

PG-DITISS – Session 20, 21 & 22

Virtual Machine Management & BASH Scripting – 40 MCQs

Q1. A Virtual Machine (VM) is:

- A. A physical computer
- B. A computer inside another computer
- C. A network device
- D. A storage device

Q2. VM management includes:

- A. Creating users
- B. Creating and managing VMs
- C. Installing printers
- D. Formatting files

Q3. Which resource is commonly allocated to a VM?

- A. CPU
- B. RAM
- C. Disk
- D. All of the above

Q4. VM networking is used to:

- A. Format disk
- B. Connect VM to network
- C. Create users
- D. Install OS

Q5. NAT network mode means:

- A. VM has no network
- B. VM shares host internet
- C. VM has its own IP always
- D. VM connects only to host

Q6. BASH stands for:

- A. Basic Shell
- B. Bourne Again SHell
- C. Binary Shell
- D. Backup Shell

Q7. A BASH script is:

- A. A binary file
- B. A text file with commands
- C. A compiled program
- D. A kernel file

Q8. BASH scripting is mainly used for:

- A. Gaming
- B. Automation
- C. Graphics
- D. Hardware testing

Q9. A variable is used to:

- A. Run commands
- B. Store values
- C. Print output
- D. Stop script

Q10. A loop is used to:

- A. Stop execution
- B. Repeat commands
- C. Delete files
- D. Exit script

Q11. Bridged networking allows VM to:

- A. Share host IP
- B. Act like a real network device
- C. Connect only to host
- D. Stay offline

Q12. Host-only networking allows VM to communicate with:

- A. Internet only
- B. Host system only
- C. Other networks
- D. Routers

Q13. Error handling in BASH means:

- A. Ignoring errors
- B. Detecting and handling errors
- C. Printing errors only
- D. Deleting error files

Q14. Debugging is used to:

- A. Speed up system
- B. Find errors in scripts
- C. Format files
- D. Create users

Q15. Output redirection sends output to:

- A. Monitor only
- B. File
- C. Network
- D. Printer

Q16. Which symbol is commonly used for output redirection?

- A. |
- B. >
- C. &
- D. #

Q17. Input redirection takes input from:

- A. Keyboard only
- B. File
- C. Network
- D. Printer

Q18. A string in BASH is:

- A. Numeric data
- B. Text data

- C. Binary data
- D. Image data

Q19. Control structures are used to:

- A. Control script flow
- B. Store files
- C. Create users
- D. Format disk

Q20. Conditional statements are used for:

- A. Repetition
- B. Decision making
- C. File transfer
- D. Networking

Q21. Regular expressions are used for:

- A. Disk partitioning
- B. Pattern matching
- C. VM creation
- D. Network routing

Q22. Which loop executes a fixed number of times?

- A. if
- B. while
- C. for
- D. case

Q23. Which statement checks a condition?

- A. for
- B. if
- C. do
- D. echo

Q24. BASH scripts help system administrators to:

- A. Automate tasks
- B. Increase hardware
- C. Reduce RAM
- D. Install OS

Q25. Debugging option helps to:

- A. Hide errors
- B. Show command execution
- C. Delete files
- D. Encrypt scripts

Q26. VM management improves:

- A. Hardware damage
- B. Resource utilization
- C. Virus spread
- D. Disk failure

Q27. VM snapshot is used for:

- A. Networking
- B. Backup and restore
- C. Disk formatting

D. User creation

Q28. VM networking is required for:

- A. File deletion
- B. Communication between VMs
- C. Disk resize
- D. Script execution

Q29. Error handling improves script:

- A. Length
- B. Reliability
- C. Size
- D. Speed only

Q30. Debugging helps developers to:

- A. Ignore errors
- B. Identify script issues
- C. Delete scripts
- D. Hide output

Q31. Which symbol is used for piping output?

- A. >
- B. <
- C. |
- D. &

Q32. Piping is used to:

- A. Send output to file
- B. Send output to another command
- C. Stop script
- D. Format output

Q33. Variables should be quoted to:

- A. Increase speed
- B. Handle spaces safely
- C. Encrypt data
- D. Hide values

Q34. A while loop executes when:

- A. Condition is false
- B. Condition is true
- C. Script starts
- D. Script ends

Q35. Infinite loop occurs when:

- A. Condition never changes
- B. Loop ends early
- C. Script exits
- D. File not found

Q36. Regular expressions are commonly used with:

- A. grep
- B. ls
- C. cd
- D. mkdir

Q37. Automation using BASH reduces:

- A. Disk space
- B. Manual effort
- C. CPU speed
- D. RAM size

Q38. VM network misconfiguration can cause:

- A. Better connectivity
- B. No network access
- C. Faster VM
- D. Disk errors

Q39. BASH scripting is best suited for:

- A. GUI applications
- B. Command automation
- C. Game development
- D. Hardware drivers

Q40. Main goal of Sessions 20–22 is:

- A. Graphics improvement
- B. Efficient VM use and automation
- C. Gaming performance
- D. Disk expansion

Answer Key

Q1—B, Q2—B, Q3—D, Q4—B, Q5—B, Q6—B, Q7—B, Q8—B, Q9—B, Q10—B, Q11—B, Q12—B, Q13—B,
Q14—B, Q15—B, Q16—B, Q17—B, Q18—B, Q19—A, Q20—B, Q21—B, Q22—C, Q23—B, Q24—A, Q25—B,
Q26—B, Q27—B, Q28—B, Q29—B, Q30—B, Q31—C, Q32—B, Q33—B, Q34—B, Q35—A, Q36—A, Q37—B,
Q38—B, Q39—B, Q40—B