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Objective Solved
Questions

Volume-7

Fundamentals of Computer
Programming Fundamentals



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E-Mail : engineers.academy.india@gmail.com

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DIRECTOR'S *Message*

To reach heights one must start climbing and if the journey is difficult then perseverance is the key to success. As a teacher we have realized over past years that success in any competitive exam requires hard work and proper guidance. **Engineers Academy** with its unique teaching methodologies has always proved that we meet the expectations of thousands of students and parents to make their dreams come true. With changing patterns, we have adapted ourselves to deliver the best and ensure better results.

This book has been organized and executed with a lot of care, dedication and passion for lucidity. A conscious attempt has been made to simplify the concepts to facilitate better understanding of the subject.

Engineers Academy has many successful stories of students who secured All India Rank in ESE, GATE, PSUs and JEn. Now we invite you to become a part of Engineers Academy to explore and achieve ultimate goal of your life. We promise to provide you quality guidance with competitive environment which is far advanced and ahead than the reach of other institution.

We would feel satisfied if the book meets the needs of the students for whom it is meant.

Lastly, we are thankful to all the engineers, authors whose work has been the source of enlightenment, inspiration and guidance in presenting this book.

It is hoped that the book in its new form will enjoy its ever increasing popularity.

Regards

Dr. Pankaj Goyal



Preface

✍ This book has been written to meet the growing requirements of candidates appearing for Senior Computer Instructor and other competitive Examinations. Though every candidate has ability to succeed but competitive environment, in-depth knowledge, quality guidance, time management and good source of study is required to achieve goals.

This book includes Multiple Choice Questions (MCQ's) which works as a mock exam practice for the reader. Questions of all the subject have been organized in systematic, concepts oriented and error less manner so that it become easy and interesting for even a beginner to understand. It is a very convenient book and must be solved by candidate aiming for competitive exams.

After solving this booklet students can feel encouraged and develop confidence to attempt each and every type of numerical as well as theoretical problems. Each problems explains solving approach so that at the end, so the reader is well equipped to be able to apply any type of problem solving requirement and distinctly choose one strategy or type from the other.

We hope this book will be proved an important tool to succeed in Basic and Senior Computer Instructor and other competitive Examinations.

Even though, enough readings were given for correcting the error and printing mistakes, due to human tendency there could be some minor typos in the book. If any such typos found, they will be highly appreciated and in corporated in the next edition. Also, please provide your valuable suggestions at :engineers.academy.india@gmail.com

Wish you all the best. Have a nice reading.

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1

Fundamental of Computer

OBJECTIVE QUESTION

- What is the precedence of arithmetic operators (from highest to lowest)?
 - %, *, /, +, -
 - %, +, /, *, -
 - +, -, %, *, /
 - %, +, -, *, /
- Which of the following is not an arithmetic operation?
 - $a * = 10;$
 - $a / = 10;$
 - $a ! = 10;$
 - $a \% = 10;$
- Which of the following data type will throw an error on modulus operation(%)?
 - char
 - short
 - int
 - float
- Which among the following are the fundamental arithmetic operators, i.e, performing the desired operation can be done using that operator only?
 - +, -
 - +, -, %
 - +, -, *, /
 - +, -, *, /, %
- Which of the following operators takes only integer operands?
 - +
 - *
 - /
 - %
- In an expression involving || operator, evaluation
 - Will be stopped if one of its components evaluates to false
 - Will be stopped if one of its components evaluates to true
 - Takes place from right to left
 - Takes place from left to right
 - I and II
 - I and III
 - II and III
 - II and IV
- Operator % in C Language is called?
 - Percentage Operator
 - Quotient Operator
 - Modulus
 - Division
- Output of an arithmetic expression with integers and real numbers is ___ by default?
 - Integer
 - Real number
 - Depends on the numbers used in the expression
 - None of the above
- If both numerator and denominator of a division operation in C language are integers, then we get
 - Expected algebraic real value
 - Unexpected integer value
 - Compiler error
 - None of the above
- Can you use C Modulo Division operator % with float and int?
 - Only int variables
 - Only float variables
 - int or float combination
 - Numerator int variable, Denominator any variable
- Select one of the true statement for the compiler?
 - The input of the compiler is source program
 - It translates the source code into object code as a whole
 - The output of the compiler is object code
 - All of above
- The language processor translates the program into object code as a whole...
 - linker
 - debugger
 - compiler
 - interpreter
- Finding and solving errors in the source code is...
 - desk checking
 - debugging
 - decoding
 - testing
- Translates the source code into machine language...
 - operating system
 - programming language
 - language processor
 - all of these
- The step by step procedure for solving a problem...
 - programming
 - algorithm
 - planing
 - flowchart
- language is not an object oriented programming language...
 - visual basic
 - c
 - c++
 - java
- Communication between user and the computer is...
 - Programming language
 - Software
 - Syntax
 - English language
- A process is a _____.
 - single thread of execution
 - program in the execution
 - program in the memory
 - task
- The word processing feature that catches most random typographical errors and misspellings is known as _____.
 - Grammar checker
 - Spell checker
 - Word checker
 - None of the these

20. What is smallest unit of the information?
 (a) A bit (b) A byte
 (c) A block (d) A nibble
21. How is the data stored on the diskette?
 (a) Ink (b) Laser bubbles
 (c) Magnetism (d) Circuits
22. Which of the following is the smallest visual element on a video monitor?
 (a) Character (b) Pixel
 (c) Byte (d) Bit
23. Which of the following natural element is the primary element in computer chips?
 (a) Silicon (b) Carbon
 (c) Iron (d) Uranium
24. Which of the following programs enables you to calculate numbers related to rows and columns?
 (a) Window program (b) Spreadsheet program
 (c) Graphics program (d) Word program
25. Which of the following is a structured programming technique that graphically represents the detailed steps required to solve a program?
 (a) Object-oriented programming
 (b) Pseudocode
 (c) Flowchart
 (d) Top-down design
26. Which of the following is an output device?
 (a) Keyboard (b) Mouse
 (c) Light pen (d) VDU
27. Which of the following is an input device?
 (a) Plotter (b) Printer
 (c) VDU (d) Mouse
28. Which of the following is the extension of Notepad?
 (a) .txt (b) .xls
 (c) .ppt (d) .bmp
29. BIOS is used?
 (a) By operating system (b) By compiler
 (c) By interpreter (d) By application software
30. What is the mean of the Booting in the system?
 (a) Restarting computer (b) Install the program
 (c) To scan (d) To turn off
31. A computer is accurate, but if the result of a computation is false, what is the main reason for it?
 (a) Power failure (b) The computer circuits
 (c) Incorrect data entry (d) Distraction
32. The central processing unit is located in the _____.
 (a) Hard disk (b) System unit
 (c) Memory unit (d) Monitor
33. Which one of the following groups contains graphical file extensions?
 (a) JPG, CPX, GCM (b) GIF, TCE, WMF
 (c) TCP, JPG, BMP (d) JPG, GIF, BMP
34. Which of the following is equal to a gigabyte?
 (a) 1024 bytes (b) 512 GB
 (c) 1024 megabytes (d) 1024 bits
35. How many bytes does 4 kilobytes represent?
 (a) 512 (b) 1024
 (c) 4096 (d) 8192
36. Which type of program acts as an intermediary between a user of a computer and the computer hardware?
 (a) Operating system (b) User thread
 (c) Superuser thread (d) Application program
37. What kind of language can computer understand?
 (a) Normal language (b) Computer language
 (c) Assembly language (d) High-level language
38. Which of the following is not one of the internal components of a CPU?
 (a) Control sequencer (b) M-D-R
 (c) M-A-R (d) Floppy disk
39. What is the speed of computer measured in?
 (a) Nanoseconds (b) Kilo-seconds
 (c) Gigahertz (d) Megabytes
40. What is the full form of RAM?
 (a) Remote Access Memory (b) Random Access Memory
 (c) Remote Access Memory (d) Random Access Memory
41. What is the full form of DRAM?
 (a) Dynamic Remote Access Memory
 (b) Dynamic Random-Access Memory
 (c) Dependent Remote Access Memory
 (d) Dependent Random-Access Memory
42. Which one of the following software applications would be the most appropriate for performing numerical and statistical calculations?
 (a) Database (b) Document processor
 (c) Graphics package (d) Spreadsheet
43. Which of the following is not considered hardware?
 (a) Operating system (b) CPU
 (c) Keyboard (d) Hard disk
44. Which of the following is exclusively a sequential access storage device?
 (a) Hard disk (b) Floppy disk
 (c) Magnetic tape (d) DVD
45. Akshat has created a story of ten pages, but only wants to print the first two pages. Which printer command should he choose?
 (a) Print all (b) Print from 1 to 2
 (c) Page setup (d) Print Preview

46. What is the full form of SRAM?
- (a) Static Random-Access Memory
 - (b) Static Remote-Access Memory
 - (c) Setup Random-Access Memory
 - (d) Setup Remote-Access Memory
47. What is the full form of USB?
- (a) Unshielded System Board
 - (b) Universal System Board
 - (c) Unidentified Serial Bus
 - (d) Universal Serial Bus
48. Which one of the following is not a form of data storage media?
- (a) A database
 - (b) Magnetic tape
 - (c) Magnetic disc
 - (d) Optical disc
49. What are five main components of a computer system?
- (a) CPU, CD-ROM, Mouse, Keyboard, Sound card
 - (b) Memory, Video card, Monitor, Software, Hardware
 - (c) Modem, Keyboard, Word Processor, Printer, Screen
 - (d) CPU, Memory, System bus, Input, Output
50. Which one of the following is the best fire extinguisher for IT equipment?
- (a) Dry powder
 - (b) Bromo chloride
 - (c) CO₂
 - (d) Water
51. The use of the IC in a computer has _____.
- (a) Increased the amount of heating
 - (b) Reduced the size and cost of computers
 - (c) Reduced the peripheral devices to be used
 - (d) Reduced the performance capacity of the computer
52. Consider the following path C:\Device\Module\Module 1.
What is the name of the file in this path?
- (a) Device
 - (b) Module
 - (c) Module 1
 - (d) C
53. What is the full form of SCSI?
- (a) Standard computer systems interface
 - (b) Small computer systems interface
 - (c) Super computer systems interface
 - (d) Small computer standard interface
54. Which one of the following is not an input device?
- (a) Keyboard
 - (b) Mouse
 - (c) Speaker
 - (d) Scanner
55. Which one of the following is an example of browser software?
- (a) Microsoft Word
 - (b) Notepad
 - (c) Internet navigator
 - (d) Internet explorer
56. Which one of the following commands can be used to work on a file?
- (a) Ctrl + XY
 - (b) Ctrl + 2
 - (c) Ctrl + C
 - (d) None of these
57. Which of the following devices is used for gaming?
- (a) Speaker
 - (b) Mouse
 - (c) Joystick
 - (d) None of these
58. Which of the following commands remove the paragraph formatting?
- (a) Ctrl + L
 - (b) Copy
 - (c) Open
 - (d) Ctrl + Q
59. Which of the following memory cannot be directly accessed?
- (a) Primary memory
 - (b) Secondary memory
 - (c) RAM
 - (d) DRAM
60. Which one of the following printers is suitable for printing sprocket-fed carbon copies?
- (a) Normal printer
 - (b) Solid Ink printer
 - (c) Dot-matrix printer
 - (d) Business Inkjet printer
61. The speed of a modern printer is generally measured in _____.
- (a) LPS
 - (b) PPM
 - (c) PPS
 - (d) DPI
62. Which of the following languages does a computer understand?
- (a) JAVA language
 - (b) C language
 - (c) Binary language
 - (d) Object language
63. The four bits are called _____.
- (a) Byte
 - (b) Nibble
 - (c) Octet
 - (d) Bit
64. What is the full form of VDU?
- (a) Virtual Development User
 - (b) Virtual Detection Unit
 - (c) Visual Detection Unit
 - (d) Visual Display Unit
65. Which of the following statements is correct about the PCI?
- (a) PCI is a hardware device.
 - (b) PCI is software that is used to transfer the data.
 - (c) PCI is an interface of the OS.
 - (d) All of these
66. What is the full form of the EEPROM?
- (a) Electrically Erasable Process Read-Only Memory
 - (b) Electrically Erasable Programmable Read-Only Memory
 - (c) Electrical Erase Program Read-Only Memory
 - (d) Electron Erase Program Read-Only Memory
67. Which of the following is a non-volatile memory chip?
- (a) EEPROM
 - (b) RAM
 - (c) DRAM
 - (d) SRAM

68. In which of the following, the second-generation computer was based?
- (a) Transistor (b) Electron tube
(c) Electron ray (d) Vacuum tube
69. In which of the following computer-generation vacuum tubes were used?
- (a) First-generation (b) Second-generation
(c) Third-generation (d) Fourth-generation
70. What is a single dot on a computer screen called?
- (a) Desktop (b) Color dot
(c) Pixel (d) Screen dot
71. Which of the following commands cannot be used to work on a file?
- (a) Ctrl + Z (b) Ctrl + Y
(c) Ctrl + I (d) None of the these
72. Which of the following language was used in first-generation computers?
- (a) Java (b) Python
(c) Machine language (d) All of the these
73. Which of the following statement is correct about the URL?
- (a) URL is a software that connects to the internet
(b) URL is the address of the web page
(c) URL is the domain name
(d) All of the these
74. Which one of the following parts is called the brain of the computer?
- (a) ALU (b) Monitor
(c) UPS (d) CPU
75. Which of the following device is not a portable device?
- (a) DVD (b) Mobile phone
(c) Pen drive (d) None of the these
76. Which of the following memory is non-volatile memory?
- (a) Secondary memory (b) Random memory
(c) RAM (d) ROM
77. Which of the following type of devices is a computer microphone?
- (a) Output device (b) Speaker device
(c) Input device (d) Keyboard device
78. What is the ".BAT" extension?
- (a) System file (b) Backup file
(c) Storage file (d) None of the these
79. Which of the following device is used for both input and output?
- (a) Monitor (b) Speaker
(c) Scanner (d) Modem
80. Which of the following device is a portable device?
- (a) Laptop (b) Computer Monitor
(c) CPU (d) None of the these
81. Which of the following two memory is the main memory in a computer?
- (a) Primary memory and Secondary memory
(b) RAM and ROM
(c) Random memory and Sequential memory
(d) Primary memory and Sequential memory
82. Which of the following statement is correct about the DVD?
- (a) DVD is an optical disk.
(b) DVD is very costly.
(c) It is not a portable device, i.e., it cannot be carried anywhere easily.
(d) It has very poor video and sound quality.
83. _____ is the assembly language for an imaginary architecture.
- (a) Byte code (b) Machine code
(c) Native code (d) Executable code
84. JIT stands for?
- (a) Just in time (b) Jump in time
(c) Jump in text (d) Jump in terms
85. JVM stands for?
- (a) Java virtual machine (b) Java visual machine
(c) JRE virtual machine (d) JRE visual machine
86. These devices provide a means of communication between a computer and outer world.
- (a) I/O (b) Storage
(c) Compact (d) Drivers
87. The I/O devices are sometimes called the peripheral devices because they surround the CPU and memory of the computer system.
- (a) True (b) False
88. Which of the following is not a 7-and-draw device?
- (a) Keypad (b) Trackball
(c) Touch screen (d) Mouse
89. A device used for video games, flight simulators, training simulators and for controlling industrial robots.
- (a) Mouse (b) Light pen
(c) Joystick (d) Keyboard
90. The unattended interactive information systems such as automatic teller machine or ATM is called as _____
- (a) Kiosks (b) Sioks
(c) Cianto (d) Kiaks
91. Input Devices that use a special ink that contains magnetizable particles of iron oxide are _____
- (a) Optical disks (b) Magnetic disks
(c) MICR (d) Magnetic drives
92. MICR character set consists of only 2 digits 0 and 1.
- (a) True (b) False

93. A printer that prints one line at a time and has a predefined set of characters is called _____
- (a) Laser (b) Drum
(c) Inkjet (d) Impact
94. Which of the following is a name of plotter as well as a printer?
- (a) Flatbed (b) Laser
(c) Drum (d) Impact
95. Name the device that converts text information into spoken sentences.
- (a) Speech Sensors
(b) Compact convertors
(c) Speech Synthesizers
(d) Voice systems
96. Which of the following is not a part of a digitizer?
- (a) Digitizing tablet (b) Cursor
(c) Stick (d) Stylus
97. Which is the device used for converting maps, pictures and drawings into digital form for storage in computers?
- (a) Digitizer (b) Scanner
(c) Image Scanner (d) MICR
98. Which of the following Printers have a speed in the range of 40-300 characters per second?
- (a) Inkjet (b) Laser
(c) Dot matrix (d) Drum
99. Which of the following is a temporary output?
- (a) Hard copy (b) Soft copy
(c) Duplicate copy (d) On paper
100. The language made up of binary coded instructions.
- (a) Machine (b) C
(c) BASIC (d) High level
101. Binary code comprises of digits from 0 to 9.
- (a) True (b) False
102. The _____ contains the address of the next instruction to be executed.
- (a) IR (b) PC
(c) Accumulator (d) System counter
103. The computer that process both analog and digital is called _____?
- (a) Analog computer (b) Digital computer
(c) Hybrid computer (d) Mainframe computer
104. Which of the following is not a type of computer on the basis of operation ?
- (a) Remote (b) Hybrid
(c) Analog (d) Digital
105. Computer that operates on digital data ?
- (a) Remote (b) Hybrid
(c) Analog (d) Digital
106. This type of computer is mostly used for automatic operations?
- (a) Remote (b) Hybrid
(c) Analog (d) Digita
107. Which are used for solving complex application such as Global Weather Forecasting?
- (a) Super computers (b) Public computers
(c) Mobile computers (d) Hybrid computers
108. The invention of gave birth to the much cheaper micro computers?
- (a) Mainframes (b) Microcomputers
(c) Microprocessors (d) PDAs
109. Which is a computer program?
- (a) Operating system
(b) Application package
(c) Utility software
(d) All of the above computer programs
110. In which of the following environment, data is held in a temporary computer file?
- (a) Batch processing (b) Online processing
(c) Online batch processing (d) None of these
111. A basic element of data in a file.
- (a) Memory (b) Record
(c) Field (d) Value
112. Records are treated as a unit.
- (a) True (b) False
113. _____ refers to the logical structuring of records.
- (a) Physical organisation (b) Logical organisation
(c) Structural organisation (d) File organisation
114. Which of the following is not an appropriate criterion for file organisation?
- (a) Larger access time (b) Ease of update
(c) Simple maintenance (d) Economy of storage
115. _____ itself is a file owned by the operating system
- (a) Logical file (b) Record
(c) Database (d) Directory
116. Which of the following isn't a part of the file directory?
- (a) Attributes (b) Protocol
(c) Location (d) Ownership
117. Allocated size of a file comes under?
- (a) Basic information
(b) Address information
(c) Access control information
(d) Usage information
118. Which of the following is not a part of the usage information?
- (a) Data created (b) Identity of creator
(c) Owner (d) Last date modified

119. When access is granted to append or update a file to more than one user, the OS or file management system must enforce discipline. This is _____
 (a) Simultaneous access (b) Compaction
 (c) External Fragmentation (d) Division
120. The user can load and execute a program but cannot copy it. This process is?
 (a) Execution (b) Appending
 (c) Reading (d) Updating
121. Perform binary addition of $1101 + 0010$ is _____
 (a) 1110 (b) 1111 (c) 0111 (d) 1,1101
122. The addition $1+1$ gives 0 as a result.
 (a) True (b) False
123. The result of $0*1$ in binary is _____
 (a) 0 (b) 1 (c) invalid (d) 10
124. The multiplication of $110 * 111$ is performed. What is a general term used for 111?
 (a) Dividend (b) Quotient
 (c) Multiplicand (d) Multiplier
125. The result obtained on binary multiplication of $1010 * 1100$ is _____
 (a) 0001111 (b) 0011111
 (c) 1111100 (d) 1111000
126. Which of the following is often called the double precision format?
 (a) 64-bit (b) 8-bit (c) 32-bit (d) 128-bit
127. What do you call the intermediate terms in binary multiplication?
 (a) Multipliers (b) Mid terms
 (c) Partial Products (d) Multiplicands
128. The result that is smaller than the smallest number obtained is referred to as _____
 (a) NaN (b) Underflow (c) Smallest (d) Mantissa
129. The number of sign bits in a 32-bit IEEE format is _____
 (a) 1 (b) 11 (c) 9 (d) 23
130. Express the decimal format of the signed binary number $(101010)_2$.
 (a) 10 (b) 12 (c) -12 (d) -10
131. What is the equivalent of $(47)_{10}$ in hexadecimal system?
 (a) 2F (b) 30
 (c) 2E (d) None of these
132. The decimal equivalent of hexa decimal number $(E5)_{16}$ is
 (a) 279 (b) 229 (c) 427 (d) 3000
133. The binary code of $(10.625)_{10}$ is
 (a) $(1010.101)_2$ (b) $(1010.100)_2$
 (c) $(1010.111)_2$ (d) $(1010.010)_2$
134. The decimal equivalent of hexadecimal number of '2ADF' is
 (a) 17670 (b) 17607 (c) 17067 (d) 10975
135. Which of the following binary number is equal to octal number 66.3
 (a) 101101.100 (b) 1101111.111
 (c) 111111.1111 (d) 110110.011
136. Gray code for number 7 is
 (a) 1100 (b) 1001
 (c) 0110 (d) 0100
137. Decimal 15 in binary is
 (a) 0111 (b) 1111 (c) 1011 (d) 1101
138. 0110 in binary form can be written as in decimal system as
 (a) 4 (b) 5 (c) 6 (d) 7
139. The decimal equivalent of binary number 100110 is :
 (a) 82 (b) 86 (c) 74 (d) 38
140. What is the decimal equivalent of hexa decimal number 8A6?
 (a) 1422 (b) 1242 (c) 2122 (d) 2214
141. The radix of binary number is
 (a) 1 (b) 0 (c) 2 (d) 8
142. Two's complement of -8 is
 (a) 1000 (b) 1010 (c) 1100 (d) 1110
143. The 2's complement of 101101 is :
 (a) 100011 (b) 101100
 (c) 010011 (d) 110011
144. Of the following which is the binary equivalent of the number 368 ?
 (a) 101110000 (b) 110110000
 (c) 1111010000 (d) 111100000
145. Decimal 43 in hexadecimal and BCD number system is respectively
 (a) B2, 0100 0011 (b) 2B, 0100 0011
 (c) 2B, 0110100 (d) B2, 0100 0100
146. The binary representation of the decimal number 1.375 is
 (a) 1.111 (b) 1010 (c) 1.011 (d) 1.001
147. The decimal equivalent of $(11011101)_2$ is :
 (a) 225 (b) 229 (c) 221 (d) None
148. In decimal system 63 can be written in Binary System as
 (a) 111100 (b) 111101
 (c) 111111 (d) 101010
149. Hexadecimal equivalent of binary number 1001101011001 is
 (a) 1359 (b) 9493 (c) 8 D62 (d) 8 D Fs
150. Binary 1110 equals _____ in hexadecimal
 (a) 2 A (b) 2 E (c) 0 E (d) 2 C
151. Decimal number 74 may be written in binary system as
 (a) 1001010 (b) 1001001
 (c) 1001011 (d) 10011
152. A string of 4 bits is called as
 (a) Bit (b) Byte (c) Word (d) Nibble
153. The decimal fraction 0.375 in binary form is....
 (a) 0.0011 (b) 0.111 (c) 0.011 (d) 0.0111
154. An equivalent decimal number of $(234.55)_8$ is
 (a) $(106.703)_{10}$ (b) $(156.703)_{10}$
 (c) $(146.703)_{10}$ (d) $(308.703)_{10}$

155. In a binary number, the leftmost bit is called :
 (a) Most significant bit (b) Least significant bit
 (c) Carry bit (d) Extra bit
156. What is the Gray code word for the binary 101011?
 (a) 101011 (b) 110101
 (c) 01111 (d) 111110
157. FG in Hexadecimal systems can be written in Binary System as :
 (a) 1111100 (b) 11110011
 (c) 11111111 (d) Not a valid Hexadecimal Number
158. How many bytes are there in binary number 1001101000111010?
 (a) 1 (b) 2 (c) 3 (d) 4
159. The binary equivalent of decimal number 17 is :
 (a) 10000 (b) 0111
 (c) 10001 (d) 11111
160. The base or radix of a hexadecimal system is :
 (a) 2 (b) 3 (c) 8 (d) 16
161. If the binary number 1110 is converted to hexadecimal number, we get
 (a) G (b) D (c) E (d) F
162. Which of the following is a minimum error code ?
 (a) Binary code (b) Excess-3code
 (c) Gray code (d) Octal code
163. A single binary digit is called :
 (a) Byte (b) Bit (c) Data (d) Logic
164. What is the equivalent decimal number of the binary number 11100?
 (a) 28 (b) 24 (c) 30 (d) 20
165. Which among the following is the decimal equivalent of hex number 1A53 ?
 (a) 6793 (b) 6739 (c) 6973 (d) 6379
166. What will be the Octal representation of $(9987)_{10}$?
 (a) 23403 (b) 44561 (c) 56431 (d) 11231
167. The 2's complement of the binary number $(11001100)_2$ is
 (a) $(00110100)_2$ (b) $(00110011)_2$
 (c) $(00110000)_2$ (d) $(11110100)_2$
168. The value of the binary 11111 is :
 (a) 2^4-1 (b) 2^4 (c) 2^5 (d) 2^5-1
169. The binary representation of 195.5 is_____.
 (a) $(11000001.01)_2$ (b) $(11000001.11)_2$
 (c) $(11000011.01)_2$ (d) $(11000011.10)_2$
170. The 2's complement of the binary number $(0000000)_2$ is
 (a) $(11111111)_2$ (b) $(0000000)_2$
 (c) $(10101010)_2$ (d) $(01010101)_2$
171. The CPU and memory are located on the?
 (a) Expansion board (b) Motherboard
 (c) Storage device (d) Output device
172. When Blooms Taxonomy of educational objectives was proposed?
 (a) 1956 (b) 1957 (c) 1955 (d) 1959
173. Skill that all pupils must learn if they are to be ready for the work place and able to participate effectively in the digital worlds –
 (a) Computer Interaction (b) Computational Thinking's
 (c) Computer Science (d) Computer Teachers
174. Which of the following is not the element of Internet?
 (a) E-mail (b) Chatting
 (c) Furniture (d) Search Engines
175. The method and practice especially as an academic subject or theoretical concept –
 (a) Analysis (b) Subject-expert
 (c) Pedagogy (d) Expertise
176. The components that process data are located in the?
 (a) Input devices (b) Output devices
 (c) System Unit (d) Storage component
177. What are the aims of teaching computer science?
 (a) To provide theoretical knowledge of the terminologies used in computer science education.
 (b) To make aware the students with the criteria and methodologies being used in the functional of the computers.
 (c) Both (a) and (b)
 (d) None of the above
178. Teaching of computer science is done at –
 (a) Primary level (b) Secondary level
 (c) Middle level (d) All of the above
179. Types of general Aims and Objectives
 (a) Knowledge (b) Application
 (c) Analysis (d) All of the above
180. _____ prepares students to take the role of a developer by expanding their knowledge of programming and in designing of the web page and applying the same documentaries for uses.
 (a) Designing of web (b) Designing of program
 (c) Programming (d) Computer and Data analysis
181. 9's complement of $(7564)_{10}$ is
 (a) 2436 (b) 2435 (c) 3435 (d) 2434
182. 10's complement of $(624)_{10}$ is
 (a) 375 (b) 475 (c) 376 (d) 476
183. 9's complement of $(527)_{10}$ is
 (a) 572 (b) 473 (c) 573 (d) 472
184. $(11011)_2 - (1001)_2 = ?$
 (a) 010011 (b) 010010
 (c) 110010 (d) 010110
185. $(11011)_2 \times (1001)_2 = ?$
 (a) 011110010 (b) 001110011
 (c) 011110011 (d) 111110011
186. 7's complement of $(456)_8$
 (a) 322 (b) 432 (c) 321 (d) 433

Answer with Explanation

1. *Ans. (a)*
2. *Ans. (c)*
3. *Ans. (d)*
4. *Ans. (a)*
5. *Ans. (d)*
Two integers are taken to be input.
6. *Ans. (d)*
No explanation is given for this question.
7. *Ans. (c)*
Operator % is called Modulus or Modular or Modulo Division operator in C. It gives the remainder of the division.
int a = 11%4;
Now a holds only 3 which is the remainder.
8. *Ans. (b)*
Any arithmetic operation with both integers and real numbers yield output as Real number only.
 $5 + 10.56 = 15.560000$ which is a real number.
 $5 + 10.0 = 15.000000$ is also a real number.
9. *Ans. (b)*
int a = 5/2 stores only 2.
10. *Ans. (a)*
Modulo Division operator % in C language can be used only with integer variables or constants.
11. *Ans. (d)*
12. *Ans. (c)*
13. *Ans. (b)*
14. *Ans. (c)*
15. *Ans. (b)*
16. *Ans. (c)*
17. *Ans. (a)*
18. *Ans. (b)*
A process is a program that is executed by the threads. It consists of multiple threads of execution.
19. *Ans. (b)*
The word processing feature that catches most random typographical errors and misspellings is known as spell checker.
20. *Ans. (a)*
The smallest unit of the information is a bit. All information is stored in the computer as bits.
21. *Ans. (c)*
The data is stored on the diskette in magnetism form. A diskette is a removable data storage, and it is used with the PC.
22. *Ans. (b)*
A pixel is the smallest portion of the screen. The name Pixel is made from the "Picture element" and is also called the PEL. All screen is made by putting millions of pixels together in a matrix form.
23. *Ans. (a)*
Silicon is the primary element in computer chips. Silicon is a highly pure element which is now perfect for the massive computer chip industry. It is cost efficient and easy to use.
24. *Ans. (b)*
Spreadsheet programs help you to calculate numbers related to rows and columns. It can also graphically represent the data as per the user's requirement.
25. *Ans. (c)*
Flowchart is a structured programming technique that graphically represents the detailed steps required to solve a program. Usually, it shows the steps as boxes of different types, and these boxes are connected with arrows.
26. *Ans. (d)*
The full form of VDU is the Visual Display Unit. It is a hardware output device that uses a cathode ray tube to display a visual image.
27. *Ans. (d)*
A mouse is a hardware input device that controls a cursor on a computer. With the help of the mouse, you can select, open, and move files, icons, folders, and text on the PC.
28. *Ans. (a)*
The .txt file extension is a standard text document extension that contains the unformatted text. It is the default file extension for the notepad.
29. *Ans. (a)*
BIOS is used by the operating system. It is used to configure and identify the hardware in a system such as the hard drive, floppy drive, optical drive, CPU, and memory.
30. *Ans. (a)*
Bootling is a process of the restart the computer. After restarting it, there is no software in the computer's main memory.
31. *Ans. (c)*
32. *Ans. (b)*
The central processing unit is located in the system unit. The system unit controls the entire computer. It includes RAM, Processors, Optical drive, Power supply, Fans, Hardware, Peripheral devices, BIOS, etc.
33. *Ans. (d)*
JPG, GIF, BMP are all extensions of graphical file. JPG stands for Joint Photographic Experts Group, GIF stands for Graphics Interchange Format, and BMP stands for Bitmap Image File.
34. *Ans. (c)*
One gigabyte is made up of 1024 megabytes.
 $1024 \text{ KB} = 1 \text{ MB}$
 $1024 \text{ MB} = 1 \text{ GB}$

35. **Ans. (c)**
1 kb = 210 bytes in binary
1 kb = 1024 bytes in binary
4 kb = 4 * 1024 bytes = 4096 bytes
36. **Ans. (a)**
An OS is a kind of program that acts as an intermediary for computer hardware and computer user. The purpose of an operating system is to provide a user-friendly and effective environment.
37. **Ans. (a)**
An assembly language is a scripting language capable of telling the computer explicitly what to do.
38. **Ans. (d)**
Floppy disk is not an internal components of a CPU. It is a component of the secondary storage and external storage. It is a kind of data storage device.
39. **Ans. (c)**
The computer clock speed is normally calculated in gigahertz (GHz) or megahertz (MHz) a gigahertz is equal to one billion ticks per second, and a megahertz is equal to one million ticks per second.
40. **Ans. (b)**
The full name of RAM is random access memory. It is a hardware device located in a computer that stores data temporarily. Temporary means it only stores data for some time. RAM is also called main memory, primary memory, or system memory.
41. **Ans. (b)**
42. **Ans. (d)**
Spread Sheet is the most appropriate for performing numerical and statistical calculation. A spreadsheet is a computer application that is a copy of a paper that calculates a worksheet. It displays several cells that together form a mesh that includes rows and columns, each cell containing alphanumeric text, numeric values, or formulas.
43. **Ans. (a)**
The operating system (OS) is a software that acts as an interface between a computer and a user. It is also called system software. OS is the first program to be loaded into a computer. It manages all the operations of the computer.
44. **Ans. (c)**
Magnetic tape is exclusively a sequential access storage device. Sequential access memory is a type of data storage devices that read and write the data in a series.
45. **Ans. (b)**
46. **Ans. (a)**
The full name of SRAM is static random-access memory. It needs a constant power to work. Due to continuous power, it does not need to be refreshed.
47. **Ans. (d)**
The full name of USB is Universal Serial Bus. It is a common interface that allows the communication between two devices.
48. **Ans. (a)**
A database is a collection of information that is organized in such a way that information can be easily accessed, managed, and updated. In the database, we can quickly and easily select the desired data. For example, the dictionary is analogous to a database that is like a file.
49. **Ans. (d)**
CPU, Memory, System bus, Input, Output
50. **Ans. (c)**
51. **Ans. (b)**
The use of the IC in a computer has reduced the cost of computers. It is an incredibly small electronics chip integrated with a set of electrical circuits and transistors. It is a very small chip.
52. **Ans. (c)**
53. **Ans. (b)**
54. **Ans. (c)**
Speaker is a hardware output device that is used for listening to audio by connecting it to a computer and other devices. The computer's sound card produces sound waves from the speaker.
55. **Ans. (d)**
Internet explorer is a web browser software on the windows computer. It helps to search for anything in the world through the Internet. It is also known as Microsoft Edge. If you use a Windows computer, this software is already installed on your computer.
56. **Ans. (c)**
Ctrl C is a copy command on the computer. It is a very useful command. This command first selects the text, files, and any data that is stored in the computer's hard disk and then copies it. It is a shortcut key on the computer.
57. **Ans. (c)**
Joystick is a hardware input device that controls the object on the computer screen. Joysticks are mostly used by gamers to play games.
58. **Ans. (d)**
The "Ctrl + L" command is used to perform left-aligned text. The copy and open command are used to copy and open the file. "Ctrl+Q" is used to remove the paragraph's formatting. In some cases, it would be used to quit the program or close the program's window. Therefore, option (d) is the correct answer.
59. **Ans. (b)**
Secondary memory cannot be accessed directly. It requires an Input/Output module to access it. Secondary memory includes Magnetic Disk, Optical Disk, Magnetic Tape, etc.
60. **Ans. (c)**
The dot matrix printer is more suitable for printing sprocketed carbon copies as it can extract multiple copies at once with the help of carbon.
61. **Ans. (b)**
Early printer speeds were measured in units of "lines-per-minute" (LPM) or "characters-per-minute" (CPM), but modern printer speeds are measured in "pages-per-minute" (PPM). Hence, option c is the right answer.

62. **Ans. (c)**
The computer knows only the binary language. The binary language is written in the form of "1s" and "0s". The binary language is sometimes referred to as machine language.
63. **Ans. (b)**
The four bits are called a nibble. A nibble is a unit of the data in the computer. It is equal to half a byte. That means one nibble is equal to four bits.
64. **Ans. (d)**
The full form of VDU is the Visual Display Unit. The VDU is also known as a monitor, which is basically used to give an output to the user.
65. **Ans. (a)**
The full form of PCI is Peripheral Component Interconnect. It was proposed by Intel in 1992. It is a hardware device that is used to connect CPU and expansion boards, such as Modem cards, Network cards, Video cards, and Sound cards. It is also called PCI bus, PCI slots, and conventional PCI.
66. **Ans. (b)**
The full name of EEPROM is Electrically Erasable Programmable Read-Only Memory.
67. **Ans. (a)**
EEPROM is a non-volatile memory chip that is used to store small amounts of data in a computer.
68. **Ans. (a)**
The second-generation computers were based on the transistor. The second-generation period was from 1959 to 1965. At that time, transistors were much cheaper, power-efficient, smaller in size, more reliable, and faster.
69. **Ans. (a)**
Vacuum tubes were used in first-generation computers. It was used as basic components for CPU and memory. The first-generation period was from 1946 to 1959.
70. **Ans. (c)**
A single point on a computer screen is called a pixel. Pixel is a very small dot on the screen.
71. **Ans. (d)**
All these commands can be used to work on any file. Therefore, option (d) is the correct answer.
72. **Ans. (c)**
Machine language was used in first-generation computers, and this language is a lower-level language than other languages.
73. **Ans. (b)**
URL means uniform resource locator. URL is the address of a web page, which is used by a web browser to access a web page on the internet.
74. **Ans. (d)**
The CPU is the brain of the computer. It takes information from memory and processes it. Intel and AMD are two companies that manufacture CPUs. CPU speed is measured in GHz or MHz.
75. **Ans. (d)**
All these devices are portable by nature. A user can pick up all these devices comfortably and can move them from one place to another.
76. **Ans. (d)**
ROM (Read-Only Memory) is a non-volatile memory used to store the data in computers and other electronic devices permanently.
77. **Ans. (c)**
Microphone is used as audio-input devices. It is used to record voice on a computer or other electronic device.
78. **Ans. (a)**
The ".BAT" extension is a batch file extension, and it is sometimes referred to as a system file extension.
79. **Ans. (d)**
Modem is a hardware device that is converted to two-way network communication in real-time between analog and digital signals. It acts as both input and output devices.
80. **Ans. (a)**
Laptop is a portable device. A user can comfortably pick up the laptop and carry it comfortably from one place to another.
81. **Ans. (b)**
Main memory is a place where the system kept the programs and data on which the computer is working. Therefore, option b is the right choice.
82. **Ans. (a)**
DVD is an optical disk technology that is used to store a very large amount of data.
83. **Ans. (a)**
Source program is compiled to an intermediate form - byte code. Byte code is the assembly language for an imaginary architecture.
84. **Ans. (a)**
JIT stands for Just in time. JVMs actually compile each bytecode instruction to native code the first time it is used.
85. **Ans. (a)**
JVM stands for Java Virtual Machine. Other related terms are JRE which is java runtime environment and JDK which is java development kit.
86. **Ans. (a)**
The I/O i.e. the input/output devices provide a means of communication between the computer and the outer world. They are often referred to as the peripheral devices sometimes.
87. **Ans. (a)**
The statement is true. The input devices are used to enter data from the outside world into primary storage. The output devices supply results of processing from primary storage to users.
88. **Ans. (a)**
All except the keypad are point-and-draw devices. They are used to rapidly point to and select a graphic icon or menu item from multiple options displayed on the GUI of a screen.