

****1. Which of the following is a valid HTTP status code indicating a successful request?****

- Option A: 200
- Option B: 400
- Option C: 302
- Option D: 404

****Correct Answer: A****

****2. What is the purpose of a Dockerfile?****

- Option A: To build, test, and deploy applications in a container
- Option B: To create virtual machines
- Option C: To manage software packages
- Option D: To debug applications

****Correct Answer: A****

****3. Which database model uses a graph to represent data?****

- Option A: Relational
- Option B: Object-oriented
- Option C: Graph
- Option D: Hierarchical

****Correct Answer: C****

****4. What is the difference between a class and an interface in Java?****

- Option A: Classes can inherit from multiple classes, while interfaces cannot
- Option B: Interfaces can inherit from classes, while classes cannot
- Option C: Classes define implementation, while interfaces define contracts
- Option D: Interfaces inherit from classes, while classes inherit from interfaces

****Correct Answer: C****

****5. Which of the following is a benefit of using cloud computing?****

- Option A: Increased flexibility and scalability
- Option B: Reduced operational costs
- Option C: Improved security
- Option D: All of the above

****Correct Answer: D****

****6. What is the role of a load balancer in a network?****

- Option A: To balance traffic among multiple servers
- Option B: To block unwanted traffic
- Option C: To translate domain names into IP addresses
- Option D: To encrypt data

****Correct Answer: A****

****7. Which of the following is a type of machine learning supervised learning algorithm?****

- Option A: K-Means Clustering
- Option B: Linear Regression
- Option C: Decision Tree
- Option D: Support Vector Machine

****Correct Answer: B****

****8. What is the purpose of a hash function in cryptography?****

- Option A: To convert data into a fixed-length string