STUDENT UNION GOVERNMENT
YUSUF MAITAMA SULE
UNIVERSITY, KANO

LEVEL ONE PAST QUESTIONS

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2020/2021 session

YUSUF MAITAMA SULE UNIVERSITY, KANO

FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER SCIENCE

2020/2021 FIRST SEMESTER EXAMINATIONS—JAN 2022

CSC1201 – INTRO. TO COMPUTER SCIENCE

TYPE C

Instruction: Answer all questions, all questions carry equal marks. ***Time Allowed:*** 1hour 15 mins

1. Which of the following features characterises the earlier computers such as the ENIAC, EDSAC, EDVAC, etc.
   A. Very expensive, perform few computations per unit time, and occupy large space
   B. Use Vacuum tubes that could easily burn
   C. All the above
   D. None of the above
2. C++ was designed by _____ in the early 1980s.
   A. Bjarne Stroustrup
   B. Tim Berners-Lee
   C. Blaise Pascal
   D. John Naphier
3. "`#include <iostream>`" tells the compiler _____.
   A. Where to get iostream library
   B. Where to process information read from the user
   C. Where to store information read from the user for further use
   D. How to automatically handle input and output
4. Another technical name for CPU is
   A. Central Processing Unit
   B. Processor
   C. Computer brain
   D. Computer Memory
5. Every modern computer, regardless of its size or processing power, has the following units:
   A. Input unit, processing unit, storage unit, output unit
   B. Exchange unit, transfer unit, input unit, calculation unit
   C. Math unit, execution unit, storage unit, output unit
   D. Storage unit, input unit, execution unit, data unit
6. A program with _____ type of error will run but leading to an incorrect or unexpected results.
   A. Syntax
   B. Semantic
   C. Run-time
   D. Arithmetic
7. The Central Processing Unit (CPU) has the following key components
   A. Control Unit, Arithmetic Logic Unit, and Communication Unit
   B. Processor, Control Unit, and Arithmetic Logic Unit
   C. Monitoring Unit and Mathematical Logic Unit
   D. None of the above
8. The unit through which a user gives instructions and data for the computer to work on is called
   A. Data input unit
   B. Input Unit
   C. Entry Unit
   D. Data Entry Unit
9. The collection of paths connecting the various modules of a computer is called _____
   A. Modules Connector
   B. Components Interconnector
   C. Interconnection Structure
   D. Modules Structure
10. The physical component of a computer that can be seen and touched is called
    A. Hardware
    B. Software
    C. Hardware and software
    D. All the above
11. Which of the following Computer Generations witnessed the development of High-Level Language?
    A. First Generation of Computer
    B. Second Generation of Computer
    C. Third Generation of Computer
    D. None of the above
12. The full meaning of is DMA is
    A. Dual Memory Access
    B. Direct Memory Access
    C. Distinct Memory Address
    D. None of the above
13. Where was the transistor developed?
    A. IBM Laboratory
    B. HP Research Laboratory
    C. University of Pennsylvania
    D. Bell Telephone Laboratory
14. ___ and ___ are the input and output operators of C++ respectively.
    A. >> and <<
    B. << and >>
    C. <= and >==
    D. >= and <=
15. Which level of integration does the fourth-generation computers use?
    A. SSI and MSI
    B. MSI and LSI
    C. LSI and VLSI
    D. All of the above
16. The following are the characteristics of First-Generation Computers except
    A. Being very huge

B. Having coded in Machine Language
C. Having programs coded in high level languages
D. Being very slow and unreliable

17. Which among the following circuitry technology does the third computer generation use?
A. Transistor
B. Resistor
C. Vacuum Tube
D. Integrated Circuits

18. The Second-generation computers saw the replacement of vacuum tubes in the computer circuitry with _____.
A. Transistor
B. Integrated Circuits
C. Resistor
D. Capacitor

19. An integration in the range of 100 to 10,000 transistors on a single silicon chip is called?
A. SSI
B. MSI
C. LSI
D. VLSI

20. The Integrated Circuits (ICs) in the Third generation of computers can be classified into _____
A. MML and SSL
B. MSL and MML
C. SSI and MSI
D. LMSI and VSSI

21. Operating System is an Example of:
A. Utility Program
B. System Software
C. Application Software
D. Malware

22. _____ is a program that translates and executes source code instruction by instruction
A. Software
B. Compiler
C. Interpreter
D. Assembler

23. The process of pinpointing and removing errors in a program is called _____.
A. Error Destruction
B. Error Removal
C. Compilation
D. Debugging

24. Program Counter (PC) is used for _____
A. Holding the next instruction to be executed by the processor
B. Storing the address of the data to be written into the RAM
C. Storing the data to be written into the hard disk
D. Holding the address of the next instruction to be fetched from the RAM into the processor

25. Who invented and built a device for performing navigational calculations?
A. William Gunter
B. John Napier
C. Edmund Gunter
D. Blaise Pascal

26. The first graphical user interface was designed by?
A. Xerox cooperation
B. IBM
C. Apple
D. Da Vinci

27. Which of the following characteristics is not true about second generation computers?
A. Having instructions coded in Machine Language
B. Having the ability to perform more calculations
C. Having more efficient storage
D. None of the above

28. Which of the following is not true?
A. C++ start program execution from "#include<iostream>"
B. Variables can be declared anywhere within the main function
C. A variable must be declared before it can be used in C++
D. C++ is a compiled programming language

29. Which of the following is a correct variable declaration and initialization?
A. `Int a = 7;`
B. `int a = " ";`
C. `Int a;`
D. `int a = 88;`

30. _____ cannot be executed on a real computer, but it resembles real programming code.
A. FORTRAN
B. Algorithm
C. Pseudo code
D. Program

31. A diagrammatic representation of an algorithm is called _____
A. Parallelogram
B. Diagram
C. Flowchart
D. Symbols

32. Taking the square root of a negative number in programming leads to a _____ error
A. Runtime
B. Syntax
C. Semantic
D. Destructive

33. Which of the following names violate the rule(s) for naming identifiers in C++:
A. `Axb_abc_d`
B. `_abc123`
C. `Kano-state`
D. `_123a`

34. Linking process involves:
A. Integrating local and remote programs so that they can communicate
B. Translating programs from high level languages into machine codes
C. Combining source codes with other codes to produce an executable file

D. Combing object code with other code to produce an executable program

35. Instruction Register (IR) is meant for storing_____
    A. The address of the next instruction to be fetched
    B. Fetched instruction
    C. Address of an already executed instruction
    D. None of the above

36. Interrupts provide a mechanism by which_____
    A. I/O and Memory may interrupt the normal processing of the processor.
    B. Registers may interrupt the normal processing of the processor.
    C. All of the above
    D. None of the above

37. _____ is a wooden rack holding two horizontal wires with beads strung to them.
    A. Punched card
    B. Abacus
    C. ENIAC
    D. Valves

38. The following are some of the features of a well-designed program except:
    A. Easy to comprehend
    B. Reliable
    C. Deployable
    D. Efficient

39. The unit through which a computer presents its result of processing/execution is called
    A. Execution Unit
    B. Output Unit
    C. Collection Unit
    D. Processing Unit

40. An I/O BR is used for the Exchange of data between I/O module and _____
    A. another I/O module
    B. The CPU
    C. The RAM
    D. All of the above

41. The type of memory on which we can store large amount of data is called
    A. Secondary storage
    B. Primary storage
    C. Large capacity storage
    D. Large capacity memory

42. A variable is:
    A. A storage location on computers memory
    B. A symbol that represents storage location on computers memory
    C. A storage location on computer's hard disk
    D. A symbol that represents storage location on computers hard disk

43. _____ denotes a direction of logical flow in a program.
    A. Arrow
    B. Line
    C. Flow line
    D. Logic line

44. The hybrid symbol in a flowchart denotes _____ operation.
    A. Output
    B. Input
    C. Process
    D. End of program

45. A process operation in a flowchart is represented by _____
    A. Oval
    B. Triangle
    C. Rectangle
    D. Diamond

46. In a flowchart, the structure where one has to make a choice from different alternatives depending on a given condition is called a _____.
    A. Trivial structure
    B. Repetition structure
    C. Selection structure
    D. Looping structure

47. The _____ operator is used in conditional statements to compare values.
    A. Logical
    B. Relational
    C. Conditional
    D. Arithmetic

48. Which type of control structure is represented below?

```
if condition then
        true alternative
else
        false alternative
end if
```

    A. Decision Structure
    B. Sequence Structure
    C. Alternative Structure
    D. Condition Structure

49. In flowcharting, a diamond is used to represent _____
    A. A beginning or end of a program
    B. An input operation
    C. A process to be carried out
    D. A decision to be made

50. _____ is a representation of a solution to a problem.
    A. Program
    B. Algorithm
    C. Pseudo code
    D. Application

51. _____ is a tool that is used to write a preliminary plan that can be developed into a computer program.
    A. Pseudo code
    B. C++
    C. Programming
    D. Algorithm

52.
```
mov     ax, 1
mov     bx, 2
add     bx
```
The code above is written in?

A. Machine Language
B. FORTRAN
C. Assembly Language
D. C++

53. The _____step is necessary to combine object code with other code to produce an *executable program*
A. integrating
B. linking
C. joining
D. mapping

54. _____ and _____ are the two steps in program compilation.
A. Compilation and Linking
B. Linking and Testing
C. Compilation and Debugging
D. Testing and Debugging

55. Memory Address Register (MAR) is meant for _____
A. Holding the address in memory for the next read or write
B. Storing the data to be written into memory
C. For receiving data read from memory
D. For receiving input read from I/O devices

56. Memory Buffer Register (MBR) is meant for _____
A. Holding the address in memory for the next read or write
B. Storing the data to be written into memory or for receiving data read from memory
C. For receiving input read from I/O devices
D. None of the above

57. The finite set of instructions that guides a computer on how to process the input data in order to produce the required result is called
A. Programming
B. Program
C. Sequence of instructions
D. Guiding instructions

58. RAM is the acronym for
A. Random Access Memory
B. Random Available Memory
C. Read Available Memory
D. Randomised Access Memory

59. The type of computer memory that can never be erased and is used for the storage of some special instructions such as bootstrap is called
A. Read Only Memory (ROM)
B. Permanent Memory
C. Random Access Memory (RAM)
D. Secondary Storage

60. Parallelogram donates _____ operation
A. Input
B. Output
C. Decision
D. Output

61. Division by zero is a _____ error
A. Syntax
B. Semantic
C. Run-time
D. Arithmetic

62. Declaring a variable with an invalid identifier is _____ error
A. Syntax
B. Semantic
C. Run-time
D. Declaration

63. _____ problems necessitated the development of electronic computer
A. Geological
B. Educational
C. Scientific
D. Medical

64. _____ proposed and helped in the development of _____
A. Blaise Pascal ___ ENIAC
B. Gottfried Wilhelm Von Lobniz ___ ENIAC
C. John Mauchly ____ ENIAC
D. Charles Babbage ____ UNIVAC

65. Other names for Random Access Memory (RAM) are
A. Primary memory, main memory, working memory
B. Computer memory, working memory, digital memory
C. Flexible memory, primary memory
D. Small capacity memory, working memory, main memory

66. The collection of 8 bits is called
A. Binary
B. Byte
C. Kilobytes
D. Megabytes

67. Which among the following is not an example of high-level programming languages?
A. COBOL
B. Java
C. Proton
D. BASIC

68. The component of the CPU in charge of doing all arithmtic and logic operations is called
A. Registers
B. ALU
C. CU
D. All the above

69. All the followings are examples of computer high level languages except:
A. FORTRAN
B. C++
C. ALGOL
D. None of the above

70. Computers can effectively understand programs written in _____
A. High Level Languages only
B. Both High Level and Low-Level Languages
C. Assembly Language only
D. None of the above

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FACULTY OF SCIENCE

DEPARTMENT OF COMPUTER SCIENCE

2019/2020 FIRST SEMESTER EXAMINATIONS—MARCH 2021

2019/2020 Session

CSC1201 – INTRO. TO COMPUTER SCIENCE

TYPE C QUESTION PAPER

Instruction: Answer all questions, all questions carry equal marks. ***Time Allowed:*** 2 hours

1. Which of the following features characterises the earlier computers such as the ENIAC, EDSAC, EDVAC, etc.
   A. Very expensive, perform few computations per unit time, and occupy large space
   B. Use Vacuum tubes that could easily burn
   C. All the above
   D. None of the above
2. Which of the following is a valid variable name?
   A. _first_mark
   B. number_12
   C. first_grade
   D. All of the above
3. The address of the next instruction to be fetched for execution by a processor is stored in _____
   A. Program Counter (PC)
   B. Memory Address Register (MAR)
   C. Memory Buffer Register
   D. Instruction Register
4. A person professionally trained to transform algorithms into computer programs is called_____
   A. Developer
   B. Programmer
   C. Designer
   D. Coder
5. A computer can be defined as an electronic device that can (choose the most precise Definition)
   A. Carry out arithmetical operations
   B. Carry out logical functions
   C. Present information to the operator on a visual display unit
   D. Accept and process data by executing a finite set of stored instructions.
6. Who invented and built a device for performing navigational calculations?
   A. William Gunter
   B. John Napier
   C. Edmund Gunter
   D. Blaise Pascal
7. An IC fabrication technology that has over 100,000 transistors on a single silicon chip is called?
   A. SSI
   B. MSI
   C. LSI
   D. VLSI
8. The Slide rule was built based on _____ ideas.
   A. Aiken's
   B. Napier's
   C. Pascal's
   D. Gunter's
9. The initial problems that necessitated the development of electronic computer were
   A. Commercial
   B. Educational
   C. Industrial
   D. Scientific
10. _____ is responsible for performing calculations such as addition, subtraction, multiplication and division
    A. Control Unit
    B. Random Access Memory (RAM)
    C. Arithmetic Logic Unit (ALU)
    D. Mathematical Operations Unit
11. The first graphical user interface were design by?
    A. Xerox cooperation
    B. IBM
    C. Apple
    D. Da Vinci
12. At a top level, a computer consists of CPU, memory, and _____, with one or more modules of each type, which are interconnected in some fashion to achieve the basic function of the computer.
    A. Register
    B. Monitor
    C. I/O components
    D. Software
13. Operating System is an Example of:
    A. Utility Program
    B. System Software
    C. Application Software
    D. Malware
14. A solution to a given problem that has been transformed into a form that a computer can understand and execute is called _____
    A. Algorithm
    B. Transformed solution
    C. Program/Software
    D. Computer understandable solution
15. Which of the following is not a relational operator
    A. <
    B. AND
    C. ==
    D. >
16. What type of error is present in the following C++ program?

```
#include <iostream>
using namespace std;
int main() {
    int x, y, x; x = 3;
    y = 1;
    z = x + y
  cout<<z;
```

return 0;
}

A. Logical error
B. Syntax and logical error
C. Syntax error
D. Programming error

17. The following are some of the programming process except:
A. Designing algorithm
B. Expressing algorithm in a programming language
C. Debugging and Testing
D. Reinventing the wheel

18. Linking process involves:
A. Integrating local and remote programs so that they can communicate
B. Translating programs from high level languages into machine codes
C. Combining source codes with other codes to produce an executable file
D. Combing object code with other code to produce an executable program

19. ENIAC is an acronym that stands for:
A. Electrical Numerical Integration and Computation
B. Electronically Networking Internet and Computers
C. Electronic Numerical Integrator and Computer
D. Electronic Numerical Integrator Automatic Computer

20. The act of transforming a problem solution presented in an algorithm into a form understandable to a computer system is called _____
A. Algorithm transformation
B. Program development
C. Programming
D. Coding

21. Which of the following components is not among the Top-Level View of Computer Components:
A. CPU
B. Injector
C. Main Memory
D. I/O Module

22. The set of instructions that guides a computer on how to process the input data in order to produce the required result is called
A. Programming
B. Program
C. Sequence of instructions
D. Guiding instructions

23. The rate at which compute executes instructions per unit time is usually expressed as MIPS. What is the full meaning of MIPS?
A. Multiple Instructions Per Second
B. Maximum Instructions Per Second
C. Mega Instructions Per Second
D. Millions of Instructions Per Second

24. The Integrated Circuits (ICs) in the Third generation of computers can be classified into _____
A. MML and SSL
B. MSL and MML
C. SSI and MSI
D. LMSI and VSSI

25. The type of software system put within electronic appliances is called _____
A. Embedded system
B. Electronic software
C. Small scale software
D. Little software system

26. Which among the following circuitry technology does the third computer generation uses?
A. Transistor
B. Resistor
C. Vacuum Tube
D. Integrated Circuits

27. The following are some of the features of a well-designed program except:
A. Easy to comprehend
B. Reliable
C. Deployable
D. Efficient

28. What is purpose of Memory Buffer Register (MBR)?
A. It contains the data to be written into memory or receives the data read from memory
B. It specifies the address in memory for the next read or write
C. It contains the address of the next instruction to be executed
D. None of the above

29. What is the full meaning of ROM?
A. Read Only Memory
B. Reliable Operation Machine
C. Random Operation Memory
D. Read Only Machine

30. What type of error will happen if a program attempts to divide a number by a zero?
A. Logical error
B. Syntax error
C. Compilation error
D. Runtime error

31. What type of error might have occurred if your program successfully compiled and executed but produced unexpected result?
A. Logical error
B. Runtime error
C. Syntax error
D. Compile-time error

32. _____ and _____ are used to describe algorithms
A. Pseudocode/flowchart
B. Flowchart/program
C. Pseudocode/program
D. Program/source code

33. The collection of paths connecting the various modules is called _____
   A. interconnection structure
   B. connecting structure
   C. combining structure
   D. none of the above

34. Which best defines the software that translates and executes source code instruction by instruction?
   A. Software
   B. Assembler
   C. Interpreter
   D. Compiler

35. A computer can be defined as an electronic device that can (choose the most precise Definition)
   A. Carry out arithmetical operations
   B. Carry out logical functions
   C. Present information to the operator on a visual display unit
   D. Accept and process data by executing a finite set of stored instructions.

36. A diamond symbol is used in a flowchart to represent _____
   A. Decision/selection
   B. Sequence
   C. Direction of flow
   D. Start/end of a flowchart

37. A compiler generates _____ at the end of a successful compilation
   A. Source code
   B. Executable code
   C. Machine code
   D. Object code

38. Which of the following is a correct variable declaration in C++?
   A. Char letter = ' ';
   B. string message = 'First test is on Monday'
   C. int prime;
   D. Double x,y,z;

39. The unit through which a user gives instructions and data for the computer to work on is called
   A. Data input unit
   B. Input Unit
   C. Entry Unit
   D. Data Entry Unit

40. The unit through which a computer presents its result of processing/execution is called
   A. Execution Unit
   B. Output Unit
   C. Collection Unit
   D. Processing Unit

41. Transistor and Integrated Circuit (IC) technologies, which replaced the vacuum tubes in earlier computers, made it possible to have smaller, portal computers. Where was transistor developed?
   A. IBM Laboratory
   B. HP Research Laboratory
   C. Bell Telephone Laboratory
   D. University of Pennsylvania

42. Which program will run faster on a computer?
   A. Program written in Assembly language
   B. Program written in high level programming language
   C. Program written in machine language
   D. Program written in pseudocode

43. Within an IF–THEN–ELSE statement may involve further IF–THEN–ELSE statement, which is called _____
   A. Enclosed Ifs
   B. Child Ifs
   C. Nested Ifs
   D. None of the above

44. In the process of connecting the various components in the desired configuration as a form of programming, the resulting "program" is in the form of hardware which is termed as _____
   A. Hardwired Program
   B. Hardwired Software
   C. Hardware Program
   D. Hardware Software

45. Which of the following best describes an example of syntax in C++ error?
   A. Missing semicolon
   B. Trying to open a file that does not exist
   C. Adding when you should be subtracting
   D. Displaying the wrong message

46. A software that is designed and developed to solve a specific user's problem is called _____
   A. System software
   B. Special software
   C. Problem solving software
   D. Application software

47. Processor has _____ within itself to keep small bit of information during processing.
   A. Registers
   B. Memory
   C. ALU
   D. Control Unit

48. Other names for Random Access Memory (RAM) are
   A. Primary memory, main memory, working memory
   B. Computer memory, working memory, digital memory
   C. Flexible memory, primary memory
   D. Small capacity memory, working memory, main memory

49. One of the following is used to mark the end of a statement in a C++ program
   A. Comma
   B. Colon
   C. Full stop
   D. Semicolon

50. True or False: every statement in C++ must terminate with a semicolon.
   A. True
   B. False
51. Which of the following is the correct syntax for variable declaration?
   A. variableName datatype;
   B. datatype variableName;
   C. datatype value;
   D. value datatype;
52. Hollerith tabulator was used by US Government in 1890 for _____
   A. Election
   B. Census
   C. Adding Numbers
   D. Airstrike
53. War always create opportunities, and World War II was no exception. There was a need for storing information about new weapons and tests that were performed with them. What was the name of computer that was built at the University of Pennsylvania in 1945?
   A. MANIAC
   B. ENIAC
   C. CANE
   D. EDVAC
54. Every C++ program must contain exactly one main function
   A. True
   B. False
55. What type of error can make a program to crash?
   A. Logical error
   B. Runtime error
   C. Logical error
   D. Syntax error
56. The language translators for high level programming languages are:
   A. Compiler, interpreter, and assembler
   B. Interpreter and assembler
   C. Compiler and assembler
   D. Compiler and interpreter
57. Which of the following features characterises the earlier computers such as the ENIAC, EDSAC, EDVAC, etc.
   A. Very expensive, perform few computations per unit time, and occupy large space
   B. Use Vacuum tubes that could easily burn
   C. All the above D
   D. None of the above
58. The first graphical user interface were design by?
   A. Xerox cooperation
   B. IBM
   C. Apple
   D. Da Vinci
59. In a computer keyboard the Alt, Ctrl, Shift, Del & Insert keys are known as
   A. Standard keys
   B. Function keys
   C. Navigation keys
   D. Special purpose keys
60. Adding #include<iostream> at the beginning of a C++ program that intends to read data from a keyboard or display information to the screen of a computer is
   A. Optional
   B. Compulsory
   C. Recommended
   D. Not required
61. In flowcharting, a diamond is used to represent _____
   A. A beginning or end of a program
   B. An input operation
   C. A process to be carried out
   D. A decision to be made
62. Antivirus software is an example of _____
   A. Utility/System software
   B. Application software
   C. Business software
   D. Gaming software
63. Manufacturers used _____ to build smaller and cheaper computers.
   A. I.C. Technology
   B. Transistors
   C. Vacuum Tubes
   D. Valves Technology
64. What functionality does Gottfried Wilhelm von Leibniz enabled on Pascal's Machine?
   A. Addition
   B. Subtraction
   C. Multiplication
   D. Division
65. The scientist that proposed and helped in the development of ENIAC was
   A. Blaise Pascal
   B. Gottfried Wilhelm Von Lobniz
   C. John Mauchly
   D. Charles Babbage
66. The step during which program source code is transformed into object code is called _____
   A. Debugging step
   B. Testing step
   C. Execution step
   D. Compilation step
67. What is the full meaning of BIOS?
   A. Basic Information Organization System
   B. Basic Input Output Serialization
   C. Basic Input Organization System
   D. Basic Input Output System
68. True or False: a problem solution written in pseudocode can be directly executed on a computer system.
   A. True
   B. False

69. The first computer that was used for anything other than military purpose was introduced in 1951. What was the name of the computer?
   A. Vacuum
   B. UNIVAC
   C. Vicuna
   D. Da Vinci

70. The type of memory on which we can store large amount of data is called
   A. Secondary storage
   B. Primary storage
   C. Large capacity storage
   D. Large capacity memory

71. The acronym MAR stands for _____
   A. Machine Arithmetic Register
   B. Main Arithmetic Register
   C. Memory Address Register
   D. Multipurpose Arithmetic Register

72. The use of C++ keywords such as int, float, and return as variable names is
   A. Allowed unconditionally
   B. Not allowed
   C. Allowed but not recommended
   D. Allowed but with conditions

73. The basic function performed by a computer is _____
   A. Sorting a program
   B. Mapping a program
   C. Deleting a program
   D. Execution of a program

74. _____ is a Scottish Mathematician that discovered logarithms in _____
   A. John Naphier in 1614
   B. Blaise Pascal in 1624
   C. Joseph-Marie Jacquard in 1724
   D. Mamman Shata in 1924

75. Three American physicists developed transistor at Bell Telephone Laboratories in the year_____
   A. 1948
   B. 1928
   C. 1918
   D. 1938

76. _____ is a wooden rack holding two horizontal wires with beads strung to them.
   A. Punched card
   B. Abacus
   C. ENIAC
   D. Valves

77. Which program will run slower when executed on a computer system?
   A. Program written in high-level programming language
   B. Program written in assembly language
   C. Program written in machine language
   D. None of the above

78. First Generation computers are characterized by the following except:
   A. Huge
   B. Having instructions coded in assembly language
   C. Very slow
   D. Unreliable

79. True or False: C++ uses an interpreter as its language translator.
   A. True
   B. False

80. The full meaning of UNIVAC is
   A. Universal Automatic Computer
   B. Universal Automatic Calculator
   C. Universal Autonomous Computer
   D. Universal Automatic Converter

81. The process of pinpointing and removing errors in a program is called _____.
   A. Error Destruction
   B. Error Removal
   C. Compilation
   D. Debugging

82. All of the following options are among key concepts of Von Neumann architecture except _____
   A. Data and instructions are stored in a single read–write memory
   B. The contents of this memory are addressable by location, without regard to the type of data contained there
   C. Execution occurs in a sequential fashion (unless explicitly modified) from one instruction to the next
   D. None of the above

83. Which of the following is an invalid variable name in C++?
   A. char
   B. first_name
   C. _gender
   D. value2

84. What type of programming error can go undetected by a compiler during compilation?
   A. Program error
   B. Syntax error
   C. Logical error
   D. All of the above

85. What will be the output of the following program?

```
#include <iostream>
using namespace std;
int main() {
        int x = 5;
        int y = 7;
        cout<<"x + y = "<< x + y;
        cout<< " ";
        return 0;
}
```

   A. "x + y" = x +y
   B. "x + y" = 5 + 7

C. "x + y" = 12
D. x + y = 12

86. The unit within a processor that interprets instructions and gives commands to other parts of a computer is called _____
A. CPU
B. Register
C. Control Unit
D. ALU

87. _____ consists of a set of locations, defined by sequentially numbered addresses
A. A CPU
B. A memory module
C. C. An I/O Module
D. None of the above

88. What type of software do we need to prepare lecture notes, question papers, calendars, wedding invitation cards, etc.?
A. Application software
B. System software
C. Solution software
D. Typing software

89. Which of the following characteristics is not true about second generation computers?
A. Having instructions coded in Machine Language
B. Having the ability to perform more calculations
C. Having more efficient storage
D. None of the above

90. The resources of a computer system are managed by what type of software?
A. Application software
B. System software
C. Resource management software
D. All of the above

91. A C++ program starts execution from
A. int main()
B. #include <iostream>
C. using namespace std;
D. Anywhere in the program

92. Virtually all contemporary computer designs are based on concepts developed by _____
A. John Mauchly
B. John Von Neumann
C. Abu Ja'far Mohammed ibn Musa Alkhowarizmi
D. Charles Babbage

93. Variable declaration in C++ is _____
A. Optional
B. Mandatory
C. Optional but recommended
D. Not needed

94. The collection of 8 bits is called
A. Binary
B. Byte
C. Kilobytes
D. Megabytes

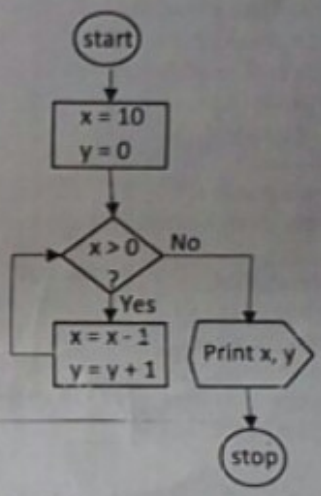
95. In C++ program, executable instructions are also called _____
A. Identifiers
B. Sentences
C. Statements
D. Runtimes

96. True or False: a variable name in C++ can begin with an underscore(_).
A. True
B. False

97. Which of the following belongs to the first-generation computers?
A. Filament
B. Vacuum Tube
C. Registers
D. Software

98. The Slide rule was built based on _____ ideas.
A. Aiken's
B. Napier's
C. Pascal's
D. Gunter's

Study the following flowchart and answer questions 99 and 100



99. What type of structure is used in the flowchart?
A. Decision and selection
B. Decision only
C. Selection only
D. None of the above",

100. What values will be printed for x and y at the end of the flowchart?
A. 10 and 0 respectively
B. 10 and 10 respectively
C. 1 and 10 respectively
D. 0 and 10 respectively