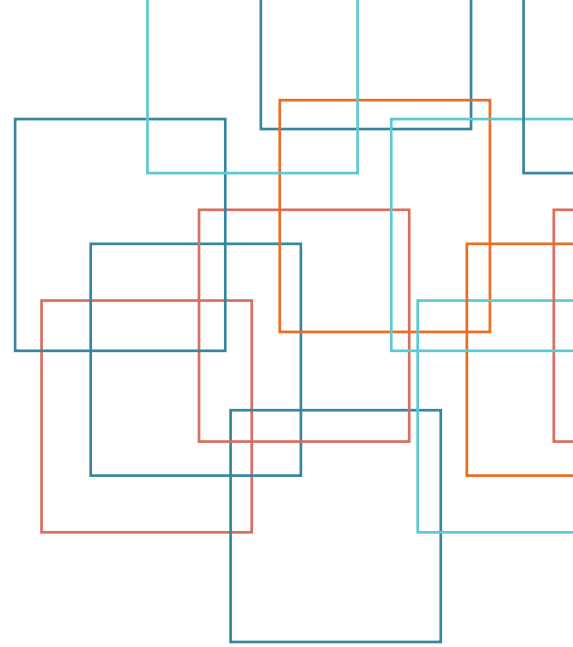


Practice Questions



- Q1. What is the possible cause of having disjoint processes in a traditional setup between Development and Operations?**
- A. People avoid playing blame games.
 - B. Processes are based on different frameworks.
 - C. Value streams go through different teams.
 - D. Processes include feedback loops.
- Q2. Which way of working in a traditional setup leads to delayed problem resolution?**
- A. Regular communication between Development and Operations for sharing the required information
 - B. Daily discussions between Development and Operations during earlier phases of development
 - C. Lack of shared knowledge articles to unknown issues
 - D. No methodical handover to the Operations team by the Development team
- Q3. Which aspect of DevOps can help traditional organizations in reducing costs and the demand for resources? Select the most direct option.**
- A. Achieving quality results and shorter cycle times through automation
 - B. Adopting Agile ways to increase scalability and stay ahead of the competition
 - C. Increasing employee engagement and job satisfaction
 - D. Making people aware of the importance of working in collaboration

Q4. Which DevOps principle focuses on engineering mindset and mutual trust among different teams?

- A. Customer-Centric Action
- B. Create With the End in Mind
- C. End-to-End Responsibility
- D. Cross-Functional Autonomous Teams

Q5. Which DASA DevOps principle focuses on T-shaped profiles and complementary skills?

- A. Automate Everything You Can
- B. Create With the End in Mind
- C. Cross-Functional Autonomous Teams
- D. Customer-Centric Action

Q6. Which concept requires a product team to experiment and learn from failures to optimize the speed of delivery?

- A. End-to-End Responsibility
- B. Create With the End in Mind
- C. Continuous Improvement
- D. Customer-Centric Action

Q7. You want your team to work on products considering the expected outcomes rather than limited to achieving their own individual goals. It requires an engineering mindset and mutual trust among team members. Which DevOps principle or concept will you apply in this situation?

- A. Automate Everything You Can
- B. Continuous Improvement
- C. Create With the End in Mind
- D. Customer-Centric Action

Q8. Which way of doing governance helps organizations to identify what they are trying to achieve?

- A. Compliance
- B. Goals
- C. Measures
- D. Vision

Q9. What is the best description of Survivorship Bias?

- A. Learning from feedback
- B. Learning from elements that failed
- C. Learning from measurements
- D. Separating performance metrics and performance predictors

Q10. Why is a T-shaped person better at communicating with others compared to an I-shaped one?

- A. Having a broad range of knowledge enables a T-shaped person to communicate with the specialists of different fields
- B. Getting involved in other areas more compared to their specialty makes a T-shaped person more interesting to interact with the specialist of different fields
- C. Having a broad base of knowledge makes a T-shaped person more creative in communicating with the specialist of different fields
- D. Having more attention of employers makes T-shaped person more confident in making required decisions when communicating with the specialist of different fields

Q11. What does the MVP concept contribute to organizational success?

- A. An Engineering Culture
- B. Build Quality in
- C. Continuous Learning and Continuous Improvement
- D. Experimentation and Risk-Taking

Q12. Which is a tool to visualize work that stimulates collaboration to uncover pitfalls?

- A. Kanban
- B. Kaizen
- C. Kepner-Tregoe (KT)
- D. Plan-Do-Check-Act (PDCA)

Q13. Which is the characteristic of the Generative typology of organizational culture?

- A. Failure leads to inquiry
- B. Low cooperation
- C. Narrow responsibilities
- D. Novelty leads to problems

Q14. Which dysfunction leads to a team of individuals working together?

- A. Avoidance of Accountability
- B. Fear of Conflict
- C. Lack of Commitment
- D. Lack of Trust

Q15. Which dialogue best supports the culture of experimentation and risk-taking?

- A. All members of our team are responsible for the complete product, which includes the full delivery cycle as well as operating/providing customer support throughout the lifecycle of the product.
- B. We use solid methodologies to ensure ideas are evaluated on the real value instead of the assumed value.
- C. We need continuous improvements to ensure the application delivers value now and in the future.
- D. We define effectiveness as our ability to adapt to “market” circumstances, and the success (value) of the product features delivered.

Q16. Which example relates to the DevOps behavior ‘Improve’?

- A. All managers openly reward the identification, prevention, and resolution of errors.
- B. Every severe incident is followed by a blameless retrospective meeting.
- C. Team members actively pick up each other’s tasks when they see a team member is too busy or unavailable.
- D. The Sales team publishes real-time sales figures on the floor monitors.

Q17. Which is a characteristic of a product-focused organization?

- A. Functionally Organized
- B. Optimized for Resource Utilization
- C. Optimized for Speed
- D. Work with Individuals

Q18. What are the characteristics of a DevOps Business Systems team?

1. Focused on the delivery of platform services
 2. Focused on delivering business value through the delivery of software
 3. Responsible for the exploitation of the platform services
 4. Responsible for maintenance of their applications in production
- A. 1 and 3
- B. 2 and 4
- C. Only 2
- D. Only 4

Q19. Which is the characteristic of autonomous teams in a DevOps organization?

- A. The teams are (largely) self-directed and work (largely) independently from one another to deliver a continuous stream of change.
- B. The Business System teams offer a rich set of standardized self-service capabilities to Platform teams.
- C. The teams perform a methodical handover or transfer of responsibility and accountability.
- D. The Platform teams are responsible for the qualities of application products, such as availability and performance.

Q20. What is the relationship between a DevOps team and Daniel Pink's aspects of motivation: autonomy, mastery, and purpose?

- A. Mastery is not within the scope of the DevOps team.
- B. These aspects are the intentions of a DevOps team.
- C. Autonomy only applies if the team has no purpose.
- D. These aspects only apply to knowledge workers, not DevOps engineers.

Q21. Which activity will you perform to mitigate scaling?

- A. Divide the work between multiple teams based on their specialty.
- B. Have a single Definition of Done for different teams.
- C. Keep the user stories in the Product Backlog dependent.
- D. Maximize transparency through visual management.

Q22. Which can be a possible characteristic of applying ITSM in the DevOps world?

- A. Different departments based on the available specialists
- B. Formal processes to manage services
- C. A mix of the centralized service desk and modern systems
- D. Value delivery optimization based on the organization's / team's needs

Q23. Which component of ITIL 4 Service Value System can be used to direct and control a DevOps organization and ensure its focus on doing the right things?

- A. Governance
- B. Guiding Principles
- C. Practices
- D. Service Value Chain

Q24. Which ITIL 4 guiding principle best supports the DevOps principle, Customer-Centric Action?

- A. Focus on Value
- B. Keep it Simple and Practical
- C. Optimize and Automate
- D. Start Where You Are

Q25. In a value stream mapping exercise, when will you identify rework?

- A. After assessing the activities
- B. After defining the activities
- C. After defining the work in progress
- D. After defining customer objectives

Q26. Which Lean principle best supports the DevOps principle "Automate Everything You Can"?

- A. Value Stream
- B. Flow
- C. Pull
- D. Perfection

Q27. Which waste is caused due to the excessive production of different parts of a product?

- A. Defects
- B. Inventory
- C. Overproduction
- D. Overprocessing

Q28. Which is a characteristic of a value-driven project?

- A. One-time estimates are performed at the beginning of the project.
- B. More resources are added to the project if the level of quality is likely to drop.
- C. An available number of resources and amount of time are known in advance.
- D. The required functionality is fixed.

Q29. DevOps focuses on collaborating with customers to understand their needs. How does Agile support this concept?

- A. Customer Collaboration over Comprehensive Documentation
- B. Customer Collaboration over Contract Negotiation
- C. Customer Collaboration over Following a Plan
- D. Customer Collaboration over Processes and Tools

Q30. What are the characteristics of delivering products in Sprints?

- 1. No changes are made that would endanger the Sprint Goal.
 - 2. Quality goals do not decrease.
 - 3. The scope may be clarified and re-negotiated.
 - 4. It is a project with a (maximum) three-month horizon.
- A. 1, 2, and 3
 - B. 1, 2, and 4
 - C. 1, 3, and 4
 - D. 2, 3, and 4

Q31. According to Conway's law, what is the relationship between the complexity of organizational structure and the complexity of the technical solution?

- A. The relationship between these two is unclear.
- B. These are directly proportional (correlated) to each other.
- C. These are indirectly proportional to each other.
- D. There is no relationship between these two.

Q32. Which trend of developing products encourages "you build it, you run it"?

- A. Autonomous Teams
- B. Continuous Deployment
- C. Platform as a Service
- D. Software as a Service

Q33. Which guideline should Microservice Architecture (MSA) apply for autonomous systems?

- A. Ability to deliver business value, independent of other services
- B. As simple as possible
- C. Minimum number of components and interactions
- D. Low cohesion and high coupling between services

Q34. Which characteristic of automating continuous delivery contributes to faster releases of products?

- A. Automated task execution is non-repeatable.
- B. Automated task errors are more expensive to fix than manual errors.
- C. Automated tasks do not depend on key personnel availability.
- D. Automated tasks require human-to-machine interaction.

Q35. Which is a characteristic of an optimized software delivery process?

- A. Methodical handovers between different specialties for better clarity
- B. Manual management of runtime environments to avoid live issues
- C. Automated provisioning for the better management of runtime environments
- D. Maximum work in progress for continuous delivery of software packages

Q36. Which focus topic of Continuous Delivery configures the virtual machines, servers, or other components required for the successful execution of the product?

- A. Architecture
- B. Automated Build
- C. Automated Deployment
- D. Automated Provisioning

Q37. Which self-service capability is essential for DevOps Business System teams for running applications once they are in the live environment?

- A. Application Deployment
- B. Continuous Integration
- C. Monitoring
- D. Test Automation

Q38. Which practices will you follow for building platform products using Cloud within a DevOps organization?

1. A clear separation of responsibilities and accountability across teams
 2. Self-service concepts required for optimized delivery of valuable software to customers (Continuous Delivery)
 3. Datacenter optimization using extensive automation
 4. Standardization and productization of infrastructure components
- A. 1, 2, 3, and 4
 - B. 1, 2, and 4
 - C. 1, 3, and 4
 - D. 2, 3, and 4

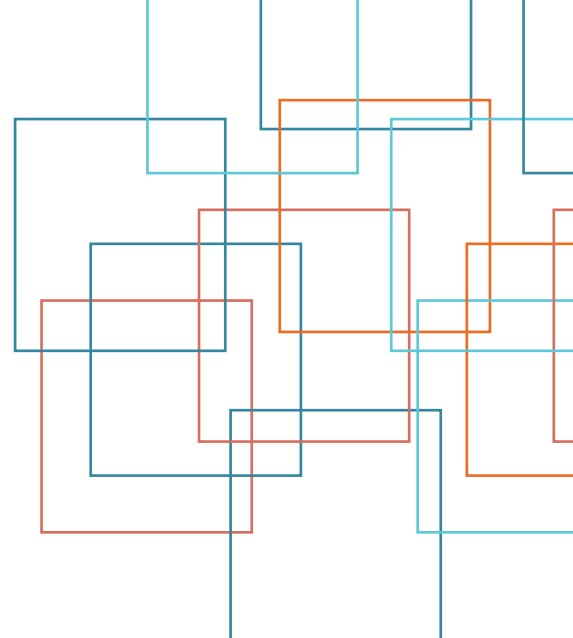
Q39. Which monitoring strategy will you use to detect issues that might have gone unnoticed?

- A. Log Aggregation Monitoring
- B. Monitoring the Monitoring
- C. Monitoring Business
- D. Monitoring Application

Q40. Which is the possible next move for an organization undergoing DevOps transformation after providing the required training to the team?

- A. Assemble the team to identify the type of product to be delivered.
- B. Focus on embedding cultural elements into the team.
- C. Improve the flow of work to deliver more value to customers.
- D. Map the context considering the basic design criteria

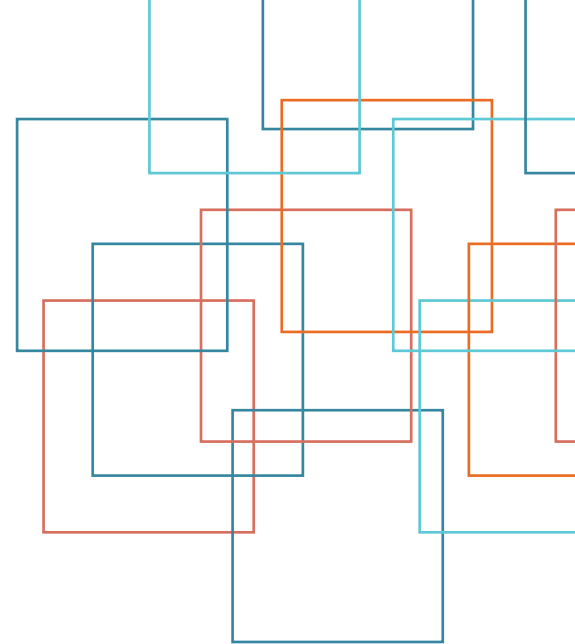
ANSWER KEY



Question #	Answer	Reference	Module #	Topic
1	B	DevOps - The context	2	DevOps Evolution
2	D	DevOps - The context	2	DevOps Evolution
3	A	DevOps - The context	2	Business Benefits of DevOps
4	B	DevOps - The context	2	DASA DevOps Principles
5	C	DevOps - The context	2	DASA DevOps Principles
6	C	DevOps - The context	2	DASA DevOps Principles
7	C	DevOps - The context	2	DASA DevOps Principles
8	B	DevOps - The context	2	Goals and Measurement
9	B	DevOps - The context	2	Goals and Measurement
10	A	DevOps for Individuals	3	T-Shape Profiles
11	C	DevOps for Teams and Organizations	4	Embracing a DevOps Culture
12	A	DevOps for Teams and Organizations	4	Core Elements of a DevOps Culture
13	A	DevOps for Teams and Organizations	4	Embracing a DevOps Culture
14	B	DevOps for Teams and Organizations	4	Core Elements of a DevOps Culture
15	B	DevOps for Teams and Organizations	4	Embracing a DevOps Culture
16	B	DevOps for Teams and Organizations	4	Core Elements of a DevOps Culture
17	C	DevOps for Teams and Organizations	5	Organizational Models
18	B	DevOps for Teams and Organizations	5	Organizational Models

19	A	DevOps for Teams and Organizations	5	Team Autonomy
20	B	DevOps for Teams and Organizations	5	Team Autonomy
21	D	DevOps for Teams and Organizations	5	DevOps at Scale
22	D	DevOps Practices	6	ITSM
23	A	DevOps Practices	6	ITSM
24	A	DevOps Practices	6	ITSM
25	C	DevOps Practices	6	Lean
26	B	DevOps Practices	6	Lean
27	B	DevOps Practices	6	Lean
28	C	DevOps Practices	6	Agile
29	B	DevOps Practices	6	Agile
30	A	DevOps Practices	6	Agile
31	B	DevOps Practices	7	Architecture
32	A	DevOps Practices	7	Architecture
33	A	DevOps Practices	7	Architecture
34	C	DevOps Practices	8	Continuous Delivery Automation Concepts
35	C	DevOps Practices	8	Continuous Delivery Automation Concepts
36	C	DevOps Practices	8	Continuous Delivery Core Concepts
37	C	DevOps Practices	7	Modern Infrastructure and Cloud
38	A	DevOps Practices	7	Modern Infrastructure and Cloud
39	A	DevOps Practices	7	Operations
40	B	DevOps - The Next Steps	9	Analyze the Current Situation + Improve Incrementally

RATIONALES



Q1.

- A) Incorrect. It helps people avoid any stress or confusion between the two teams and be more responsible. It has nothing to do with the processes.
- B) Correct. The traditional structure of the various processes of the two teams is usually based on different frameworks, such as ITIL, ASL, COBIT, and Scrum. Therefore, development processes do not integrate well with operations processes leading to disjointed processes and different vocabulary, again intensifying the wall of confusion.
- C) Incorrect. Value streams of work go through different teams to complete the work.
- D) Incorrect. The feedback loop that is both positive and continuous between development and operational processes causes the lack of understanding to increase. Hence, it can be a factor of having an integrated process between the two teams.

Q2.

- A) Incorrect. It helps the two teams to share their experiences with each other. The Operations team shares valuable information from their experience of managing the Production environment. This information can help the Development team to design and develop more robust applications. In case of problems, regular communication helps in identifying and resolving these quickly.
- B) Incorrect. In the presence of required discussions between the Development and Operations teams during earlier phases of development, a lot of useful information is shared between the two teams. Such information is crucial for the Operations team to get ready for the upcoming changes to the applications under development, and hence helps in resolving the problems earlier.
- C) Incorrect. A critical part of the transition between the Development and Operations teams is knowledge articles. These articles help the Operations team to solve known problems, not the unknown ones.
- D) Correct. When the Operations team is unable to solve problems in production, they look forward to the Development team for the required support. The situation leads to a feedback loop delaying the problem resolution.

Q3.

The correct answer option is A. By implementing a DevOps approach, an organization can significantly reduce the costs and demand for resources associated with traditional IT implementations. When the organizations use continuous delivery and Lean Management practices, higher quality results and shorter cycle times are achieved, which further reduce costs. Other factors that help to reduce cost and resource requirements include minimal project startup and ongoing operational costs, increased collaboration, increased data availability and accessibility, and improved security.

The other options B, C, and D are important aspects for DevOps teams to perform, but these three are not primarily focused on reducing costs and the demand for resources.

Q4.

- A) Incorrect. It focuses on understanding customers' requirements and supports an open culture where there is no fear of asking questions.
- B) Correct. If you do not know where you are going, you will not know whether you lost the way. Creating with the end in mind brings focus on the results. It will foster the product, service thinking, and collaboration. However, it requires an engineering mindset and mutual trust among different teams and team members.
- C) Incorrect. It focuses on the "concept to grave" and encourages people to care about their skills and knowledge to live up to their responsibility to deliver excellent services.
- D) Incorrect. It focuses on having T-shaped profiles and complementary skills to enable the team to be self-sufficient in developing, testing, and deploying the products.

Q5.

- A) Incorrect. It focuses on enhancing the product/service quality and maximizing flow.
- B) Incorrect. It brings focus on the results and requires product and service thinking, engineering mindset, and effective collaboration.
- C) Correct. It focuses on having T-shaped profiles and complementary skills to enable the team to be self-sufficient in developing, testing, and deploying the products.
- D) Incorrect. It focuses on understanding customers' requirements and supports an open culture where there is no fear of asking questions.

Q6.

- A) Incorrect. It focuses on the "concept to grave" and encourages people to care about their skills and knowledge to live up to their responsibility to deliver excellent services.
- B) Incorrect. It focuses on product and service thinking, engineering mindset, and collaboration.
- C) Correct. It requires teams to focus on experimenting with new ideas, minimizing waste, optimizing for speed, cost, and ease of delivery to continuously innovate and help the organization beat the competition. It is, therefore, essential to experiment and learn from failures (try to fail as fast and often as possible).
- D) Incorrect. It focuses on understanding customers' requirements and supports an open culture where there is no fear of asking questions.

Q7.

- A) Incorrect. It focuses on enhancing productivity.
- B) Incorrect. It is an approach to identify opportunities and streamline work.
- C) Correct. It brings focus on the results and fosters the product, service thinking, and collaboration. However, it requires an engineering mindset and mutual trust among different teams and team members. It best supports the given situation, and hence an appropriate answer option.
- D) Incorrect. It focuses on a clear understanding of the customers' requirements and encourages an open culture.

Q8.

- A) Incorrect. It enables organizations to provide evidence that they are compliant with the rules and regulations.
- B) Correct. The goals help identify the short-, medium-, and long-term goals that the organization is trying to achieve.
- C) Incorrect. The measures (indicators and metrics) help identify whether the organization is achieving the defined goals.
- D) Incorrect. It helps to formulate the reasons (the WHY) behind the organization's wishes.

Q9.

The correct answer option is B. Survivorship Bias is the phenomenon of considering success stories along with the accompanying failures. It is about the logical error to concentrate on the people or things that survived some process and overlooking those that failed.

Q10.

- A) Correct. A broad range of knowledge is necessary to have meaningful communication with other specialists.
- B) Incorrect. Getting involved in other areas more compared to their specialty is not a characteristic of a T-shaped person. He/she dives into the other areas whenever they need a break from their specialty.
- C) Incorrect. Having a broad base of knowledge makes a T-shaped person more creative in finding new ideas/solutions to get the work done, not in communication.
- D) Incorrect. Having more attention from employers does not have nothing to do with communication.

Q11.

The correct answer option is C. MVP contributes to Continuous Learning and Continuous Improvement. The other ways that help in this direction include organizing by teams, facilitating knowledge sessions, conducting hackathons, making people responsible, setting a clear DoD, and coaching teams in an Agile way of working.

Q12.

The correct answer option is A. Kanban is a key tool of Visual Management that stimulates collaboration to uncover pitfalls. Kaizen, Kepner-Tregoe (KT), and Plan-Do-Check-Act (PDCA) are problem-solving techniques.

Q13.

The correct answer option is A. Failure leads to inquiry is the characteristic of Generative Typology. The other options relate to Pathological Typology (Option B) or Bureaucratic Typology (Options C and D).

Q14.

DevOps supports the Lean leadership style: Go, See, Ask, Why, Show, and Respect. According to this style, senior management must spend time on the plant floor, respect their people, and use the why technique daily. So, the correct answer option is B.

Q15.

Option B best supports the culture of experimentation and risk-taking. The other options support the culture of taking responsibility (Option A), the culture of product thinking (Option C), and the culture of effectiveness (Option D).

Q16.

The given examples relate to the following DevOps behavior:

- A) Fail-Safe
- B) Improve Continually (correct answer option)
- C) Multidisciplinary
- D) Transparency

Q17.

Product-focused organizations are optimized for speed. The correct answer is, therefore, Option C. The other options are characteristics of activity-focused organizations.

Q18.

1 and 3 are the characteristics of the Platform teams. 2 and 4 are the characteristics of the Business Systems teams. Hence, the correct answer option is B.

Q19.

- A) The option correctly describes autonomous teams.
- B) Incorrect. This option is just the opposite. The Platforms teams offer a rich set of standardized self-service capabilities to Business System teams.
- C) Incorrect. Autonomous teams do not support transfer of responsibility and accountability without any handover.
- D) Incorrect. The Platform teams are responsible for the qualities of platform products, not the applications.

Q20.

- A) Incorrect. Members of a DevOps team also work on broader knowledge, and therefore, develop their mastery.
- B) Correct. DevOps team considers the three aspects of motivation as these support DevOps principles.
- C) Incorrect. Autonomy gives more room to the team to focus on its purpose.
- D) Incorrect. DevOps engineers are knowledge workers.

Q21.

- A) Incorrect. The work should not be divided between teams based on their specialty. It should be divided in an Agile way.
- B) Incorrect. The teams should not be forced to use a single Definition of Done because of the potential differences among their products. However, their Definitions of Done should be compatible in a way that when these are combined, their outputs should produce a potentially releasable Increment.
- C) Incorrect. The User Stories should be kept independent in the Product Backlog.
- D) Correct. Visual management helps enhance transparency, mitigate risks, and visualize the need for growth.

Q22.

- A) Incorrect. It is the characteristic of a classical IT organization with specialist departments.
- B) Incorrect. An IT organization with specialist departments needs formal processes to manage services.
- C) Incorrect. Most organizations applying ITSM concepts in the DevOps world are a mix of the centralized service desk and legacy systems, not the modern systems.
- D) Correct. ITIL 4 practices can be used to optimize value delivery based on the organization's / team's needs.

Q23.

- A) Correct. Governance refers to how an organization is directed and controlled and is having the right focus on doing the right things.
- B) Incorrect. Guiding principles refer to recommendations that guide organizations in all circumstances, regardless of changes in its goals, strategies, type of work, or management structure.
- C) Incorrect. Practices refer to a set of organizational resources designed to perform work or accomplish an objective. These practices can be used to optimize value delivery basis the organization's / team's needs.
- D) Incorrect. The service value chain is the operating model and refers to a set of activities performed by an organization to deliver a valuable product or service to its consumers.

Q24.

The DevOps principle, Customer-Centric Action, focuses on understanding the customer's requirements to deliver the required value. The guiding principle, Focus on Value, also concentrates on customer's requirements to deliver customer value directly or indirectly. Therefore, it best supports the DevOps principle, Customer-Centric Action. Let's discuss the given guiding principles in little detail for better clarity.

- A) Focus on Value: Everything that the organization does needs to map, directly or indirectly, to value for the stakeholders. The focus on value principle encompasses many perspectives, including the experience of customers and users.
- B) Keep it Simple and Practical: If a process, service, action, or metric provides no value or produces no useful outcome, eliminate it. In a process or procedure, use the minimum number of steps necessary to accomplish the objective(s). Always use outcome-based thinking to produce practical solutions that deliver results.
- C) Optimize and Automate: Resources of all types, particularly Human Resources (HR), should be used to their best effect. Eliminate anything wasteful and use technology to achieve maximum objectives. Human intervention should only happen where it contributes value.
- D) Start Where You Are: Do not start from scratch and build something new without considering what is already available to be leveraged. There is likely to be a great deal in the current services, processes, programs, projects, and people that can be used to create the desired outcome. The current state should be investigated and observed directly to ensure it is understood.

Q25.

The various steps involved in value stream mapping are:

1. State customer objectives and process actors.
2. Define activities.
3. Define work in progress.
4. Identify rework.
5. Assess activities.
6. Determine process cycle efficiency.
7. Determine value add for each activity.

Based on the preceding steps, you can easily find that the rework is identified during value stream mapping after defining the work in progress. Hence, the correct answer option is C.

Q26.

The Flow principle focuses on having a continuous flow in production with the Just-in-Time approach and reduces peak and low volumes. Automate Everything You Can also focuses on maximizing flow. Hence, the correct answer option is B.

Q27.

- A) Incorrect. Defects refer to efforts wasted by rework, scrap, and incorrect documentation.
- B) Correct. Inventory is the waste caused by excessive production taking up space. In a software development context, it is the incomplete work (story) as per the DoD. Therefore, you cannot demonstrate or release it. As a result, it becomes a task to define it as WIP.
- C) Incorrect. Overproduction is the result of producing more than what is required in the current situation.
- D) Incorrect. Overprocessing or extra-processing is the result of doing more work due to higher quality than required.

Q28.

- A) Incorrect. One-time estimates are performed at the beginning of the project in the plan-driven approach.
- B) Incorrect. The number of resources is more or less fixed due to the size of the team involved.
- C) Correct. The available number of resources and the amount of time is more or less fixed due to the size of the team involved and the length of the sprint.
- D) Incorrect. Fixing functionality is part of the plan-driven approach.

Q29.

The Agile Manifesto states that:

We are uncovering better ways of developing software by doing it and helping others do it. Through this work, we have come to value:

- Individuals & Interactions over Processes & Tools
- Working Software over Comprehensive Documentation
- Customer Collaboration over Contract Negotiation
- Responding to Change over Following a Plan

“While there is value in the items on the right, we value the items on the left more.”

Hence, the correct answer option is B.

Q30.

Only Point 4 is not a characteristic of developing products in Sprints. Yes, a Sprint is considered a project but with no more than a one-month horizon. Hence, the correct answer option is A.

Q31.

Conway’s law states that any piece of software reflects the organizational structure that produced it. The law is difficult to break. It implies that complex organizations are bound to create complex architectures. In other words, simple architecture requires simple organizations.

Let’s try to understand the law in simple words.

The number of services is directly proportional to complexity, which in turn is indirectly proportional to quality. This means when the number of services grows, the complexity also grows. When complexity grows, quality of the system, such as reliability, maintainability, or scalability, falls down.

Hence, the correct answer option is B.

Q32.

Many trends in the software development support the goal of creating better software, faster and cheaper, such as:

- **Agile Organizations:** Dedicated teams over resourcing, products over projects, prioritization over planning, and outcome over output
- **Continuous Delivery:** Cycle time measured in hours or even minutes
- **Autonomous Teams:** You build it, you run it, shared something is more important than aiming to deliver the best quality
- **Reactive Manifesto:** Responsive, resilient, scalable, and loosely-coupled (message-driven) systems that are easy to develop and change
- **Platform as a Service (PaaS):** Cheap, easy, and fast runtime environments for apps

The given question supports the characteristics of Agile Organizations. Hence, the correct answer option is A.

Q33.

Autonomous systems should be able to deliver business value, independent of other services. Option A is, therefore, correct. Option B relates to bringing simplicity, whereas options C and D relate to Low Coupling/High Cohesion.

Q34.

Automated task execution does not depend on the availability of humans, so the wait time is eliminated. Hence, the correct answer option is C. The other options are characteristics of manual task execution, not of an automated one.

Q35.

Option C is a characteristic of optimized and automated software delivery. The other options support the manual process of delivering software.

Q36.

- A) Incorrect. Architecture of any system includes its components, their relationships, and the way these interact with each other.
- B) Incorrect. Automated build is an automated process of writing and committing code, scanning the code for errors, compiling it, running automated tests, and reporting errors if any.
- C) Correct. Automated Deployment is an automated process of deploying published deployment artifacts to different environments. It includes various tasks to make the target machines ready for deployment, such as:
 - a) Moving artifacts to the target machines
 - b) Configuring the target machines for the software/product to run successfully
 - c) Configuring the other components required to successfully execute the software
- D) Incorrect. Automated Provisioning is the ability to deploy, update, and repair the complete application infrastructure (such as network components, server components, and runtime software stacks) using a predefined set of automated procedures.

Q37.

Some of the capabilities required by DevOps Business System teams for running applications and tools are:

- Application management self-services, such as backup restore, server restart, and changing log levels
- Logging self-services (aggregated)
- Monitoring self-services (aggregated)
- Billing services

Hence, Option C is the correct answer option. The other options are pre-live steps.

Q38.

The Cloud principles are a best practice for building platform products within a DevOps organization. These principles imply:

1. A clear separation of responsibilities and accountability across teams
2. Self-service concepts required for optimized delivery of valuable software to customers (Continuous Delivery)
3. Datacenter optimization using extensive automation
4. Standardization and productization of infrastructure components

Hence, option A is correct as all the practices (1, 2, 3, and 4) listed in the question are correct.

Q39.

- A) Correct. Tooling for log aggregation is capable of using all the data to detect issues that might have gone unnoticed.
- B) Incorrect. It is about the need to monitor the monitoring infrastructure.
- C) Incorrect. It describes the need for providing feedback to the business at the earliest to take corrective actions.
- D) Incorrect. It explains that having a healthy infrastructure and platform is not good enough for an application to function correctly.

Q40.

When an organization thinks of undergoing a DevOps transformation, they should perform the following steps:

1. Map the context.
2. Assemble the team based on current involvement with the product/service/customer.
3. Do the DASA Competence Scan.
4. Train the team.
5. Focus on cultural elements.
6. Improve the flow of work.

Hence, the correct answer option is B.

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