Test 5 consists of 50 questions drawn from the following; for IST102 & IST103 students only:

Mercer County Community College, Computer Concepts, Test 5
Covers Chapters 10 and 11 for IST102 and IST103 (all sections)

1. During which phase of the system development life cycle does the actual programming occur?
   A. Design
   B. Analysis
   C. Development and Documentation
   D. Testing and Installation

2. In object-oriented programming, inheritance allows a new class to pick up all the characteristics of the original or _________ class.

3. The language that the CPU understands, consisting of a sequence of bits, is called:
   A. assembly language.
   B. machine language.
   C. second-generation language.
   D. basic language.

4. BASIC, FORTRAN, COBOL, C++, and Java are all ___________ languages.

5. Higher-level programming languages create programs that can be moved from one type of computer to another, which is called:
   A. portability.
   B. scalability.
   C. transferability.
   D. inheritance.

6. A variable declaration tells the operating system to allocate space:
   A. on the bus.
   B. in RAM.
   C. in the CPU.
   D. on the hard drive.

7. The process by which code is converted into machine language is called:
   A. programming.
   B. translation.
   C. compilation.
   D. execution.

8. The binary sequence that instructs the CPU to run the programming code is called a(n):
   A. source file.
   B. executable program.
   C. base code.
   D. interpreted program.

9. Violations of the strict, precise set of rules that define a programming language are:
   A. keyword errors.
   B. syntax errors.
   C. source code errors.
   D. runtime errors.

10. Most integrated development environments (IDEs) include a debugger that:
    A. helps programmers find runtime errors.
    B. eliminates viruses.
    C. helps programmers find syntax errors.
11. Which language do programmers use if the problem requires a lot of “number crunching”?
   A. C++  
   B. HTML  
   C. FORTRAN  
   D. Java.

12. Which of the following is NOT part of a program’s problem statement?
   A. inputs or data that are expected to be provided  
   B. outputs or the information that is expected to be produced  
   C. pseudocode or the text-based approach to documenting the algorithm  
   D. processing or the set of steps that transform input into output

13. Which of the following is a flowcharting program?
   A. C++  
   B. XML  
   C. Microsoft Visio  
   D. JavaScript

14. Structured Query Language (SQL) is an example of a:
   A. second-generation language.  
   B. third-generation language.  
   C. fourth-generation language.  
   D. fifth-generation language.

15. Which statement does NOT describe fifth-generation languages?
   A. They are the most “natural” of languages.  
   B. Problems are presented as a series of facts instead of a specific algorithm.  
   C. They use a set of short, English-based commands (such as SUB) that speak directly to the CPU.  
   D. Facts can be queried.

16. Some programmers include scrollbars, title bars, buttons, and menus in a program simply by adding them to a layout through a process called:
   A. visual programming.  
   B. drag and drop programming.  
   C. layout programming.  
   D. windows programming.

17. An alternative approach to systems development, called __________, makes use of a prototype at the beginning of the project.

18. Which of the following is the current version of Visual Basic used to build applications for Windows, the Web, and mobile devices?
   A. Visual Basic 5.0  
   B. Visual Basic 6.0  
   C. Visual Basic 2005  
   D. Visual Basic 2006

19. Which statement about the integrated development environment (IDE) is FALSE?
   A. All programming languages use the same IDE.  
   B. IDEs include an editor.  
   C. IDEs provide help files with examples of proper use of keywords.  
   D. The IDE presents all syntax errors in one list.

20. Which statement about selecting the right programming language for a project is FALSE?
A. Some programming languages may take up too much space.
B. All programming languages require the same amount of time to execute.
C. Select a language that is easy for programmers to use and maintain.
D. Certain languages are customized to support a UNIX or Windows environment.

21. Most modern operating systems have been written in:
   A. Java.
   B. Visual Basic.
   C. C.
   D. HTML.

22. Which of the following statements about Java is FALSE?
   A. C# competes with Java.
   B. Java can only run on a Windows operating system.
   C. The Java program can run on many different CPUs.
   D. Java only needs to be compiled once.

23. Which of the following statements describes dynamic decision-making?
   A. It occurs during the second phase of the SDLC.
   B. It is the ability of a Web page to display itself based on choices the reader makes.
   C. It is an alternative method used in system design.
   D. It is part of the flowcharting phase of algorithm creation.

24. Which of the following statements about pseudocode is TRUE?
   A. It is a basic programming language.
   B. It uses shapes and arrows to represent an algorithm.
   C. It is a text-based approach to documenting an algorithm.
   D. It is used only with the C++ programming language.

25. Small Java-based programs are called:
   A. Java classes.
   B. JSPs.
   C. JavaScripts.
   D. Java applets.

26. The loop decision point consists of three features: an initial value, a set of actions to be performed, and a(n):
   A. class.
   B. operator.
   C. test condition.
   D. testing plan.

27. Flowcharts and data flow diagrams are used during which step in the SDLC?
   A. Analysis
   B. Design
   C. Development and Installation
   D. Testing and Installation

28. Each input and output item used by the program is referred to as a:
   A. keyword.
   B. prototype.
   C. syntax.
   D. variable.

29. Which of the following is the programming language often used to build Windows applications?
   A. HTML
   B. Java
   C. C++
   D. Visual Basic
30. Which of the following enables Web sites to talk to each other easily by introducing a standard way for software to interact through Web services?
   A. RAD
   B. The .NET Framework
   C. JavaScript
   D. PHP (Hypertext Preprocessor)

31. Which of the following would NOT be used to build Web sites with interactive capabilities?
   A. Active Server Pages
   B. PHP (Hypertext Preprocessor)
   C. .NET Framework
   D. Java Server Pages

32. In object-oriented programming, each object from a given class is described by its:
   A. derived class.
   B. initial value.
   C. data and methods.
   D. input and output.

33. Which of the following statements is NOT a binary decision?
   A. “Did you work at most 8 hours today?”
   B. “Did you receive your online order?”
   C. “How much was the purchase?”
   D. “Did you want a catalog?”

34. Keywords in a programming language that allow the programmer to redirect the flow of the program based on a decision are called:
   A. pseudocode.
   B. control structures.
   C. directions.
   D. operators.

35. What language is used for applications that need to collect information from networked computers?
   A. HTML
   B. Java
   C. COBOL
   D. FORTRAN

36. Which of these components is NOT common to all programming languages?
   A. Syntax
   B. Classes
   C. Operators
   D. Datatypes

37. Programming is important for Microsoft Office users because:
   A. you cannot create a database in Access unless you use programming.
   B. you can save time by automating repetitive tasks.
   C. you cannot update spreadsheet values in Excel without using programming.
   D. you can more easily understand HTML values, which are important in word-processing.

38. To create a macro in Microsoft Word, use the ____________ tab.

39. The easiest way to automate a task in Word is to:
   A. perform the task while recording the macro.
B. use the Automate Macro Wizard.
C. use the Macro Programming window to type in the commands needed to perform the task.
D. open the HTML file that corresponds to the Word file.

40. After creating a macro, you can use it by:
   A. activating the macro wizard.
   B. clicking the run button in the Macros dialog box.
   C. selecting the Options group.
   D. clicking on the .exe file.

41. Macros are written using:
   A. Visual C++.
   B. Visual Basic for Applications.
   C. XHTML.
   D. RUBY.

42. Macros:
   A. cannot be changed.
   B. can perform only one or two steps.
   C. can perform simple or complex operations.
   D. are difficult to create in Word.

43. The button to create a macro can be found in the ____________ group.

44. To create a macro:
   A. programming experience is required.
   B. programming experience is helpful but not required.
   C. experience with VBA is helpful.
   D. experience with Visual C++ is required.

45. What happens when you run a macro?
   A. The macro is executed.
   B. The macro starts recording.
   C. The macro stops recording.
   D. Either the macro starts or stops recording, depending on its current state.

46. A macro consists of:
   A. complex, lengthy code.
   B. a small program.
   C. several programming languages.
   D. BASIC or Prolog.

47. Before you begin to create a database using Access, you should do all of the following EXCEPT:
   A. determine field names for categories of data.
   B. organize data into tables.
   C. determine relationships between tables.
   D. enter all your date into a spreadsheet.

48. Planning a database before you begin is important because:
   A. you cannot change database after it is created.
   B. a well-planned database will be more efficient for accessing information.
   C. it is a required step in the database creation wizard in Access.
   D. SQL will not work without a well-planned database.

49. The objects that allow you to collect and edit data are:
   A. tables and forms.
   B. tables and reports.
   C. reports and queries.
50. The Access object that summarizes information for presentation and printing is:
   A. tables.
   B. forms.
   C. queries.
   D. reports.

51. The Access object that allows you to ask the database questions about information is:
   A. tables.
   B. forms.
   C. queries.
   D. reports.

52. The Access object that organizes data into fields and records is:
   A. tables.
   B. forms.
   C. queries.
   D. reports.

53. If you want to reduce the possibility of data entry errors, use the __________ object in Access.

54. The __________ view is used to enter field properties and data types.

55. The Developer tab is located on the:
   A. Home tab.
   B. Insert tab.
   C. Ribbon.
   D. Office menu.

56. When data is entered on a form, the underlying __________ is also updated.