

1. What is a characteristic of a multiprocessor system?

- a) Increased power consumption
- b) Decreased scalability
- c) Enhanced parallel processing
- d) Reduced complexity

*Answer: c) Enhanced parallel processing*

In a multiprocessor system, multiple processors work concurrently on different tasks, thereby enhancing parallel processing capabilities.

2. What is the structure of multiprocessor-interprocessor arbitration?

- a) Master-slave
- b) Priority-based
- c) Random selection
- d) Token passing

*Answer: b) Priority-based*

In priority-based arbitration, processors are given different priority levels, and the one with the highest priority gains access to shared resources first.

3. Which mechanism is commonly used for inter-processor communication in a multiprocessor system?

- a) Message passing

- b) Shared memory
- c) Direct memory access
- d) Interrupts

*Answer: a) Message passing*

Message passing involves sending data between processors through a communication mechanism, often utilizing shared memory or specific communication channels.

4. What is a key aspect of memory management in a multiprocessor system?

- a) Increased latency
- b) Limited bandwidth
- c) Cache coherence
- d) Non-uniform memory access

*Answer: c) Cache coherence*

Cache coherence ensures that data stored in multiple caches across different processors remains consistent and up-to-date.

5. What concept is central to pipelining in computer architecture?

- a) Serial processing
- b) Parallel processing
- c) Instruction-level parallelism
- d) Data parallelism

*Answer: c) Instruction-level parallelism*

Pipelining involves breaking down instructions into smaller stages and executing them concurrently, exploiting instruction-level parallelism.

6. Which processing technique involves performing operations on entire arrays of data simultaneously?

- a) Vector processing
- b) Parallel processing
- c) Pipelining
- d) Serial processing

*Answer: a) Vector processing*

Vector processing allows operations to be performed simultaneously on entire arrays or vectors of data, optimizing throughput.

7. Which architecture tends to emphasize simpler instructions and fewer addressing modes?

- a) RISC
- b) CISC
- c) SIMD
- d) MIMD

*Answer: a) RISC*

Reduced Instruction Set Computer (RISC) architectures prioritize simplicity and efficiency,

typically featuring simpler instructions and fewer addressing modes.

8. What is a characteristic of a multicore processor?

- a) Limited parallelism
- b) Increased power consumption
- c) Improved scalability
- d) Reduced performance

*Answer: c) Improved scalability*

Multicore processors integrate multiple processor cores onto a single chip, enhancing parallelism and scalability for handling multiple tasks efficiently.

9. Which company is known for producing the Intel Core series of multicore processors?

- a) AMD
- b) Nvidia
- c) Intel
- d) Qualcomm

*Answer: c) Intel*

Intel is renowned for its Core series of multicore processors, which are widely used in various computing devices.

10. What is a key advantage of multicore processors over single-core processors?

- a) Reduced power consumption
- b) Enhanced clock speed
- c) Improved multitasking performance
- d) Decreased complexity

*Answer: c) Improved multitasking performance*

Multicore processors can execute multiple tasks concurrently across different cores, leading to improved multitasking performance compared to single-core processors.

11. Which type of processing architecture typically features a large number of general-purpose registers?

- a) RISC
- b) CISC
- c) SIMD
- d) MIMD

*Answer: a) RISC*

Reduced Instruction Set Computer (RISC) architectures commonly feature a large number of general-purpose registers, facilitating efficient execution of instructions.

12. In a multiprocessor system, what mechanism helps maintain data consistency across shared caches?

- a) Cache coherence protocol
- b) Interrupt handling

- c) Direct memory access
- d) Message passing

*Answer: a) Cache coherence protocol*

Cache coherence protocols ensure that data stored in different caches remains consistent by coordinating cache access and data updates.

13. Which processor design philosophy favors a larger number of simple instructions?

- a) RISC
- b) CISC
- c) SIMD
- d) MIMD

*Answer: a) RISC*

Reduced Instruction Set Computer (RISC) architectures prioritize simplicity and efficiency, typically featuring a larger number of simple instructions.

14. What type of processing architecture is designed to handle multiple instructions at the same time?

- a) SIMD
- b) MIMD
- c) SISD
- d) MISD

*Answer: a) SIMD*

Single Instruction, Multiple Data (SIMD) architectures execute the same instruction on multiple data elements simultaneously, thereby improving parallelism.

15. Which component is responsible for coordinating access to shared resources in a multiprocessor system?

- a) Cache controller
- b) Memory controller
- c) Arbiter
- d) Processor scheduler

*Answer: c) Arbiter*

An arbiter is responsible for coordinating access to shared resources, such as memory or I/O devices, among multiple processors in a multiprocessor system.

16. Which instruction set architecture tends to have a larger set of complex instructions?

- a) CISC
- b) RISC
- c) SIMD
- d) MIMD

*Answer: a) CISC*

Complex Instruction Set Computer (CISC) architectures typically feature a larger set of

complex instructions, aiming to reduce the number of instructions required to perform tasks.

17. Which company produces the Ryzen series of multicore processors?

- a) Nvidia
- b) AMD
- c) Intel
- d) Qualcomm

*Answer: b) AMD*

AMD is known for its Ryzen series of multicore processors, which offer high-performance computing capabilities for various applications.

18. What type of processing architecture allows multiple processors to execute different instructions on different data simultaneously?

- a) MIMD
- b) SIMD
- c) SISD
- d) MISD

*Answer: a) MIMD*

Multiple Instruction, Multiple Data (MIMD) architectures enable multiple processors to execute different instructions on different data simultaneously, facilitating parallel processing.



19. Which memory access pattern tends to suffer from non-uniform memory access (NUMA) in a multiprocessor system?

- a) Random access
- b) Sequential access
- c) Cyclic access
- d) Distributed access

*Answer: a) Random access*

Random memory access patterns can lead to non-uniform memory access (NUMA) issues in a multiprocessor system, where accessing remote memory locations incurs higher latency.

20. Which characteristic is typically associated with CISC architectures?

- a) Simplified instruction set
- b) Reduced instruction complexity
- c) Limited addressing modes
- d) Support for complex operations in single instructions

*Answer: d) Support for complex operations in single instructions*

Complex Instruction Set Computer (CISC) architectures often support complex operations, such as string manipulation or floating-point arithmetic, in single instructions, reducing the need for multiple instructions to accomplish tasks.

Related posts:

1. Computer Architecture, Design, and Memory Technologies MCQ
2. Basic Structure of Computer MCQ
3. Computer Arithmetic MCQ
4. I/O Organization MCQ
5. Memory Organization MCQ
6. Introduction to Energy Science MCQ
7. Ecosystems MCQ
8. Biodiversity and its conservation MCQ
9. Environmental Pollution mcq
10. Social Issues and the Environment MCQ
11. Field work mcq
12. Discrete Structure MCQ
13. Set Theory, Relation, and Function MCQ
14. Propositional Logic and Finite State Machines MCQ
15. Graph Theory and Combinatorics MCQ
16. Relational algebra, Functions and graph theory MCQ
17. Data Structure MCQ
18. Stacks MCQ
19. TREE MCQ
20. Graphs MCQ
21. Sorting MCQ
22. Digital Systems MCQ
23. Combinational Logic MCQ
24. Sequential logic MCQ
25. Analog/Digital Conversion, Logic Gates, Multivibrators, and IC 555 MCQ

26. Introduction to Digital Communication MCQ
27. Introduction to Object Oriented Thinking & Object Oriented Programming MCQ
28. Encapsulation and Data Abstraction MCQ
29. MCQ
30. Relationships - Inheritance MCQ
31. Polymorphism MCQ
32. Library Management System MCQ
33. Numerical Methods MCQ
34. Transform Calculus MCQ
35. Concept of Probability MCQ
36. Algorithms, Designing MCQ
37. Study of Greedy strategy MCQ
38. Concept of dynamic programming MCQ
39. Algorithmic Problem MCQ
40. Trees, Graphs, and NP-Completeness MCQ
41. The Software Product and Software Process MCQ
42. Software Design MCQ
43. Software Analysis and Testing MCQ
44. Software Maintenance & Software Project Measurement MCQ
45. Introduction to Operating Systems MCQ
46. File Systems MCQ
47. CPU Scheduling MCQ
48. Memory Management MCQ
49. Input / Output MCQ
50. Operating Systems and Concurrency
51. Software Development and Architecture MCQ
52. Software architecture models MCQ

- 53. Software architecture implementation technologies MCQ
- 54. Software Architecture analysis and design MCQ
- 55. Software Architecture documentation MCQ
- 56. Introduction to Computational Intelligence MCQ
- 57. Fuzzy Systems MCQ
- 58. Genetic Algorithms MCQ
- 59. Rough Set Theory MCQ
- 60. Introduction to Swarm Intelligence, Swarm Intelligence Techniques MCQ
- 61. Neural Network History and Architectures MCQ
- 62. Autoencoder MCQ
- 63. Deep Learning MCQs
- 64. RL & Bandit Algorithms MCQs
- 65. RL Techniques MCQs
- 66. Review of traditional networks MCQ
- 67. Study of traditional routing and transport MCQ
- 68. Wireless LAN MCQ
- 69. Mobile transport layer MCQ
- 70. Big Data MCQ
- 71. Hadoop and Related Concepts MCQ
- 72. Hive, Pig, and ETL Processing MCQ
- 73. NoSQL MCQs Concepts, Variations, and MongoDB
- 74. Mining social Network Graphs MCQ
- 75. Mathematical Background for Cryptography MCQ
- 76. Cryptography MCQ
- 77. Cryptographic MCQs
- 78. Information Security MCQ
- 79. Cryptography and Information Security Tools MCQ

- 80. Data Warehousing MCQ
- 81. OLAP Systems MCQ
- 82. Introduction to Data & Data Mining MCQ
- 83. Supervised Learning MCQ
- 84. Clustering & Association Rule mining MCQ
- 85. Fundamentals of Agile Process MCQ
- 86. Agile Projects MCQs
- 87. Introduction to Scrum MCQs
- 88. Introduction to Extreme Programming (XP) MCQs
- 89. Agile Software Design and Development MCQs
- 90. Machine Learning Fundamentals MCQs
- 91. Neural Network MCQs
- 92. CNNs MCQ
- 93. Reinforcement Learning and Sequential Models MCQs
- 94. Machine Learning in ImageNet Competition mcq
- 95. Computer Network MCQ
- 96. Data Link Layer MCQ
- 97. MAC Sub layer MCQ
- 98. Network Layer MCQ
- 99. Transport Layer MCQ
- 100. Raster Scan Displays MCQs
- 101. 3-D Transformations MCQs
- 102. Visualization MCQ
- 103. Multimedia MCQs
- 104. Introduction to compiling & Lexical Analysis MCQs
- 105. Syntax Analysis & Syntax Directed Translation MCQs
- 106. Type Checking & Run Time Environment MCQs

- 107. Code Generation MCQs
- 108. Code Optimization MCQs
- 109. INTRODUCTION Knowledge Management MCQs
- 110. Organization and Knowledge Management MCQs
- 111. Telecommunications and Networks in Knowledge Management MCQs
- 112. Components of a Knowledge Strategy MCQs
- 113. Advanced topics and case studies in knowledge management MCQs
- 114. Conventional Software Management MCQs
- 115. Software Management Process MCQs
- 116. Software Management Disciplines MCQs
- 117. Rural Management MCQs
- 118. Human Resource Management for rural India MCQs
- 119. Management of Rural Financing MCQs
- 120. Research Methodology MCQs
- 121. Research Methodology MCQs
- 122. IoT MCQs
- 123. Sensors and Actuators MCQs
- 124. IoT MCQs: Basics, Components, Protocols, and Applications
- 125. MCQs on IoT Protocols
- 126. IoT MCQs
- 127. INTRODUCTION Block Chain Technologies MCQs
- 128. Understanding Block chain with Crypto currency MCQs
- 129. Understanding Block chain for Enterprises MCQs
- 130. Enterprise application of Block chain MCQs
- 131. Block chain application development MCQs
- 132. MCQs on Service Oriented Architecture, Web Services, and Cloud Computing
- 133. Utility Computing, Elastic Computing, Ajax MCQs

- 134. Data in the cloud MCQs
- 135. Cloud Security MCQs
- 136. Issues in cloud computing MCQs
- 137. Introduction to modern processors MCQs
- 138. Data access optimizations MCQs
- 139. Parallel Computing MCQs
- 140. Efficient Open MP Programming MCQs
- 141. Distributed Memory parallel programming with MPI MCQs
- 142. Review of Object Oriented Concepts and Principles MCQs.
- 143. Introduction to RUP MCQs.
- 144. UML and OO Analysis MCQs
- 145. Object Oriented Design MCQs
- 146. Object Oriented Testing MCQs
- 147. CVIP Basics MCQs
- 148. Image Representation and Description MCQs
- 149. Region Analysis MCQs
- 150. Facet Model Recognition MCQs
- 151. Knowledge Based Vision MCQs
- 152. Game Design and Semiotics MCQs
- 153. Systems and Interactivity Understanding Choices and Dynamics MCQs
- 154. Game Rules Overview Concepts and Case Studies MCQs
- 155. IoT Essentials MCQs
- 156. Sensor and Actuator MCQs
- 157. IoT Networking & Technologies MCQs
- 158. MQTT, CoAP, XMPP, AMQP MCQs
- 159. IoT MCQs: Platforms, Security, and Case Studies
- 160. MCQs on Innovation and Entrepreneurship

- 161. Innovation Management MCQs
- 162. Stage Gate Method & Open Innovation MCQs
- 163. Innovation in Business: MCQs
- 164. Automata Theory MCQs
- 165. Finite Automata MCQs
- 166. Grammars MCQs
- 167. Push down Automata MCQs
- 168. Turing Machine MCQs
- 169. Database Management System (DBMS) MCQs
- 170. Relational Data models MCQs
- 171. Data Base Design MCQs
- 172. Transaction Processing Concepts MCQs
- 173. Control Techniques MCQs
- 174. DBMS Concepts & SQL Essentials MCQs
- 175. DESCRIPTIVE STATISTICS MCQs
- 176. INTRODUCTION TO BIG DATA MCQ
- 177. BIG DATA TECHNOLOGIES MCQs
- 178. PROCESSING BIG DATA MCQs
- 179. HADOOP MAPREDUCE MCQs
- 180. BIG DATA TOOLS AND TECHNIQUES MCQs
- 181. Pattern Recognition MCQs
- 182. Classification Algorithms MCQs
- 183. Pattern Recognition and Clustering MCQs
- 184. Feature Extraction & Selection Concepts and Algorithms MCQs
- 185. Pattern Recognition MCQs
- 186. Understanding Cybercrime Types and Challenges MCQs
- 187. Cybercrime MCQs



- 188. Cyber Crime and Criminal justice MCQs
- 189. Electronic Evidence MCQs
- 190. OPERATING SYSTEMS MCQ
- 191. E-mail, IP and Web Security MCQ
- 192. Decision control structure MCQs
- 193. Ecosystems mcqs
- 194. State-Space Analysis, Sampling Theorem, and Signal Reconstruction mcqs
- 195. System Design and Compensation Techniques MCQs
- 196. Discrete-Time Signals and Systems MCqs
- 197. Aperture and slot mcqs
- 198. Specification of sequential systems mcqs
- 199. Introduction to Embedded Systems mcqs
- 200. Power Semiconductor Switches MCQS