowledge of one's own personal characteristics. Since the number of potential careers is extremely large, it is most efficient to begin this process by identifying one's own personal characteristics and career objectives and then matching these characteristics and objectives with characteristics of particular careers.