CS5340 Databases – Fall 2025 (Quiz # 0)

Name: _____   Roll No: _____

Instructions

1- Read the Questions carefully to give concise Answers.
2- Answers outside the box will not be considered. Answers should be readable
3- Clearly mention any assumptions you have taken in your Answers.
4- Use of unfair means will result in an award of ZERO marks.

Q1. Why were flat files of the 1960s considered highly inefficient?

A. They supported relationships but lacked indexing.

B. They stored data in binary instead of text, making them unreadable.

C. A change in one file often required manual updates in multiple related files.

D. They required SQL to query, which slowed down retrieval.

Explain your answer:

Q2. Which statement best describes the relationship between a public key and a private key in asymmetric encryption?

A. Both keys are identical and kept secret

B. The public key is shared openly, while the private key is kept secret

C. Both keys must always be kept private to ensure security

D. The public key is used only for authentication, not encryption

Explain your answer:

Q3. Which is an example of database use in government systems?

A. YouTube playlists

B. Passport and CNIC records

C. Online shopping carts

D. Multiplayer game rankings

Explain your answer:

Q4. Which of the following best explains why social media platforms like Facebook and TikTok need databases?

A. To store only login credentials

B. To store and analyze user content, interactions, and recommendations

C. To reduce internet bandwidth usage

D. To prevent users from deleting posts

Explain your answer:

Q5. Which of the following is a real-life use of databases in healthcare?

A. Recording songs on CDs

B. Patient records, prescriptions, and lab results

C. Filing handwritten receipts

D. Organizing physical X-ray films

Explain your answer:

Q6. Which problem was solved by introducing databases in exam systems?

A. Risk of paper damage during shipping

B. Needing more warehouses

C. Too many authorized users

D. High cost of encryption

Explain your answer:

Q7. Which of the following best explains how databases improved exam record-keeping compared to paper-based systems?

A. They reduced the number of subjects students could take.

B. They allowed duplicate roll numbers to be assigned for flexibility.

C. They enabled fast searching, eliminated redundancy, and improved security

D. They replaced teachers with automated grading systems

Explain your answer:

Q8. Which is an example of semi-structured data?

A. A CSV payroll file

B. JSON file of user profile data

C. Printed sales report

D. A scanned book image

Explain your answer:

Q9. Which of these is an example of semi-structured data?

A. A log of temperature readings in Excel

B. A folder of PDF resumes

C. JSON or XML files

D. A handwritten ledger

Explain your answer:

Q10. Which is an example of structured data?

A. Employee table with ID, Name, and Salary   B. A folder of holiday pictures

C. Chat messages in WhatsApp   D. Customer reviews in free text

Explain your answer:

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Q11. Which of the following best defines data?

A. Processed information ready for decisions   B. Raw facts and figures without context

C. A collection of insights and reports   D. Organized tables in a DBMS

Explain your answer:

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Q12. Which of the following best illustrates the difference between data and information in the context of databases?

A. 102, 105, 110 are marks of students and is data; calculating the class average as 105.6 is information.

B. A sales report showing profit margins is data, while the raw receipts are information.

C. A table of employee names is information, while identifying their manager is data.

D. The JSON file of an online purchase is information, while the analysis of customer spending patterns is data.

Explain your answer:

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Q13. Which of the following is a unique feature of asymmetric encryption compared to symmetric encryption?

A. It uses a single secret key for both encryption and decryption.

B. It does not requires secret keys.

C. It uses a mathematically linked pair of keys (public & private) where one key encrypts and only the other can decrypt.

D. It is generally faster and more efficient for bulk data encryption.

Explain your answer:

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Q14. Which feature ensures the same records are visible to all users accessing a database?

A. Encryption   B. Data Integrity

C. Indexing   D. Cloud Hosting

Explain your answer:

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Q15. why is port 1433 important for Microsoft SQL Server?

A. It is the default port used by SQL Server for broadcasting messages

B. It is the default port SQL Server listens on for incoming client connections

C. It is a random port assigned to SQL Server during installation

D. It is used by web servers to handle HTTP requests

Explain your answer:

Q16. Which leadership role oversees all data activities, policies, and governance?

A. Database Administrator

B. Data Analyst

C. Chief Data Officer (CDO)

D. Database Architect

Explain your answer:

Q17. Which type of data does not follow a fixed format or structure?

A. Structured data

B. Semi-structured data

C. Unstructured data

D. Tabular data

Explain your answer:

Q18. Why is sharing exam data easier with databases?

A. Data must be shipped physically

B. Data can be instantly accessed online from anywhere

C. Multiple duplicate copies are made

D. Examiners exchange CDs or USBs

Explain your answer:

Q19. Which of the following best describes a database?

A. A file system for saving documents only

B. An organized collection of data stored electronically for efficient access and management

C. A programming language for queries

D. A computer hardware device for storage

Explain your answer:

Q20. Which is an example of unstructured data?

A. An SQL query log

B. XML document

C. A set of family photos

D. Excel attendance sheet

Explain your answer: