

Q1. Agile methodology primarily focuses on:

- A. Documentation-heavy process
 - B. Linear sequential development
 - C. Iterative development with customer feedback
 - D. Single-developer projects
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Q2. In Scrum, who is responsible for maximizing the product value?

- A. Scrum Master
 - B. Development Team
 - C. Product Owner
 - D. Stakeholders
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Q3. Kanban methodology is characterized by:

- A. Time-boxed sprints
 - B. Visual boards and continuous flow
 - C. Prescribed roles
 - D. Monthly release cycles
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Q4. Lean methodology aims to:

- A. Maximize waste
 - B. Reduce process inefficiencies
 - C. Focus on hardware resources
 - D. Eliminate agile principles
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Q5. In DevOps, the CI/CD pipeline automates:

- A. Project planning
 - B. Integration, testing, and deployment
 - C. Marketing strategies
 - D. Database indexing
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Q6. CAMS model in DevOps stands for:

- A. Cloud, Automation, Monitoring, Security
 - B. Culture, Automation, Measurement, Sharing
 - C. Configuration, Access, Monitoring, Scaling
 - D. Code, Application, Metrics, Services
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Q7. Kaizen in DevOps emphasizes:

- A. Large-scale changes only
 - B. Continuous small improvements
 - C. Eliminating automation
 - D. Fixed process without feedback
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Q8. IAM (Identity and Access Management) ensures:

- A. Code versioning
 - B. Secure authentication and authorization
 - C. Load balancing
 - D. Container orchestration
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Q9. LXC is:

- A. A virtualization hypervisor
 - B. OS-level containerization
 - C. CI/CD tool
 - D. Cloud provider
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Q10. KVM uses which technology for virtualization?

- A. OS-level namespace isolation
 - B. Hardware-assisted virtualization (Intel VT-x / AMD-V)
 - C. Continuous deployment
 - D. Configuration management
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□ MEDIUM (15 Questions)

Q11. In Scrum, which ceremony is used to review the sprint outcome?

- A. Daily Standup
 - B. Sprint Planning
 - C. Sprint Review
 - D. Backlog Grooming
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Q12. Which of the following is a key principle of Lean implementation?

- A. Increasing WIP (Work In Progress)
 - B. Eliminating non-value-added activities
 - C. Slower deployment cycles
 - D. Limiting automation
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Q13. Agile in DevOps improves:

- A. Deployment frequency and collaboration
 - B. Manual testing effort
 - C. Hardware resource utilization only
 - D. Documentation volume
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Q14. Which DevOps tool is used for configuration management?

- A. Jenkins
 - B. GitHub
 - C. Ansible
 - D. Docker
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Q15. Which phase of DevOps focuses on monitoring applications in production?

- A. Code
 - B. Operate
 - C. Build
 - D. Test
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Q16. Immutable deployment ensures:

- A. Existing servers are updated in-place
 - B. New instances are deployed for each release
 - C. Servers are rolled back manually
 - D. Only partial updates are applied
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Q17. Docker primarily provides:

- A. VM-level virtualization
 - B. OS-level containerization for apps and dependencies
 - C. Hardware monitoring
 - D. Continuous integration pipelines
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Q18. LXC containers share:

- A. Separate kernel for each container
 - B. Host OS kernel
 - C. Cloud infrastructure
 - D. Immutable images only
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Q19. Which of these is NOT part of the DevOps ecosystem?

- A. Monitoring tools
 - B. CI/CD pipelines
 - C. Container orchestration
 - D. Hardware RAID controller
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Q20. CI in CI/CD stands for:

- A. Continuous Integration
 - B. Code Inspection
 - C. Container Implementation
 - D. Cloud Infrastructure
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Q21. In Kanban, WIP limits:

- A. Increase task backlog
 - B. Control the number of tasks in progress
 - C. Determine sprint length
 - D. Allocate hardware resources
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Q22. A key feature of Docker images is:

- A. Persistent hardware allocation
 - B. Immutable and portable environment
 - C. Continuous deployment only
 - D. Load balancing
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Q23. Jenkins pipelines are typically defined using:

- A. YAML
 - B. JSON
 - C. Groovy
 - D. XML
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Q24. Kaizen is usually applied during:

- A. Only initial setup
 - B. Continuous improvement throughout process
 - C. Deployment only
 - D. Testing only
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Q25. IAM policies in DevOps are implemented using:

- A. Role-based access control (RBAC)
 - B. Agile ceremonies
 - C. Docker volumes
 - D. CI/CD pipeline steps
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HARD (15 Questions)

Q26. In Scrum, if the team cannot complete all tasks in a sprint, the best practice is:

- A. Extend the sprint indefinitely
 - B. Push tasks to the next sprint after review
 - C. Ignore incomplete tasks
 - D. Remove them permanently
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Q27. In Lean, value stream mapping is used to:

- A. Visualize and optimize workflow
 - B. Allocate servers
 - C. Configure containers
 - D. Write CI/CD scripts
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Q28. CAMS principle “Measurement” in DevOps primarily focuses on:

- A. User satisfaction metrics only
 - B. Code metrics and system performance monitoring
 - C. Cloud vendor selection
 - D. Agile planning sessions
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Q29. Which DevOps phase involves packaging applications and dependencies for deployment?

- A. Build
 - B. Plan
 - C. Test
 - D. Operate
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Q30. Docker container orchestration is usually handled by:

- A. Jenkins
 - B. Kubernetes
 - C. Git
 - D. Ansible
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Q31. LXC containers are more lightweight than KVM VMs because:

- A. They share the host OS kernel
 - B. They require dedicated hardware
 - C. They need a separate OS per container
 - D. They cannot run multiple apps
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Q32. Immutable infrastructure benefits include:

- A. Reduced rollback complexity
 - B. Manual patching
 - C. Single-instance updates
 - D. In-place configuration changes
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Q33. In CI/CD, “Continuous Delivery” differs from “Continuous Deployment” because:

- A. CD always deploys to production automatically
- B. Continuous Delivery may require manual approval before production deployment
- C. Continuous Delivery replaces CI
- D. CD ignores testing

Q34. KVM virtual machines require which of the following to run modern OS efficiently?

- A. Container images
 - B. Hardware virtualization support
 - C. Only CPU scheduling
 - D. Immutable deployment
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Q35. Jenkins “Blue Ocean” interface provides:

- A. CI/CD pipeline visualization
 - B. VM creation
 - C. Container orchestration
 - D. Agile sprint tracking
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Q36. Scenario: A DevOps team wants to prevent shared history overwrites. Which Git practice should be followed?

- A. Force push (`git push --force`)
 - B. Use feature branches and pull requests
 - C. Delete main branch
 - D. Clone repositories repeatedly
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Q37. DevOps automation tools like Ansible differ from scripts because:

- A. They are state-driven and idempotent
 - B. Require manual execution
 - C. Only support containers
 - D. Cannot be version-controlled
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Q38. IAM policies in cloud-native environments are critical to prevent:

- A. Unauthorized access and privilege escalation
 - B. Slow builds
 - C. Container crashes
 - D. Disk failures
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Q39. Which container solution allows lightweight process-level virtualization?

- A. KVM
 - B. LXC
 - C. VMware
 - D. Hyper-V
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Q40. Which CI/CD pipeline stage is MOST associated with automated testing?

- A. Build
- B. Test
- C. Deploy
- D. Operate