

Course Code: CS406
Web-based Database Applications
Final Term MCQ's File # 1
Prepared by DL

1. Which technique can be used to reduce round trips between the browser and the web server?
 - A) Using more complex queries
 - B) Implementing caching strategies**
 - C) Avoiding asynchronous processing
 - D) Increasing the number of server requests

2. Which layout strategy is recommended for web applications?
 - A) Using table-based layouts for all designs
 - B) Designing complex and overloaded pages
 - C) Using Cascading Style Sheets (CSS) for layout**
 - D) Avoiding the use of Master Pages

3. What is a web farm?
 - A) A single server hosting multiple applications
 - B) A collection of servers that work together to provide services**
 - C) A database management system
 - D) A type of web application architecture

4. Which design pattern is commonly used in data access components?
 - A) Model-View-Controller (MVC)
 - B) Table Data Gateway**
 - C) Observer Pattern
 - D) Singleton Pattern

5. What is the main advantage of using a DataReader in PHP?
 - A) It allows for read-only, forward-only operations**
 - B) It supports complex data manipulations
 - C) It is used for writing data to the database
 - D) It provides a graphical user interface

6. What is the purpose of a BLOB in a database?
 - A) To store large amounts of text data
 - B) To store binary large objects**

- C) To create indexes
- D) To manage user sessions

7. **What is the role of a proxy server in web database applications?**

- A) To store data permanently
- B) To intercept requests and fulfill them**
- C) To create user interfaces
- D) To manage user authentication

8. **What is a characteristic of a 1-tier client-server architecture?**

- A) The client, server, and database all reside on different machines.
- B) The client, server, and database all reside on the same machine.**
- C) It is the most complex architecture.
- D) It requires multiple network connections.

9. **What is the main advantage of server-side solutions over client-side solutions?**

- A) They are easier to implement.
- B) They do not require installation on the client machine.**
- C) They are platform-dependent.
- D) They are less secure.

10. **What is the main advantage of using JavaScript for client-side state management?**

- A) It eliminates the need for server-side processing.**
- B) It allows for complex data manipulations.
- C) It provides a graphical user interface.
- D) It is a strongly typed language.

11. **What is a key characteristic of CGI programs?**

- A) They run in the same memory space as the web server.
- B) They can share data between requests.
- C) They are executed as separate processes.**
- D) They are always secure.

12. **What does FastCGI allow for in terms of application deployment?**

- A) It requires all applications to run on the same server.
- B) It allows applications to run on different machines.**
- C) It eliminates the need for a database.
- D) It is only suitable for small applications.

13. **What is the main advantage of using server API programs over CGI?**

- A) They are easier to implement.
- B) They run as separate processes.
- C) They share address space with the HTTP server.**
- D) They are always secure.

14. What is the main advantage of using template-driven database connectivity packages?

- A) They provide maximum flexibility.
- B) They speed up the development process.**
- C) They require extensive coding.
- D) They are platform-dependent.

15. Which of the following is NOT a feature of visual web database building tools?

- A) Rapid application development
- B) User-friendly interface
- C) Extensive coding requirements**
- D) Integration with various databases

16. What is the main advantage of server-side state management?

- A) It is easier to implement.
- B) It is more reliable and robust than client-side management.**
- C) It requires less coding.
- D) It is always faster.

17. What does the SQL SELECT statement do?

- A) Inserts new data into a table
- B) Updates existing data in a table
- C) Retrieves data from one or more tables**
- D) Deletes data from a table

18. What is a potential drawback of database-driven web applications?

- A) They are always faster than static pages.
- B) They require more server resources.**
- C) They are easier to maintain.
- D) They do not require user input.

19. What is a search part in an HTTP request?

- A) The body of the request
- B) The URL of the request
- C) The parameters sent to the server**

D) The response from the server

20. Which type of input field allows users to select multiple options?

- A) Text input
- B) Checkbox**
- C) Radio button
- D) Hidden field

21. What happens if a required field is missing when the form is submitted?

- A) The form is submitted successfully.
- B) The script displays an error message and redisplay the form.**
- C) The data is saved in the database.
- D) The user is redirected to another page

22. What is the main advantage of using multi-step forms?

- A) They require less coding.
- B) They simplify the data entry process for users.**
- C) They eliminate the need for validation.
- D) They are easier to implement.

23. What is a primary key in a database?

- A) A field that can contain NULL values
- B) A unique identifier for each record in a table**
- C) A field that can be duplicated across records
- D) A field that stores sensitive information

24. What is the purpose of the ENUM data type in MySQL?

- A) To store large amounts of text data
- B) To limit the range of values allowed in a field**
- C) To create indexes
- D) To manage user sessions

25. What does the WHERE clause do in a SQL query?

- A) It specifies the columns to be returned.
- B) It filters records based on specified conditions.**
- C) It sorts the results of the query.
- D) It groups the results by a specific column.

26. What is the purpose of the ROLLBACK command in a transaction?

- A) To save changes made during the transaction.

- B) To undo changes made during the transaction.**
- C) To start a new transaction.
- D) To end the current session.

27. What does the REVOKE command do in MySQL?

- A) It grants privileges to a user.
- B) It removes privileges from a user.**
- C) It creates a new user.
- D) It deletes a user from the database.

28. What is a full backup in the context of database management?

- A) A backup that includes only the schema of the database
- B) A backup that includes all data and schema of the database**
- C) A backup that includes only the most recent changes
- D) A backup that is created automatically

29. What is caching in the context of MySQL performance tuning?

- A) Storing data permanently
- B) Temporarily storing frequently accessed data to speed up retrieval**
- C) Deleting old data
- D) Creating new tables

30. What is a potential benefit of using replication in MySQL?

- A) Increased data redundancy**
- B) Reduced database size
- C) Simplified database design
- D) Elimination of the need for backups

31. What is a potential benefit of using MySQL Cluster?

- A) Increased data redundancy
- B) Improved performance for read-heavy workloads**
- C) Reduced complexity in database design
- D) Elimination of the need for backups

32. What is the primary purpose of stored procedures in MySQL?

- A) To create backups of the database
- B) To encapsulate complex SQL logic for reuse**
- C) To delete unnecessary data
- D) To improve query performance

- 33. What is the primary purpose of triggers in MySQL?**
- A) To create backups of the database
 - B) To automatically execute a specified action in response to certain events**
 - C) To delete unnecessary data
 - D) To improve query performance
- 34. What is the primary purpose of a view in MySQL?**
- A) To create backups of the database
 - B) To provide a virtual table based on the result of a query**
 - C) To delete unnecessary data
 - D) To improve query performance
- 35. What is the primary purpose of importing data into MySQL?**
- A) To create backups of the database
 - B) To add data from external sources into the database**
 - C) To delete unnecessary data
 - D) To improve query performance
- 36. What is the primary goal of query optimization in MySQL?**
- A) To increase the size of the database
 - B) To improve the performance of SQL queries**
 - C) To create new tables
 - D) To delete unnecessary data
- 37. What is the primary purpose of error handling in MySQL?**
- A) To create backups of the database
 - B) To manage and respond to errors that occur during database operations**
 - C) To delete unnecessary data
 - D) To improve query performance
- 38. Which command is used to grant privileges to a user in MySQL?**
- A) GRANT**
 - B) ADD PRIVILEGES
 - C) CREATE USER
 - D) INSERT PRIVILEGES
- 39. What is the primary purpose of MySQL configuration?**
- A) To create backups of the database
 - B) To optimize the performance and behavior of the MySQL server**
 - C) To delete unnecessary data
 - D) To improve query performance

- 40. What is the primary purpose of monitoring MySQL performance?**
- A) To create backups of the database
 - B) To identify and resolve performance issues**
 - C) To delete unnecessary data
 - D) To improve query performance
- 41. What is a primary benefit of using MySQL in cloud environments?**
- A) Increased hardware costs
 - B) Scalability and flexibility in resource allocation**
 - C) Limited access to data
 - D) Reduced performance
- 42. What is the primary purpose of a data warehouse?**
- A) To store operational data
 - B) To support business intelligence and analytics**
 - C) To manage user authentication
 - D) To create backups of the database
- 43. What is the primary purpose of business intelligence (BI) tools?**
- A) To create backups of the database
 - B) To analyze data and support decision -making processes**
 - C) To manage user authentication
 - D) To delete unnecessary data
- 44. What is a primary consideration when using MySQL for machine learning applications?**
- A) MySQL is not suitable for machine learning.
 - B) The need for efficient data retrieval and processing.**
 - C) MySQL can handle unlimited data without performance issues.
 - D) MySQL requires no optimization for machine learning.
- 45. What is the primary purpose of data governance in MySQL?**
- A) To create backups of the database
 - B) To ensure data quality, consistency, and compliance with regulations**
 - C) To manage user authentication
 - D) To delete unnecessary data
- 46. Which of the following is a common approach to data visualization with MySQL?**
- A) Using BI tools to create visual representations of data**

- B) Ignoring data quality issues
- C) Storing all data in plain text
- D) Allowing unrestricted access to all users

47. What is a potential benefit of maintaining high data quality in MySQL?

- A) Improved performance for all queries
- B) Enhanced decision-making based on reliable data**
- C) Elimination of the need for data modeling
- D) Reduced data redundancy

48. What is the primary purpose of compliance in MySQL?

- A) To create backups of the database
- B) To ensure adherence to legal and regulatory requirements regarding data management**
- C) To manage user authentication
- D) To delete unnecessary data

49. What is the common approach to implementing data retention in MySQL?

- A) Using automated scripts to delete old data**
- B) Ignoring data quality issues
- C) Storing all data in plain text
- D) Allowing unrestricted access to all users

50. What is the primary purpose of data collaboration in MySQL?

- A) To create backups of the database
- B) To enable sharing and integration of data across teams and systems**
- C) To manage user authentication
- D) To delete unnecessary data

51. What is a common practice to ensure data ethics in MySQL?

- A) Regular audits of data usage and policies**
- B) Ignoring data quality issues
- C) Storing all data in plain text
- D) Allowing unrestricted access to all users

52. What are the main types of reservation systems used by airlines?

- A) Direct and indirect**
- B) Online and offline
- C) Domestic and international
- D) Traditional and automated

53. What is the primary function of a web framework?
- A) **To automate the coding process of web applications.**
 - B) To create user interfaces for mobile applications.
 - C) To manage databases for websites.
 - D) To provide security for web servers.
54. Which type of web framework focuses on the external part of a web application:
- A) Server-side frameworks
 - B) **Frontend frameworks**
 - C) Client-side frameworks
 - D) Backend frameworks
55. What is the primary focus of client-side frameworks?
- A) Managing server-side logic.
 - B) **Creating user interfaces and improving user experience.**
 - C) Handling data storage and retrieval.
 - D) Ensuring website security.
56. Which of the following is NOT a benefit of using web frameworks?
- A) Reduced development time.
 - B) Improved code quality and consistency.
 - C) Enhanced security features.
 - D) **Increased complexity of the development process.**
57. What was the primary way web applications were developed before the introduction of web frameworks?
- A) **Hand-coded by developers.**
 - B) Using pre-built templates.
 - C) Through automated scripting tools.
 - D) By utilizing drag-and-drop interfaces.

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May You All Stay Success in your Whole Life,
Ameen! Summ Ameen...
Just Remember us in your Deep Prayers. JazakAllah...