

AL HUDA SCIENCE ACADEMY

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Most Important MCQs of Computer

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1. What is the primary function of a system?

- A. To work independently
- B. To achieve a common goal ✓**
- C. To create new systems
- D. To provide entertainment

2. What is one of the fundamental concepts of any system?

- A. Its size
- B. Its objective ✓**
- C. Its age
- D. Its price

3. What is an example of a simple system?

- A. A human body
- B. A computer network
- C. A thermostat regulating temperature ✓**
- D. The internet

4. What are the basic components of a system?

- A. Users, hardware, software
- B. Objectives, components, environment, communication ✓**
- C. Inputs, outputs, processes
- D. Sensors, actuators, controllers

5. Which of the following describe the Von Neumann architecture's main characteristic?

- A. Separate memory of data and instructions
- B. Parallel execution of instructions
- C. Single memory store for both program instructions and data ✓**
- D. Multiple CPUs for different tasks

6. What is disadvantage of the Von Neumann architecture?

- A. Complex design due to separate memory spaces
- B. Difficult to modify programs stored in memory
- C. Bottleneck due to single memory space for instructions and data ✓**
- D. Lack of flexibility in executing instructions

7. Which of the following number is a valid binary number?

- A. 1101102
- B. 11011 ✓**
- C. 110.11
- D. 1101A

8. How many bytes are used to store a typical integer?

- A. 1 byte
- B. 2 bytes
- C. 4 bytes ✓**

D. 8 bytes

9. What is the primary difference between signed and unsigned integers?

- A. Unsigned integers cannot be negative ✓**
- B. Signed integers have a large range
- C. Unsigned integers are stored in floating-point format
- D. Signed integers are only used for positive numbers

10. What does ASCII stands for?

- A. American Standard Code for Information Interchange ✓**
- B. Advanced Standard Code for Information Interchange
- C. American Standard Communication for Information Interchange
- D. Advanced Standard Code for Information Interchange

11. How many bits are used in the standard ASCII encoding?

- A. 7 bits ✓**
- B. 8 bits
- C. 16 bits
- D. 32 bits

12. Which of the following is a key advantage of Unicode over ASCII?

- A. It used fewer bits per character
- B. It can represents characters for many different languages ✓**
- C. It is backward compatible with binary
- D. It is specific to the English language

13. Which of the following Boolean expression represents the OR operation?

- A. $A.B$
- B. $A+B$ ✓**
- C. A
- D. (Not provided)

14. Which logic gate outputs true only if both inputs are true?

- A. OR gate
- B. AND gate ✓**
- C. XOR gate
- D. NOT gate

15. What is the decimal equivalent of the binary number 1101?

- A. 11
- B. 12
- C. 13 ✓**
- D. 14

16. What is the dual of the Boolean expression $A.0=0$?

- A. $A+1=1$ ✓**

- B. $A+0=A$
- C. $A.1=A$
- D. $A.0=0$

17. What is the first step in the systematic process of troubleshooting?

- A. Establish a Theory of Probable Cause
- B. Implement the Solution
- C. Identify Problem ✓**
- D. Document Findings, Actions, and Outcomes

18. Why is effective troubleshooting important for maintaining systems?

- A. It helps save money on repairs
- B. It prevents the need for professional help
- C. It ensure systems operate smoothly and efficiently ✓**
- D. It allow for more frequent system updates

19. Which step involves coming up with a theory about what might be causing a problem?

- A. Test the Theory to Determine the Cause
- B. Establish a Theory of Probable Cause ✓**
- C. Implement the Solution
- D. Verify Fully System Functionality

20. After implement a solution, What is the next step in the troubleshooting process?

- A. Document Findings, Action, and Outcomes
- B. Test the Theory to Determine the Cause
- C. Verify Full system Functionality ✓**
- D. Establish a plan of Action to Resolve the Problem

21. Which of the following is an example of identifying a problem in troubleshooting process?

- A. Testing a laptop battey by plugging in the poower cord
- B. Coming up with a plan to replace a laptop battery
- C. Noticing that a laptop does not turn on when the power button is pressed ✓**
- D. Writing down that a laptop battery was replaced

22. What is the purpose of establishing a plan of action in troubleshooting?

- A. To identify the problem
- B. To verify full system functionality
- C. To determine the cause of the problem
- D. To decide on the steps needed to resolve the issue ✓**

23. Why is troubleshooting important in computing systems?

- A. It ensures hardware components are always up to date
- B. It prevents the need for data backups
- C. If helps keep systems running smoothly and securely ✓**
- D. It eliminates the need for software update

24. What is the primary objective of computer networks?

- A. Increase the computational power
- B. Enable resource sharing and data communication ✓**
- C. Enhance graphic capabilities
- D. Improve software development

25. What is a key benefit of using computer networks in businesses?

- A. Increase computational power
- B. Enable resources sharing and efficient communication ✓**
- C. Enhance graphic capabilities
- D. Improve software development

26. Which device is used to connect multiple networks and direct data packets between them?

- A. Switch
- B. Hub
- C. Router ✓**
- D. Modem

27. Which method of data transmission used a dedicated communication path?

- A. Packet Switching
- B. Circuit Switching ✓**
- C. Full-Duplex
- D. Half-Duplex

28. Which network topology connects all devices to a central hub?

- A. Ring
- B. Mesh
- C. Bus
- D. Star ✓**

29. Which layer of the OSI model is responsible for node-to-node data transfer and error detection?

- A. Physical Layer
- B. Data Link Layer ✓**
- C. Network Layer
- D. Transport Layer

30. What is the function of the Domain Name System (DNS)?

- A. Assign IP addresses dynamically
- B. Translate domain names to IP addresses ✓**
- C. Secure data communication
- D. Monitor network traffic

31. Which protocol is used for reliable data transfer in the TCP/IP model?

- A. HTTP
- B. FTP
- C. TCP ✓**

D. UDP

32. What is the main purpose of a firewall in network security?

- A. Convert data into a secure format
- B. Monitor and control network traffic ✓**
- C. Assign IP addresses
- D. Translate domain names

33. Which of the following best defines computational thinking?

- A. A method of solving problems using mathematical calculations only
- B. An approach that employs systematic, algorithmic and logical thinking ✓**
- C. A technique used exclusively in computer programming
- D. An approach that ignores real-world applications

34. Why is problems decomposition important in computational thinking?

- A. It simplifies problems by breaking them down into smaller, more manageable parts ✓**
- B. It complicates problems by adding more details
- C. It eliminates the need for solving the problem
- D. It is only useful for simple problems

35. Pattern recognition involves:

- A. Finding and using similarities within problems ✓**
- B. Ignoring repetitive elements
- C. Breaking problems into smaller pieces
- D. Writing detailed algorithms

36. Which term refer to the process of ignoring the details to focus on the main idea?

- A. Decomposition
- B. Pattern recognition
- C. Abstraction ✓**
- D. Algorithm design

37. Algorithms are:

- A. List of data
- B. Graphical representation
- C. Step-by-step instructions for solving a problem ✓**
- D. Repetitive patterns

38. Which of the following is a principle of computational thinking?

- A. Ignoring problem understanding
- B. Problem simplification ✓**
- C. Avoiding solution design
- D. Implementing random solutions

39. Which of the following is the first step in problem-solving according to computational thinking?

- A. Writing the solution

B. Understanding the problem ✓

C. Designing a flowchart

D. Selecting a solution

40. Flowcharts are used to:

A. Code a program

B. Represent algorithms graphically ✓

C. Solve mathematical equations

D. Identify patterns

41. Pseudocode is:

A. A type of flowchart

B. A high-level description of an algorithm using plain language ✓

C. A programming language

D. A debugging tool

42. Dry running a flowchart involves:

A. Writing the code in a programming language

B. Testing the flowchart with sample data ✓

C. Converting a flowchart to pseudocode

D. Ignoring the details of the flowchart

43. Which of the following tag is not a correct HTML tag?

A. A

B. B

C. C

D. D

44. Which property is used to change the background color in CSS?

A. Color

B. Background-color ✓

C. Bgcolor

D. Background

45. Which HTML tag is used to create an unordered list?

A. A

B. B ✓

C. C

D. D

46. Which HTML attribute is used to define inline styles?

A. Class

B. Style ✓

C. Font

D. Values

47. Which tag is used to display a horizontal in HTML?

- A. A
- B. B ✓**
- C. C
- D. D

48. Which of the following is the correct syntax for a CSS rule?

- A. Selector {property: value;} ✓**
- B. Selector: {property=value;}
- C. Selector {property=value}
- D. Selector: {property: value;}

49. In JavaScript, which markup is used for comments?

- A. /**/
- B. // ✓**
- C. <-
- D. /**/

50. How do you include JavaScript in an HTML document?

- A. (A)
- B. (B)
- C. (C)
- D. (D)

51. What is data?

- A. Processed information
- B. Raw facts gathered about things ✓**
- C. A collection of numbers only
- D. A list of observed events

52. Which of the following is an example of qualitative data?

- A. Temperature readings in degrees celsius
- B. Number of students in a class
- C. Favourite ice cream flavours ✓**
- D. Test scores of 100

53. How can you use organize data to make it easier to analyse?

- A. By writing it in long paragraphs
- B. By creating tables, charts and graphs ✓**
- C. By storing it in random files
- D. By keeping it in a messy notebook

54. What is main purpose of data collection?

- A. To create random numbers
- B. To gather information to answer question or make decisions ✓**
- C. To delete old data

D. To format text document

55. What is primary purpose of data visualization?

A. To generate random numbers

B. To convert text into data

C. To make data easier to understand by turning it into pictures ✓

D. To hide complex data

56. Which tool is specifically designed for creating detailed and interactive visualizations?

A. Microsoft Excel

B. Google sheets

C. Tableau ✓

D. PowerPoint

57. What is the first step in data science process?

A. Data cleaning

B. Data analysis

C. Data collection

D. Understanding Data Science ✓

58. Which of the following is not a subfield of AI?

A. Machine learning

B. Natural language processing

C. Computer vision

D. Agriculture ✓

59. Which of the following is an application of AI in healthcare?

A. Personalized drug development

B. Automated diagnosis

C. Remote patient monitoring

D. All of the above ✓

60. What is the primary purpose of using AI techniques in machine learning models?

A. to improve accuracy ✓

B. To enhance interpretability

C. To reduce computational complexity

D. All of the above

61. Which of these AI algorithms is considered an "explainable" model?

A. Neural networks

B. Decision trees ✓

C. Random forests

D. Convolutional neural networks

62. What is the key difference between explainable (whitebox) and unexplainable (blackbox) AI models?

- A. The complexity of the model
 - B. The ability to understand the decision-making process ✓**
 - C. The performance of the model
 - D. The training data used
- 63. Which of these is a security concern in IoT deployments?**
- A. Device vulnerability
 - B. Data privacy
 - C. Lack of standardization
 - D. All of the above ✓**
- 64. Which of the following is an application of IoT in the transportation domain?**
- A. Smart traffic management
 - B. Vehicle-to-Vehicle (V2V) communication
 - C. Predictive maintenance of vehicles
 - D. All of the above ✓**
- 65. Why is it important to use computers safely and responsibly?**
- A. To ensure we can use them more frequently
 - B. To protect out personal information and make wise choices about hardware and software ✓**
 - C. To make the computer run faster
 - D. To avoid paying for software
- 66. What does "responsible computer usage" include?**
- A. Choosing the most expensive hardware
 - B. Sharing your passwords with friends
 - C. Being cautious about what you share online and protecting yourself and others ✓**
 - D. Ignoring software updates
- 67. What should you check to ensure hardware and software compatibility?**
- A. The color of the hardware
 - B. The system requirements on software packages and match them with your computer's specifications ✓**
 - C. The price of the hardware
 - D. The brand of the hardware
- 68. Why is it important to use strong, unique passwords?**
- A. To make your account easy to hack
 - B. To help other guess your password
 - C. To make it harder for someone to guess your password and access your account ✓**
 - D. To avoid installing software updates
- 69. What does two-factors authentication (2FA) do?**
- A. It makes your password easier to guess
 - B. Its adds an extra layer of security by requiring a second form of verification ✓**
 - C. It removes the need for a password

D. It reduces the need for software updates

70. Why should you be cautious when using public Wi-Fi for sensitive transactions?

A. Public Wi-Fi is usually faster

B. Public Wi-Fi networks are often less secure ✓

C. Public Wi-Fi is free

D. Public Wi-Fi always provides encryption

71. What is one reason to avoid clicking on unknown links or downloading files from intrusted sources?

A. They might contain helpful software

B. They might contain malware that can harm your device or steal your information ✓

C. They are usually cheaper

D. They help your device run faster

72. What is an important aspect of responsible use of social media?

A. Sharing personal information like your home address

B. Posting photos without considering privacy setting

C. Being respectful and avoiding shearing sensitive information publicly ✓

D. Ignoring privacy setting

73. What should you do if you receive an email from an unknown sender asking for personal information?

A. Provide the information requested

B. Forward the email to your friends

C. Ignore or delete the email ✓

D. Open the email and click on any links

74. What is entrepreneurship?

A. The process of starting a new business or organization ✓

B. The process of buying and selling stocks

C. The process of working for a large company

D. The process of creating a marketing campaign

75. What is the key characteristic of entrepreneurs?

A. Avoiding risks

B. Seeking job security

C. Innovation ✓

D. Following established methods

76. What is an example of a digital technology used by modern entrepreneurs?

A. Newspaper advertisements

B. Television commercials

C. Mobile apps ✓

D. Door-to-Door sales

77. What is the first step in the design thinking process?

- A. Prototyping
- B. Testing
- C. Empathizing ✓**
- D. Defining

78. Which of the following is not a technique for identifying market needs?

- A. Surveys and questionnaires
- B. Market research
- C. Observation
- D. Brainstorming ✓**

79. What is the primary purpose of creating a business plan?

- A. To attract investors
- B. To outline strategies for growth ✓**
- C. To study market trends
- D. To implement digital marketing strategies

80. What does market analysis involve?

- A. Calculating revenue forecasts
- B. Researching competitors and understanding customer need ✓**
- C. Developing pricing strategies
- D. Implementing digital marketing campaigns

81. An organized set of components that are coordinated to perform a designated function is called:

- A. System ✓**
- B. Tool
- C. Machine
- D. Group

82. Which of the following is the simplest example of a system?

- A. Human Brain
- B. Thermostat ✓**
- C. Computer Network
- D. Car engine

83.system circulates blood in the human body.

- A. Respiratory
- B. Cerebral
- C. Cardiovascular ✓**
- D. Digestive

84. Which type of science involves designing new system to solve problems?

- A. Natural science
- B. Theoretical science
- C. Design science ✓**

D. Earth science

85. What does the design science of computer science aim to do?

A. Observe natural events

B. Improve and build computer tools ✓

C. Collect data

D. Analyze data

86. Which device helps a user to input data into the computer?

A. Printer

B. Keyboard ✓

C. Monitor

D. Speaker

87. Which software helps users perform specific tasks like writing or browsing?

A. Operating system

B. Application software ✓

C. BIOS

D. Firewall

88. The CPU is also known as:

A. Storage hub

B. Data cable

C. Brain of the computer ✓

D. Mouse controller

89. A system bus contains how many main types of buses?

A. 2

B. 3 ✓

C. 4

D. 5

90. Which bus carries the actual data between components?

A. Address bus

B. Data bus ✓

C. Control bus

D. Graphics bus

91. Which bus is responsible for sending control signals?

A. Internet bus

B. Storage bus

C. Control bus ✓

D. Power bus

92. The Von Neumann computer architecture was developed in:

A. 1990s

- B. 1980s
- C. 1940s ✓**
- D. 1950s

93. The idea of storing a program instructions and data in same memory was introduced by:

- A. John Von Neumann ✓**
- B. Dr.Abdul Qadeer
- C. Dr.Abdul Salam
- D. Pascal

94. CU stands for:

- A. Cache unit
- B. Control unit ✓**
- C. Calculating Unit
- D. Communication unit

95. The brain of the computer that executes instructions is called:

- A. CPU ✓**
- B. System unit
- C. Mother board
- D. RAM

96. Temporary storage in the CPU is called:

- A. RAM
- B. ROM
- C. Hard Disk
- D. Registers ✓**

97. Which component of the CPU decides which operations to perform?

- A. ALU
- B. Control Unit ✓**
- C. Register
- D. None

98. Which unit decodes the instruction to determine the necessary action?

- A. ALU
- B. Control Unit (CU) ✓**
- C. Memory
- D. Output Device

99. In Von Neumann architecture, where are instructions and data stored?

- A. In the Control Unit
- B. In the ALU
- C. In memory ✓**
- D. In the Output Device

100. What is an advantage of Von Neumann architecture?

- A. Complex design
- B. Simplified design ✓**
- C. High security
- D. Fast processing

101. The base of decimal number system is:

- A. 2
- B. 8
- C. 10 ✓**
- D. 16

102. How many unique digits are there in the binary number system?

- A. 2 ✓**
- B. 8
- C. 10
- D. 16

103. The number system we use in our daily life is number system:

- A. Binary
- B. Octal
- C. Decimal ✓**
- D. Hexadecimal

104. What is the base of the octal number system?

- A. 2
- B. 8 ✓**
- C. 10
- D. 16

105. What is the octal value of the binary number 011?

- A. 1
- B. 2
- C. 3 ✓**
- D. 4

106. B in hexadecimal system is equivalent to decimal system:

- A. 10
- B. 11 ✓**
- C. 12
- D. 15

107. A 1-byte integer has bits to store values:

- A. 2
- B. 4
- C. 8 ✓**

D. 16

108. What is the maximum value of a 1-byte unsigned integer?

A. 127

B. 255 ✓

C. 128

D. 256

109. Which formula is used to calculate the maximum value of an unsigned integer?

A. 2^n

B. 2^{n+1}

C. $2^n - 1$ ✓

D. $2^n + 1$

110. If the sign bit is 1 in a signed integer, what does it represent?

A. Positive

B. Zero

C. Negative ✓

D. Even

111. Which formula gives the minimum value of a signed integer?

A. -2^n

B. $-2^{(n-1)}$ ✓

C. 2^{n-1}

D. 2^n

112. How many bits are used in standard ASCII encoding?

A. 6 bits

B. 7 bits ✓

C. 8 bits

D. 10 bits

113. How many bits are used in extended ASCII?

A. 7

B. 8 ✓

C. 16

D. 32

114. Which encoding scheme can represent characters from almost all languages?

A. ASCII

B. Extended ASCII

C. Unicode ✓

D. Binary

115. Which Unicode encoding is backward compatible with ASCII?

A. UTF-16

- B. UTF-32
- C. UTF-8 ✓**
- D. ASCII-128

116. Which Unicode encoding uses fixed 4 bytes per character?

- A. UTF-8
- B. UTF-16
- C. UTF-32 ✓**
- D. ASCII

117. Which storage method stores files on remote servers accessed via the internet?

- A. CD
- B. SSD
- C. Cloud storage ✓**
- D. HDD

118. Which storage device uses flash memory for faster access times and better performance?

- A. CD
- B. HDD
- C. SDD (SSD) ✓**
- D. DVD

119. IBM created first hard drive in?

- A. 1956 ✓**
- B. 1957
- C. 1958
- D. 1959

120. What company built the first hard drive in 1956?

- A. Microsoft
- B. IBM ✓**
- C. Apple
- D. Intel

121. The weight of the first hard drive created by IBM In 1956 was over:

- A. 50KG
- B. 500KG
- C. 1 ton ✓**
- D. 10 ton

122. Which of the following singles has only two possible values?

- A. Analog
- B. Continuous
- C. Digital ✓**
- D. Voice

123. What kind of signal used in modern computing systems?

- A. Analog
- B. Digital ✓**
- C. Wave
- D. Modulated

124. What does ADC stand for?

- A. Analog dual converter
- B. Audio Data Converter
- C. Analog to Digital Converter ✓**
- D. None

125. Which device typically uses a DAC?

- A. Microphone
- B. Temperature sensor
- C. Speaker ✓**
- D. Keyboards

126. The digital logic is based on:

- A. Symbolic text
- B. Decimal digits
- C. Binary numbers ✓**
- D. Negative voltage

127. A binary digit is also known as:

- A. Logic gate
- B. Voltage input
- C. Bit ✓**
- D. Symbolic sign

128. The symbol + represents which Boolean operation?

- A. OR ✓**
- B. AND
- C. NOT
- D. XOR

129. The result of NOT 1 is:

- A. 0 ✓**
- B. 1
- C. 2
- D. 3

130. Boolean functions produces:

- A. Two outputs
- B. Decimal output
- C. Single binary output ✓**

D. Continuous signal

131. Who invented Boolean algebra?

- A. Isaac Newton
- B. Alan Turing
- C. George Boole ✓**
- D. Charles Babbage

132. When was George Boole born?

- A. 1915
- B. 1815 ✓**
- C. 1899
- D. 1705

133. Boolean algebra laid the foundations for:

- A. Mechanical tools
- B. Computer science ✓**
- C. Chemical engineering
- D. Airplane design

134. Logic gates performs:

- A. Graph pointing
- B. Boolean operations ✓**
- C. Text formatting
- D. Image editing

135. In a logic gate, what does true represent?

- A. 0
- B. 10
- C. 1 ✓**
- D. 5

136. What is the output of a NAND gate when both inputs are true?

- A. False ✓**
- B. True
- C. Unknown
- D. High

137. What does $A+B$ equal to in the commutative law?

- A. $A.B$
- B. $B+A$ ✓**
- C. A
- D. B

138. Which law states $(A+B)+C=A+(B+C)$?

- A. Commutative

B. Associative ✓

C. Distributive

D. Identity

139. A.(A+B) simplifies to:

A. A.B

B. B

C. A ✓

D. A+B

140. The main goal of system troubleshooting is to:

A. Replace hardware

B. Upgrade system

C. Identify and fix problems ✓

D. Install new software

141. What is the first step in the troubleshooting process?

A. Implementing a solution

B. Documenting actions

C. Identifying the problem ✓

D. Rebooting the system

142. What is meant by data integrity?

A. Data is stored

B. Data is stored online

C. Data is accurate and reliable ✓

D. Data is copied

143. Troubleshooting can help to improve:

A. Typing speed

B. Hardware cost

C. Equipment performance ✓

D. App size

144. Troubleshooting can help identify:

A. App downloads

B. Security vulnerabilities ✓

C. Shopping websites

D. Social media profiles

145. What kind of issue can reduce system performance?

A. Software conflicts ✓

B. File downloads

C. Screen brightness

D. Font sizes

146. Fixing bugs improves:

- A. File size
- B. User experience ✓**
- C. Wallpaper color
- D. Folder structure

147. Which tool can be used to check RAM issue?

- A. Crystal disk info
- B. SMART
- C. Mem test 86 ✓**
- D. Chrome

148. What is a common symptom of RAM failure?

- A. Faster browsing
- B. Blue screen of death ✓**
- C. Keyboard error
- D. Bright monitor

149. computer crashes are caused by RAM error:

- A. 5%
- B. 10% ✓**
- C. 25%
- D. 50%

150. What sound might indicate hard drive failure?

- A. Beeping
- B. Clicking ✓**
- C. Whistling
- D. Buzzing

151. What tool can check hard drive health?

- A. Crystal Disk Info ✓**
- B. Weather app
- C. Music player
- D. Photo Editor

152. What does SMART check in your computer?

- A. RAM speed
- B. CPU usage
- C. Hard drive health ✓**
- D. Internet speed

153. What should you use to keep cables organized?

- A. Gue
- B. Cable ties ✓**
- C. Tape

D. Paper clips

154. The wannacry attack exploited:

A. Unupdated Windows system ✓

B. Overheated CPUs

C. Dirty keyboards

D. Old monitors

155. Google drive and dropbox are examples of:

A. Antivirus programs

B. File converters

C. Cloud storage ✓

D. RAM tools

156. High CPU temperature can reduce a lifespan by:

A. 10%

B. 30%

C. 50% ✓

D. 70%

157. The minimum numbers of computer requires to form a computer network is:

A. Two ✓

B. Three

C. Four

D. Five

158. Which of the following is not a node in a computer networks:

A. Smartphone

B. Routers

C. Printer

D. Ethernet cable ✓

159. What is the largest network in the world?

A. LAN

B. Intranet

C. Internet ✓

D. MAN

160. What was invented by Tim Berners-Lee in 1989?

A. Internet

B. MAC Address

C. WWW ✓

D. Email

161. What type of connection is Ethernet?

A. Wireless

B. Wired ✓

C. Optical

D. a and b both

162. What type of connection is wi-fi?

A. Wired

B. Wireless ✓

C. Internal

D. a and b both

163. An example of communication protocol is:

A. HTTP ✓

B. CPU

C. RAM

D. USB

164. Which of the following is an example of a medium?

A. MAC address

B. Ethernet cable ✓

C. PDF file

D. Printer

165. Which of these devices connect multiple nodes and helps them communicate within a network?

A. Browser

B. Firewall

C. Switch ✓

D. Monitor

166. Which of the following is not a networking device?

A. Switches

B. Routers

C. Hubs

D. Bus ✓

167. What does SIM stand for?

A. Signal identification mode

B. Simple internal memory

C. Subscriber identity module ✓

D. System internal module

168. Which layer does the switch operate on?

A. Network layer

B. Transport layer

C. Data link layer ✓

D. Application layer

169. What type of device often includes both a switch and access point?

- A. Printer
- B. Laptop
- C. Home router ✓**
- D. Scanner

170. Access points transmit the data using:

- A. Radio waves ✓**
- B. Sound waves
- C. Electrical pulses
- D. Light signals

171. What does each data packet include?

- A. Full file
- B. Website info
- C. Destination address ✓**
- D. Device name

172. In packet switching, data is split into:

- A. Bytes
- B. Packets ✓**
- C. Only large file
- D. Electrical signals

173. In a bus topology, all devices share a common:

- A. Router
- B. Switch
- C. Communication line ✓**
- D. Server

174. The central cable used in bus topology is called:

- A. Mainframe
- B. Hub
- C. Bus ✓**
- D. Ring

175. Bus topology is best described as:

- A. Complex and costly
- B. Easy to set up ✓**
- C. Wireless only
- D. Secure and hidden

176. In star topology, all devices connect to a central device:

- A. Router
- B. Printer
- C. Hub or switch ✓**

D. Server

177. The central device in a star topology works as a:

- A. Power backup
- B. Data flow repeater ✓**
- C. Screen projector
- D. Data storage

178. In ring topology, devices are connected in a:

- A. Straight line
- B. Circular path ✓**
- C. Star formation
- D. Mesh pattern

179. Data in ring topology travels in:

- A. Both direction
- B. Zig-zag pattern
- C. One direction ✓**
- D. Wireless path only

180. Which topology allow data to be rerouted in case on a broken link?

- A. Bus
- B. Ring
- C. Mesh ✓**
- D. Star

181. What does each data packet include?

- A. Full file
- B. Website info
- C. Destination address ✓**
- D. Device name

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- A. Bytes
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C. Mesh ✓

D. Star

191. How many types of data transmission modes are there?

A. 2

B. 3 ✓

C. 5

D. 7

192. What is the direction of data flow in simplex communication?

- A. Bidirectional
- B. Circular
- C. Unidirectional ✓**
- D. Random

193. What is fixed in simplex communication?

- A. Protocols
- B. IP addresses
- C. Direction of data flow ✓**
- D. Devices

194. What device is an example of half-duplex communication?

- A. Telephone
- B. Walkie-talkie ✓**
- C. Laptop
- D. Television

195. Which communication mode is used in modern phones?

- A. Simplex
- B. Half duplex
- C. Full duplex ✓**
- D. Serial

196. What was the first message sent over ARPANET?

- A. LOG
- B. HELLO
- C. LO ✓**
- D. Start

197. How many layers are in the OSI model?

- A. 5
- B. 6
- C. 7 ✓**
- D. 8

198. Which OSI layer is responsible for error detection during data transmission?

- A. Network
- B. Transport
- C. Data link ✓**
- D. Physical

199. Which addressing method is used to the network layer of the OSI model?

- A. MAC address
- B. Email address
- C. IP address ✓**

D. Web address

200. Routers operate mainly of which OSI layer?

- A. Physical
- B. Transport
- C. Network ✓**
- D. Data link

201. Which protocol is used at the transport layer?

- A. HTTP
- B. TCP ✓**
- C. IP
- D. SMTP

202. Which version of internet protocol is designed to replace IPv4?

- A. IPv2
- B. IPv5
- C. IPv6 ✓**
- D. IPv3

203. What is the binary equivalent of 172 in IPv4?

- A. 11011010
- B. 10101100 ✓**
- C. 10010011
- D. 1100000

204. How many bits are there in IPv 6 addresses?

- A. 32
- B. 64
- C. 96
- D. 128 ✓**

205. IPv 6 addresses are written in:

- A. Decimal format
- B. Binary format only
- C. Hexadecimal format ✓**
- D. Symbolic format

206. The TCP/IP protocol is used for:

- A. Streaming music
- B. Programming languages
- C. Internet communication ✓**
- D. Software installation

207. DHCP assigns IP addresses:

- A. Manually

B. Automatically ✓

C. Through DNS

D. Statically

208. What does DNS stand for?

A. Data name server

B. Domain number system

C. Domain name system ✓

D. Device naming setting

209. What is a short range personal network called?

A. LAN

B. WAN

C. MAN

D. PAN ✓

210. What type of network is limited to a small area?

A. WAN

B. LAN ✓

C. MAN

D. CAN

211. A computer lab in a school is an example of:

A. MAN

B. WAN

C. LAN ✓

D. PAN

212. Which network type connects multiple LANs in a city?

A. WAN

B. CAN

C. PAN

D. MAN ✓

213. Which network type cover the largest geographical area?

A. PAN

B. LAN

C. WAN ✓

D. CAN

214. What is an example of WAN?

A. Bluetooth connection

B. University network

C. Internet ✓

D. Smart home

215. Which network type is most suitable to connecting multiple building on a university campus?

- A. PAN
- B. MAN
- C. CAN ✓**
- D. WAN

216. An internet network of a company is typically called:

- A. Internet
- B. Extranet
- C. Intranet ✓**
- D. Ethernet

217. What is an LMS?

- A. Learning model setup
- B. Language management server
- C. Learning management system ✓**
- D. Local machine server

218. What is a popular LMS platform?

- A. Powerpoint
- B. Gmail
- C. Blackboard ✓**
- D. WhatsApp

219. What is EHR?

- A. Electrical health resource
- B. Electronic health record ✓**
- C. Emergency health report
- D. Email hosting room

220. Breaking down a problem into smaller parts or sub-problems is called:

- A. Debugging
- B. Algorithm
- C. Decomposition ✓**
- D. Pattern Recognition

221. Decomposition is an important step in:

- A. Debugging
- B. Computational Thinking ✓**
- C. Hardware design
- D. Data storage

222. Involves looking for similarities or patterns among and within the problem.

- A. Decomposition
- B. Pattern Recognition ✓**
- C. Abstraction

D. Algorithm

223. Abstraction focuses on:

- A. Complex details
- B. Unnecessary details
- C. High-level overview ✓**
- D. Hidden parts

224. is a step-by-step collection of instructions to solve a problem or complete a task.

- A. Procedure
- B. Algorithm ✓**
- C. Method
- D. Technique

225. An algorithm must terminate after a number of steps.

- A. Infinite
- B. Five
- C. Two
- D. Finite ✓**

226. What is the first step in problem-solving in computational thinking?

- A. Solution selection
- B. Problem understanding ✓**
- C. Problem simplification
- D. Algorithm design

227. The graphical representation of steps to be followed to solve a problem is called:

- A. Flowchart ✓**
- B. Program
- C. Diagram
- D. Algorithm

228. Flowchart symbols illustrate:

- A. Data types
- B. Steps in a process ✓**
- C. Hardware devices
- D. Programming languages

229. Flowcharts were first standardized by ANSI in:

- A. 1945
- B. 1947 ✓**
- C. 1950
- D. 1955

230. The first standardized flowchart symbols were developed by:

- A. John Smith

B. American National Standards Institute ✓

C. Albert Einstein

D. Steve Jobs

231. Flowcharts were popularized in computing by John von Neumann and:

A. Steve Jobs

B. Herman Goldstine ✓

C. Isaac Newton

D. Tim Berners-Lee

232. Which symbol in a flowchart represents the start or end of a process?

A. Rectangle Symbol

B. Diamond Symbol

C. Oval Symbol ✓

D. Parallelogram Symbol

233. Which symbol represents a process, task, or operation that needs to be performed in a flowchart?

A. Oval Symbol

B. Rectangle Symbol ✓

C. Diamond Symbol

D. Parallelogram Symbol

234. Pseudocode is written in:

A. Programming language

B. Plain English ✓

C. Binary code

D. Assembly language

235. What does Time Complexity measure in an algorithm?

A. Memory usage

B. Algorithm speed ✓

C. Number of inputs

D. Program size

236. Space Complexity measures the amount ofan algorithm uses.

A. Time

B. Speed

C. Memory ✓

D. Processing Power

237. Dry run helps to:

A. Hide errors

B. Find errors manually ✓

C. Reduce code size

D. Delete variables

238. Simulation helps to explore:

- A. Software installation
- B. Different scenarios and situations ✓**
- C. Hardware parts
- D. Internet speed

239. LARP stands for:

- A. Logical Algorithm Resolution Program
- B. Logic of Algorithms for Resolution of Problems
- C. Language Algorithm Resolution Program
- D. Logic of Algorithms for Resolution of Problems ✓**

240. The process of finding and fixing errors in an algorithm is called:

- A. Simulation
- B. Debugging ✓**
- C. Execution
- D. Flowcharting

241. Dividing a number by zero causes:

- A. Syntax Error
- B. Logical Error
- C. Runtime Error ✓**
- D. Input Error

242. Which type of error is hardest to detect?

- A. Syntax error
- B. Runtime error
- C. Logical error ✓**
- D. Spelling error in comments

243. Writing comments in an algorithm helps to:

- A. Increase speed
- B. Explain each step ✓**
- C. Hide mistakes
- D. Reduce code size

244. What is an example of an "Invalid Operation"?

- A. Adding two numbers
- B. Dividing by zero ✓**
- C. Printing a message
- D. Declaring a variable

245. The process of creating website and web application is called?

- A. Web hosting
- B. Web designing
- C. Web development ✓**

D. Web marketing

246. Hotmail was created by students from which university?

- A. MIT
- B. Harvard
- C. Stanford ✓**
- D. Oxford

247. How much did Microsoft pay to Hotmail?

- A. 40 million dollars
- B. 100 million dollars
- C. 400 million dollars ✓**
- D. 1 billion dollars

248. Which of the following can be used to create interactive web pages?

- A. HTML
- B. JavaScript ✓**
- C. SQL
- D. CSS

249. Who created the first website?

- A. Bill Gates
- B. Tim Berners-Lee ✓**
- C. Mark-Zuckerberg
- D. Larry page

250. When was the first website created?

- A. 1989
- B. 1991 ✓**
- C. 1995
- D. 2000

251. Where can the first website still be accessed?

- A. <http://example.com>
- B. <http://firstweb.org>
- C. <http://info.cern.ch> ✓**
- D. <http://webstart.net>

252. Which front-end language can be used to add animations?

- A. HTML
- B. CSS ✓**
- C. JavaScript
- D. None

253. Which language is used to process forms in the back-end?

- A. HTML

- B. Python
- C. PHP ✓**
- D. A and B

254. Which of the following is in back-end development?

- A. User interface
- B. Design
- C. Database ✓**
- D. Graphics

255. HTML stands for:

- A. Hyper text markup language ✓**
- B. Hash tag markup language
- C. Hyper tech markup language
- D. High tech machine language

256. HTML are enclosed in:

- A. ()
- B. []
- C. <> ✓**
- D. //

257. Sublime Text is an example of:

- A. Text editor ✓**
- B. Web browser
- C. Web server
- D. Search engine

258. Which of the following is not a web browser?

- A. Google chrome
- B. Microsoft edge
- C. Mozilla Firefox
- D. Notepad++ ✓**

259. A single document on the world wide web is known as:

- A. Web net
- B. Web page ✓**
- C. Web link
- D. Web cam

260. An HTML element usually consist of tags:

- A. Start
- B. End
- C. Start and end ✓**
- D. Middle

261. What does tag define?

A. Unordered list ✓

B. Underline

C. Upper level

D. Universal link

262. What does CSS stands for?

A. Computer Style System

B. Cascading Style Sheets ✓

C. Creative Style System

D. Colorful Style System

263. Which CSS property changes text color?

A. Text-color

B. Font-color

C. Color ✓

D. Text-style

264. Which method adds CSS directly to an HTML element?

A. Inline style ✓

B. Internal styles

C. External styles

D. Embedded styles

265. Where is the internal CSS typically placed in an HTML file?

A. Inside the body

B. Inside the title

C. Inside the head ✓

D. Inside the footer

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