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CS5340 Databases – Fall 2025 ( Quiz # 1 )

Name: Roll No:

**Instructions**

1- Read the Questions carefully to give concise Answers.   
 2- Answers outside the box will not be considered. Answers have to be readable  
 3- Clearly mention any assumptions you have taken in your Answers.   
 4- Explanation is only optional for MCQs that are based on definitions.   
 5- Use of unfair means will result in an award of ZERO marks.

Q1. Which column type is most appropriate for storing addresses of varying length?

|  |  |
| --- | --- |
| A. CHAR | B. VARCHAR |
| C. INT | D. BIT |

Explain your answer:

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Q2. A professor searches for "CS340" but fails to find a course stored in a CHAR(6) column. Why?

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| A. CHAR pads values with spaces like "CS340 " | B. VARCHAR auto-trims spaces |
| C. SQL auto-converts CHAR to VARCHAR | D. CHAR converts to NVARCHAR internally |

Explain your answer:

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Q3. Which relational concept ensures that no two rows share the same StudentID?

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| --- | --- |
| A. Candidate Key | B. Primary Key |
| C. Foreign Key | D. CHECK |

Explain your answer:

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Q4. A composite primary key is defined on (OrderID, ProductID). Which is true?

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| --- | --- |
| A. Each column must be unique on its own | B. The pair (OrderID, ProductID) must be unique |
| C. NULL values are allowed in either column | D. No foreign keys can reference it |

Explain your answer:

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Q5. Which SQL Server constraint guarantees a column cannot have duplicate values but may allow NULLs?

|  |  |
| --- | --- |
| A. CHECK | B. UNIQUE |
| C. PRIMARY KEY | D. NOT NULL |

Explain your answer:

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Q6. Which system database in SQL Server is recreated fresh every restart?

|  |  |
| --- | --- |
| A. master | B. msdb |
| C. model | D. tempdb |

Explain your answer:

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Q7. Which category of SQL statements controls user permissions?

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| --- | --- |
| A. DML | B. DCL |
| C. DDL | D. TCL |

Explain your answer:

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Q8. Which of the following is a DML command?

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| --- | --- |
| A. SELECT | B. CREATE |
| C. GRANT | D. ALTER |

Explain your answer:

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Q9. Which SQL function replaces NULL with a specified replacement value?

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| --- | --- |
| A. NULLIF | B. ISNULL |
| C. TRY\_CONVERT | D. PARSE |

Explain your answer:

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Q10. Which query ensures the first non-NULL among Email, Phone, Address is returned?

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| --- | --- |
| A. ISNULL(Email, Phone, Address) | B. COALESCE(Email, Phone, Address) |
| C. CAST(Email AS varchar) | D. NULLIF(Email, Address) |

Explain your answer:

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Q11. In SQL, what happens if you run WHERE ShippedDate = NULL?

|  |  |
| --- | --- |
| A. Rows with NULL ShippedDate are returned | B. No rows are returned |
| C. Syntax error occurs | D. NULLs are treated as empty strings |

Explain your answer:

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Q12. Which keyword is used in SQL Server to rename a column in the result set?

|  |  |
| --- | --- |
| A. RENAME | B. AS |
| C. ALIAS | D. NAME |

Explain your answer:

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Q13. In Docker, what happens if you don’t use a volume for SQL Server?

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| --- | --- |
| A. Data persists across restarts | B. Data is lost when container is removed |
| C. Database becomes read-only | D. Backup is stored automatically |

Explain your answer:

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Q14. What does the -d flag in a Docker run command do?

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| --- | --- |
| A. Deletes the container after stop | B. Runs in detached mode |
| C. Enables debug mode | D. Sets database schema |

Explain your answer:

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Q15. In C#, what does the static void Main(string[] args) method represent?

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| --- | --- |
| A. The program’s entry point | B. A constructor for Program class |
| C. A test-only function removed at build | D. A background thread initializer |

Explain your answer:

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END OF QUIZ  
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