

D A S A

DEVOPS AGILE  
SKILLS ASSOCIATION

# DEVOPS FUNDAMENTALS – MOCK EXAM

v1.7 – December 2017

© 2017 – DevOps Agile Skills Association

All rights reserved. No part of this publication may be published, reproduced, copied or stored in a data processing system or circulated in any form by print, photo print, microfilm or any other means without written permission by DASA

## EXAM DETAILS

Exam Duration	60 minutes (Additional 15 minutes for non-native English speaker)
Format of Exam (Open book/Closed book)	Closed book
No. of Questions	40 <b>Note:</b> the mock exam has 35 questions
Pass Percentage	65% (26 or more correct answers)

# QUESTION SET

## QUESTION 1

---

Which DevOps principle focuses on product and service thinking?

- A. Customer-centric action
- B. Continuous Improvement
- C. Create with the end in mind
- D. Automate everything you can

## QUESTION 2

---

An organization maintains an independent and autonomous team for each of its services. What is a possible disadvantage of this type of organization structure?

- A. Quality of delivered features will be low.
  - B. Implementation of changes within a team is slow.
  - C. Reuse of skills within the organization is limited.
  - D. Waiting time for processing the service request is high.
-

### QUESTION 3

---

What type of mindset is the core of a DevOps culture?

- A. Service Mindset
- B. Skill Mindset
- C. People Mindset
- D. Automation Mindset

### QUESTION 4

---

What is NOT an appropriate predictor of IT performance in a DevOps environment?

- A. Changes approved outside of the team
- B. High-trust organizational culture
- C. Proactive monitoring
- D. Version control of all artifacts

### QUESTION 5

---

Erik is working in a Product team (or Business System team) specialized in delivering a specific IT-related product for the Sales department. Which of the following types of activities will most likely be recurring in the agendas of Erik's team?

- A. Many handovers moments with other departments.
- B. Meetings on the utilization of the specialized resources within the organization.
- C. Monthly release meetings for the bi-monthly release.
- D. Attending the product demo meeting.

## QUESTION 6

---

What type of tasks are characterized by low task variability and high task analyzability?

- A. Routine
- B. Craft
- C. Engineering
- D. Non-Routine

## QUESTION 7

---

Which of the following software delivery approaches focuses on smaller functional units instead of developing the complete software?

- A. Agile
- B. Iterative
- C. Lean
- D. Waterfall

## QUESTION 8

---

What is the lifecycle of Story Mapping?

- A.
  1. Establish a common overall goal
  2. Determine the end-to-end workflow
  3. Define a first marketable feature set
  4. Expand/improve the existing functionality
- B.
  1. Establish a common overall goal
  2. Define activities
  3. Determine the end-to-end workflow
  4. Expand/improve the existing functionality
- C.
  1. Establish a common overall goal
  2. Define work in progress
  3. Define activities
  4. Define a first marketable feature set
  5. Expand/improve the existing functionality
- D.
  1. Establish a common overall goal
  2. Determine the end-to-end workflow
  3. Define activities
  4. Define a first marketable feature set
  5. Expand/improve the existing functionality

## QUESTION 9

---

The platform products control the freedom and restrictions for the DevOps Business System teams. Which cloud services classification poses the greatest number of restrictions when the customer aims for flexibility for tailoring the complete platform including hardware and software?

- A. On-Premise
- B. IaaS
- C. PaaS
- D. SaaS

## QUESTION 10

---

How do the Service Level Management processes of the ITIL Service Design phase map in a DevOps organization?

- A. Aims at full autonomy and full responsibility for delivering a product (value) to the customer.
- B. Brings new software live in a matter of minutes through automation.
- C. Maintains stable and fixed teams to avoid resource-switching between projects.
- D. Manages changes through the same mechanisms used for aligning the business with IT.

## QUESTION 11

---

What is the difference between Continuous Delivery and Continuous Deployment?

- A. Continuous Delivery is a manual task, while Continuous Deployment is an automated task.
- B. Continuous Delivery has a manual release to production decision, while Continuous Deployment has releases automatically pushed to production.
- C. Continuous Delivery includes all steps of software development life cycle; Continuous Deployment may skip few steps such as validation and testing.
- D. Continuous Delivery means complete delivery of the application to customer; Continuous Deployment includes only deployment of the application in customer environment.

## QUESTION 12

---

What is NOT an aspect related to managing work in an organization?

- A. Attending scrum of scrums
- B. Using Feature Switches
- C. Using a scrum board to get members of the team on the same page
- D. Applying test automation



## QUESTION 13

---

What are the characteristics of people working in a DevOps based, product-focused organization?

- A. People are functionally organized.
- B. People know about business and IT and deliver work, thereby appealing to use any of a person's skills and/or talents.
- C. People are specialist-oriented.
- D. People are assigned to multiple projects at once, for reasons related to resource optimization.

## QUESTION 14

---

Which phrase fits BEST as a characteristic of a DevOps team, considering that the team is part of an antifragile organization?

- A. Employee First
- B. Honor Web-inspired value
- C. Minimum Viable Bureaucracy
- D. Self-management

## QUESTION 15

---

When should you move to the Improve phase of the DMAIC method?

- A. After collecting the related data and facts about the variables that can influence the problem
- B. After defining potential solutions to the problem
- C. After ensuring whether a particular solution works
- D. After understanding the causes of the problem

## QUESTION 16

---

In DevOps, Business System teams are autonomous teams, that “land” their application and infrastructure code onto a common platform. This common platform is maintained by a Platform team.

What is correct about the responsibilities of these teams?

- A. The Platform team is always responsible for maintaining the product within its operational environment.
- B. When a product/service application is “landed” on the platform, the responsibility of the product/service shifts from the Business System teams to the Platform team.
- C. The Business System team is only responsible for the development phase of new services.
- D. The Business System teams have an end-to-end responsibility, there is no handover or transfer of responsibility and accountability.

## QUESTION 17

---

What is the main reason to know exactly who the customer is when setting up a Business Service team?

- A. To determine what value and functionalities should be delivered by the team
- B. To establish the required mix of skills and knowledge for the team
- C. To know what kind of work the team will be handling
- D. To understand the scope of the technology responsibility of the team

## QUESTION 18

---

Which DevOps principle appreciates measuring processes, people, and tools?

- A. Continuous improvement
- B. Create with the end in mind
- C. Cross-functional autonomous teams
- D. People responsibility

## QUESTION 19

---

Which role should ensure that user stories adhere to the Definition of Ready (DoR)?

- A. Product Owner
- B. Scrum Master
- C. Service Manager
- D. Scrum Team

## QUESTION 20

---

John is the Product Owner and is helping his team to understand the product and the customer requirements. By doing so, which type of waste, visible to the customer, is likely to be eliminated?

- A. Defects
- B. Non-Utilized Skills
- C. Transportation
- D. Motion

## QUESTION 21

---

What are the appropriate characteristics of Continuous Delivery approach?

1. Complex, but small number of releases
  2. A focus on cycle time reduction
  3. Resource-based management of the process
  4. Self-managed and responsive teams
- A. 1 and 3
  - B. 2 and 4
  - C. 2, 3, and 4
  - D. 1, 2, 3, and 4

## QUESTION 22

---

What is the main benefit of automated provisioning?

- A. Flexible approach to ad-hoc system changes
- B. Focus on operational perspective to control infrastructure changes
- C. High speed delivery of new environments
- D. Variability in application environments

## QUESTION 23

---

What is correct about implementation of measurements within an organization?

- A. Defining good measurements are enough for business improvement.
- B. Differences in measurements can lead to confrontation within organization; so measurements should be avoided.
- C. Measurement of one aspect can often represent the overall business scenario.
- D. Organizations should establish a balanced view to confront the measurements and draw the right conclusion.

## QUESTION 24

---

What is the correct characteristic for performance metrics?

- A. Performance metrics are output oriented.
- B. Performance metrics are difficult to measure.
- C. Performance metrics are easy to improve.
- D. Performance metrics are also known as leading indicators.

## QUESTION 25

---

Which model is used by Desired State Configuration (DSC) for specifying the configuration of systems?

- A. Declarative
- B. Imperative
- C. Procedural
- D. Sequential

## QUESTION 26

---

What is the correct sequence of the four steps when providing feedback in according to the Feedback model?

- A.
  1. Describe concrete observations.
  2. Explain what it does to you.
  3. Wait and listen to clarifying questions.
  4. Give concrete suggestions OR recognition/incentive.
- B.
  1. Explain what it does to you.
  2. Describe concrete observations.
  3. Wait and listen to clarifying questions.
  4. Give concrete suggestions OR recognition/incentive.
- C.
  1. Wait and listen to clarifying questions.
  2. Explain what it does to you.
  3. Describe concrete observations.
  4. Give concrete suggestions OR recognition/incentive.
- D.
  1. Wait and listen to clarifying questions.
  2. Give concrete suggestions OR recognition/incentive.
  3. Describe concrete observations.
  4. Explain what it does to you.

## QUESTION 27

---

The development of new software and IT services consist of functional and non-functional requirements. From what point in the development process should the non-functional requirements be addressed, to be able to deliver software and services faster and better?

- A. From the initiation of the software development
- B. After the functional acceptance test by the customer representatives
- C. Simultaneous with the implementation of continuous delivery
- D. The non-functional requirements are of no concern to the customers

## QUESTION 28

---

Which statement does NOT define DevOps?

- A. DevOps is a movement or practice that emphasizes collaboration and communication of both software developers and other Information Technology (IT) professionals.
- B. DevOps is a framework and job title that focuses on structured processes to organize flow between the Development and Operations teams.
- C. DevOps is about experiences, ideas, and culture.
- D. DevOps is an activity of optimizing the development-to-operations value stream by creating an increasingly smooth, fast flow of application changes from development into operations.



## QUESTION 29

---

What characteristics should an organization adopt to become a DevOps organization?

- A. Automation
- B. Product thinking
- C. Individual thinking
- D. Fail fast
- E. Problem avoidance
- F. Specialist roles
- G. 1, 2, and 4
- H. 1, 5, and 6
- I. 2, 3, and 4
- J. 3, 5, and 6

## QUESTION 30

---

What does 'resilience' mean with reference to IT architecture?

- A. Preparing systems for changed requirements
- B. Preparing systems for security threats
- C. Preparing systems for upgrades in technology
- D. Preparing systems for unexpected events

## QUESTION 31

---

Your DevOps team is a stable team, where team members have been working together for several sprints now. The team is having trouble delivering a new version of the product for use by your customers. You are supposed to be delivering work in sprints of two weeks, but the team is unable to deliver agreed upgrades in time.

What is the appropriate approach to meet the timelines in subsequent sprints?

- A. Extend the sprint to four weeks to give team more time.
- B. Expect that the team will learn from the mistakes and will fix the problem in the next cycle.
- C. Shorten the sprint to take small steps and find the problems quickly.
- D. Focus on only few limited changes that are viable to be delivered in two weeks.

## QUESTION 32

---

Which component provides the first feedback on the quality of committed application code changes?

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

### QUESTION 33

---

In the context of cloud computing, which concept enables dynamic adaptation to different system loads?

- A. Abstraction
- B. Elasticity
- C. Metering
- D. Multitenancy

### QUESTION 34

---

Which is the correct sequence of tests when testing new software?

- A. Functional tests, system tests, unit tests, UI tests
- B. UI tests, functional tests, system tests, Unit tests
- C. System tests, unit tests, functional tests, UI tests
- D. Unit tests, system tests, UI tests, functional tests

### QUESTION 35

---

Which tool helps lowering risk during development as customer feedback is embedded into the design process?

- A. Test Automation
- B. Snapshot Deployment
- C. Story Mapping
- D. Value Stream Mapping

## ANSWER KEY

QUESTION NO.	ANSWER	REFERENCE MODULE
1	C	DevOps Introduction
2	C	Organization
3	A	Culture
4	A	Measure and Improvement
5	D	Organization
6	A	Automation
7	A	DevOps Introduction
8	A	Processes
9	D	Automation
10	A	Processes
11	B	Automation
12	D	Organization
13	B	Processes

14	D	DevOps Introduction
15	D	Culture
16	D	Organization
17	A	Organization
18	A	DevOps Introduction
19	A	Processes
20	A	Processes
21	B	Automation
22	C	Automation
23	D	Measure and Improvement
24	A	Measure and Improvement
25	A	Automation
26	A	Culture
27	A	Organization
28	B	DevOps Introduction

29	A	Culture
30	D	Organization
31	D	Culture
32	B	Automation
33	B	Automation
34	D	Automation
35	C	Processes