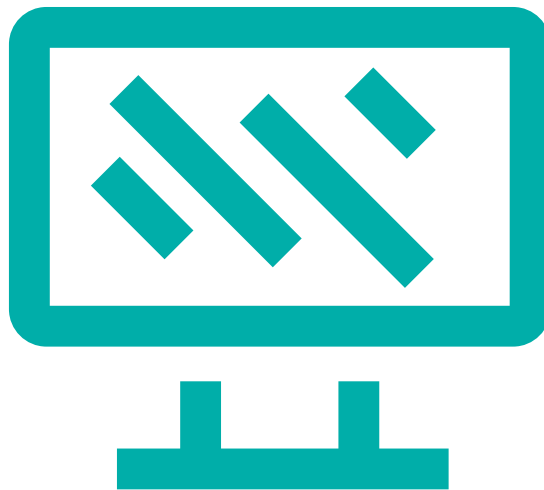




NOCTI
State Customized
Credential Blueprint



Management Information Systems (PA)

Code: 8092 / Version: 01
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General Assessment Information

Blueprint Contents

General Assessment Information	Sample Written Items
Written Assessment Information	Performance Assessment Information
Specific Competencies Covered in the Test	Sample Performance Job

Test Type: The Management Information Systems PA Assessment was developed based on a Pennsylvania statewide competency task list and contains a multiple-choice and performance component. This assessment is meant to measure technical skills at the occupational level and includes items which gauge factual and theoretical knowledge.

Revision Team: The assessment content is based on input from Pennsylvania educators who teach in approved career and technical education programs.



52.1201- Management
Information Systems,
General



Career Cluster 8- Information
Technology



NATIONAL COLLEGE CREDIT RECOMMENDATION SERVICE
University of the State of New York - Regents Research Fund

In the lower division
baccalaureate/associate degree
category, 3 semester hours in
Management Information Systems

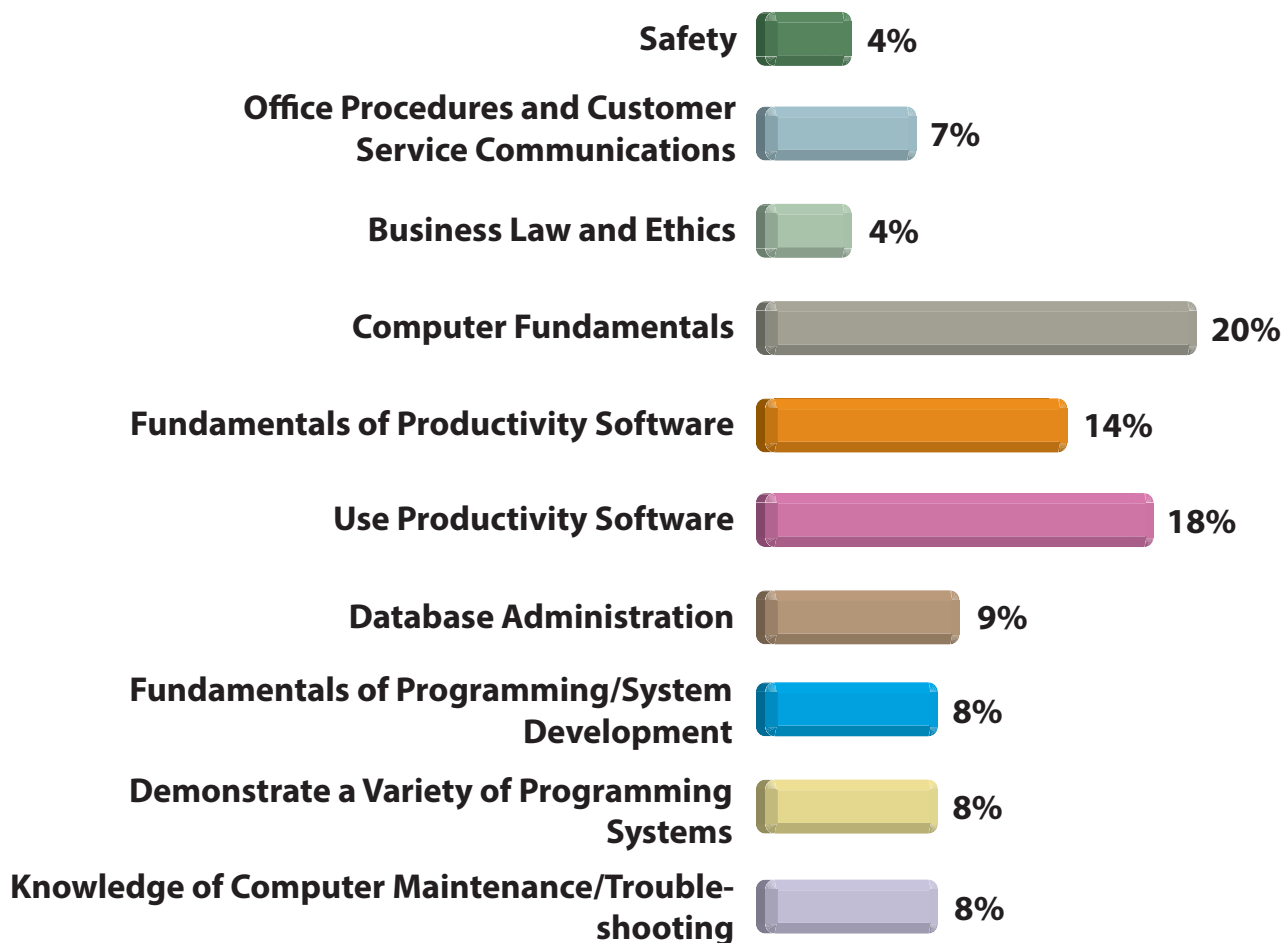
Written Assessment

NOCTI written assessments consist of questions to measure an individual's factual theoretical knowledge.

Administration Time: 3 hours

Number of Questions: 200

Number of Sessions: This assessment may be administered in one, two, or three sessions.



Specific Standards and Competencies Included in this Assessment

Safety

- Follow ergonomic practices
- Organize and maintain workstation
- Describe and demonstrate ways to dissipate electrostatic discharge
- Discuss risks to computer if static electricity is present

Office Procedures and Customer Service Communications

- Identify, proofread, and correct grammar errors in all documents
- Demonstrate proper interpersonal communication skills
- Develop time management skills by setting priorities and perform multiple tasks
- Maintain records, report, or files
- Identify the ways a customer service representative can develop a rapport with customers
- Explain the importance of putting extra effort into satisfying customers

Business Law and Ethics

- Learn business law and business ethics vocabulary
- Explain how advances in computer technology impact such areas as intellectual property, contract law, criminal law, tort law, and international law
- Explain crimes often associated with business and organizations (e.g., embezzlement, extortion, computer crimes)
- Identify improper use of business technology and property (e.g., computers, personal digital assistants, cell phones, telephones)
- Identify legal safeguards to protect your right of computer privacy
- Identify Cyberlaw as an emerging trend in the 21st century

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Specific Standards and Competencies (continued)

Computer Fundamentals

- Identify terminology and the use of the World Wide Web
- Research and evaluate new technologies
- Use search engines to locate resources
- Identify components of the system unit, including input/output devices
- Navigate and manage operating systems and utility programs
- Utilize communication devices and networks
- Employ computer security, ethics, and privacy

Fundamentals of Productivity Software

- Edit a document using word processing software
- Edit formats, footnotes, and paragraphs
- Edit tables and charts
- Generate form letters, mailing labels and envelopes
- Perform desktop publishing using word processing software
- Edit a document using spreadsheet software
- Edit graphs and associated data using spreadsheet software
- Edit data in multiple worksheets using spreadsheet software
- Edit macros
- Edit and export lists using spreadsheet software
- Perform business mathematical statistics and built-in functions using spreadsheet software
- Send and receive messages using communications software
- Edit a slide presentation using multimedia software
- Edit text, graphics, and tables to a presentation using multimedia software

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Specific Standards and Competencies (continued)

Use Productivity Software

- Create a document using word processing software
- Create formats, footnotes, and paragraphs
- Edit tables and charts
- Create a document using spreadsheet software
- Create graphs and associated data using spreadsheet software
- Create data in multiple worksheets using spreadsheet software
- Create lists using spreadsheet software
- Create a slide presentation using multimedia software
- Add text, graphics, and tables to a presentation using multimedia software
- Produce a customized slide presentation using all available tools

Database Administration

- Demonstrate a working knowledge of database design fundamentals and terminology
- Enter updates and maintain databases
- Create reports, forms, and combo boxes
- Import and export data into other applications
- Define database management theories
- Create entity–relationship diagram
- Create data queries using simple and complex structured query language
- Aggregate and sort data in queries
- Include calculated and built-in functions and procedures in queries



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Specific Standards and Competencies (continued)

Fundamentals of Programming/System Development

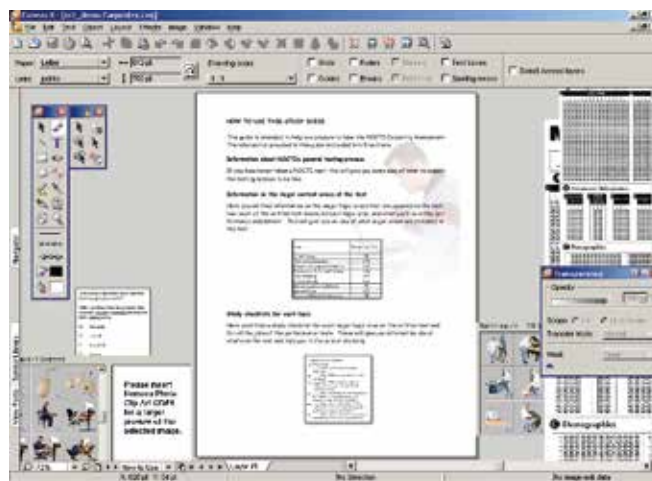
- Describe a working knowledge of the System Development LifeCycle (System Investigation/project proposal, Analysis, Design, Code/Text, Implementation and Maintenance)
- Differentiate programming fundamentals – system processing, integration, generations of languages, binary code, object code, source code
- Declare and manipulate appropriate data types variables, such as arrays and string data
- Utilize program control structures (e.g., decisions, loops, functions/subroutines, arithmetic and logical operations)

Demonstrate a Variety of Programming Systems

- Create working graphical user interfaces (GUI)
- Create, test, and debug successful computer programs
- Create clear and thorough program documentation

Knowledge of Computer Maintenance/Troubleshooting

- Demonstrate the troubleshooting theory
- Analyze common hardware processing, problems, and performance issues
- Analyze common software processing, problems, and performance issues
- Integrate common preventive maintenance techniques
- Analyze basic network processing, problems, and performance issues



Sample Questions

The term, malware, refers to software designed to

- A. enhance the appearance of a web browser
- B. damage a computer system
- C. convert text files to binary files
- D. test for damage on the hard drive

The computer's clipboard is

- A. a place in the memory to aid in cutting, copying, and pasting
- B. a new word processor
- C. hardware used to hold papers and other documentation
- D. used with the delete key

The two methods to consolidate data from multiple spreadsheets are position and

- A. location
- B. placement
- C. intersection
- D. category

The purpose of a substring function is to

- A. separate an alpha field into smaller parts
- B. have one part of a header appear under a main heading
- C. be able to print a formula such as H₂O
- D. have a string of data underneath another string of data in a report

The information processing cycle includes

- A. input, printing, processing, and output
- B. input, processing, output, and storage
- C. storage, research, data entry, and output
- D. organization, input, dictation, and storage

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Sample Questions (continued)

A wrist rest is a common device used to prevent

- A. stiff wrists
- B. tired wrists
- C. carpal tunnel syndrome
- D. wrist strain syndrome

All the office assistants in a firm are trained to cooperate _____ themselves.

- A. outside
- B. within
- C. between
- D. among

A two-letter country code in a URL is the

- A. file
- B. page
- C. domain
- D. keyword

The ability to process both numerical and word processing data by collecting, deleting, modifying, analyzing, and summarizing is referred to as

- A. desktop publishing
- B. records dispersal
- C. data manipulation
- D. direct observation

Visual programming languages, often used for GUI development, are known as _____ generation languages.

- A. 2nd
- B. 3rd
- C. 4th
- D. 5th

Performance Assessment

NOCTI performance assessments allow individuals to demonstrate their acquired skills by completing actual jobs using the tools, materials, machines, and equipment related to the technical area.

Administration Time: 3 hours

Number of Jobs: 3

Areas Covered:

52% Spreadsheet

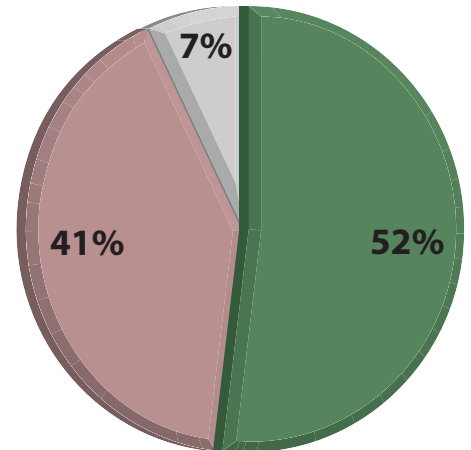
Participants will place header, create spreadsheet heading and column headings, enter data and formulas, get computer totals, use functions, format correctly, create a pie chart, save the spreadsheet, and print the material.

41% Database Design and Reports

Participants will title the database, create fields within the table, enter data, print records and fields, print tabular report, save database, query report A&B, place name in header, close and exit.

7% Device Identification

Participant will identify computer features.



Sample Job

Database Design and Reports

Maximum Time: 1 hour and 30 minutes

Participant Activity: Using a database application package, the participant will set up a database file; enter data provided; print all records and all fields; print a tabular report, save the database to a CD or other digital media storage device, create two separate queries, close the database and exit the application.

