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Marks 15.00/20.00

Grade **75.00** out of 100.00

Question 1

Complete

Mark 1.00 out of
1.00

What does the SQL command ROLLBACK do?

- ☒ a. Reverts the database to the last committed state
- ☐ b. Saves changes permanently
- ☐ c. Starts a new transaction
- ☐ d. Commits the current transaction

The correct answer is: Reverts the database to the last committed state

Question 2

Complete

Mark 1.00 out of 1.00

What is the purpose of export VAR=value in a shell script?

- ☒ a. Set an environment variable
- ☐ b. Set a local variable
- ☐ c. List all variables
- ☐ d. Remove a variable

The correct answer is: Set an environment variable

Question 3

Complete

Mark 1.00 out of 1.00

What does the grep -r option do in Linux?

- ☒ a. Search recursively through directories for a pattern
- ☐ b. Search for a pattern in a single file
- ☐ c. Exclude directories during search
- ☐ d. Search only in hidden files

The correct answer is: Search recursively through directories for a pattern

Question 4

Complete

Mark 1.00 out of 1.00

In SDLC, which phase is responsible for defining system requirements?

- ☒ a. Requirement Analysis
- ☐ b. Design
- ☐ c. Maintenance
- ☐ d. Implementation

The correct answer is: Requirement Analysis

Question 5

Complete

Mark 0.00 out of 1.00

How do you retrieve the second highest salary from an Employee table?

- ☐ a. `SELECT MAX(salary) FROM Employee WHERE salary NOT IN (SELECT MAX(salary) FROM Employee);`
- ☒ b. `SELECT salary FROM Employee ORDER BY salary DESC LIMIT 1 OFFSET 1;`
- ☐ c. All of the above (depending on SQL version)
- ☐ d. `SELECT TOP 1 salary FROM Employee ORDER BY salary DESC OFFSET 1 ROW;`

The correct answer is: All of the above (depending on SQL version)

Question 6

Complete

Mark 1.00 out of 1.00

What is the function of the tee command in Linux?

- ☐ a. Monitors network traffic
- ☐ b. Filters output based on patterns
- ☒ c. Sends output to both terminal and file
- ☐ d. Overwrites the file

The correct answer is: Sends output to both terminal and file

Question 7

Complete

Mark 1.00 out of 1.00

How do you capture the output of a command into a variable in shell scripting?

- ☒ a. `var=$(command)`
- ☐ b. `var<<command>>`
- ☐ c. `var: command`
- ☐ d. `var = command`

The correct answer is: `var=$(command)`

Question 8

Complete

Mark 1.00 out of 1.00

What does the final keyword do when applied to a class in Java?

- ☐ a. Allows the class to be subclassed
- ☐ b. Prevents variables from being assigned a value
- ☒ c. Prevents the class from being subclassed
- ☐ d. Allows variables to be modified

The correct answer is: Prevents the class from being subclassed

Question 9

Complete

Mark 0.00 out of 1.00

In shell scripting, what is the correct syntax to define a function?

- ☒ a. `myFunc() { ... }`
- ☐ b. `def myFunc() { ... }`
- ☐ c. Both A and B
- ☐ d. `function myFunc { ... }`

The correct answer is: Both A and B

Question 10

Complete

Mark 1.00 out of 1.00

What is the output of comparing two string objects created using `new String("abc")` using `==`?

- ☐ a. Compilation error
- ☐ b. Runtime error
- ☐ c. true
- ☒ d. false

The correct answer is: false

Question 11

Complete

Mark 1.00 out of 1.00

The sum of three consecutive even numbers is 48. What is the smallest number?

- ☒ a. 14
- ☐ b. 16
- ☐ c. 18
- ☐ d. 12

The correct answer is: 14

Question 12

Complete

Mark 0.00 out of
1.00

A number is increased by 25% and then decreased by 20%. What is the overall percentage change?

- ☐ a. 10% decrease
- ☐ b. 0% change
- ☒ c. 5% decrease
- ☐ d. 5% increase

The correct answer is: 0% change

Question 13

Complete

Mark 1.00 out of
1.00

A and B can complete a job in 20 and 30 days respectively. How many days will they take if they work together?

- ☒ a. 12 days
- ☐ b. 15 days
- ☐ c. 10 days
- ☐ d. 18 days

The correct answer is: 12 days

Question 14

Complete

Mark 1.00 out of 1.00

What does the read -p option do in shell scripting?

- ☐ a. Reads input from a file
- ☐ b. Reads input silently without showing on screen
- ☒ c. Reads input and prints a prompt message
- ☐ d. Reads multiple variables

The correct answer is: Reads input and prints a prompt message

Question 15

Complete

Mark 0.00 out of 1.00

What is the function of set -e in a shell script?

- ☐ a. Exit script when any command fails
- ☒ b. Enable debugging output
- ☐ c. Ignore errors and continue execution
- ☐ d. Disable execution

The correct answer is: Exit script when any command fails

Question 16

Complete

Mark 1.00 out of 1.00

A train covers a distance of 240 km in 4 hours. If its speed is increased by 20%, what is the new time taken?

- ☒ a. 3 hours 20 minutes
- ☐ b. 3 hours 30 minutes
- ☐ c. 2 hours 50 minutes
- ☐ d. 3 hours

The correct answer is: 3 hours 20 minutes

Question 17

Complete

Mark 1.00 out of 1.00

What is the main difference between an interface and an abstract class in Java?

- ☐ a. Interface methods can have a body; abstract class methods cannot
- ☒ b. A class can implement multiple interfaces but extend only one abstract class
- ☐ c. Abstract classes cannot contain fields
- ☐ d. Interface methods must always be private

The correct answer is: A class can implement multiple interfaces but extend only one abstract class

Question 18

Complete

Mark 1.00 out of 1.00

What is the purpose of a foreign key in SQL?

- ☐ a. To speed up SELECT queries
- ☐ b. To enforce a unique constraint
- ☐ c. To enforce a default value in a column
- ☒ d. To maintain referential integrity between tables

The correct answer is: To maintain referential integrity between tables

Question 19

Complete

Mark 0.00 out of 1.00

What does the awk '{print \$1}' file.txt command do?

- ☒ a. Prints the entire first line of the file
- ☐ b. Deletes the first field from each line
- ☐ c. Prints the first word (field) of each line
- ☐ d. Prints the first character of each line

The correct answer is: Prints the first word (field) of each line

Question 20

Complete

Mark 1.00 out of
1.00

The ratio of ages of A and B is 3:5. After 6 years, their ratio becomes 4:6. What are their current ages?

- ☐ a. 12 and 20
- ☐ b. 15 and 25
- ☒ c. 18 and 30
- ☐ d. 24 and 40

The correct answer is: 18 and 30