EXIN DEVOPS FOUNDATION — TABLE OF CONTENTS

The "EXIN DevOps Foundation" course is designed to provide candidates with a foundational understanding of DevOps principles, its practices, and its practical applications in IT operations and application lifecycle management. This 2-day course offers comprehensive insights into the historical development, key methodologies, and common misconceptions about DevOps, as well as practical knowledge on how to implement and sustain DevOps in various organizational environments.

Day 1: Understanding DevOps Basics and Principles

- 1.4.1 Clarify that DevOps is not a part of Agile.
- 1.4.2 Clarify that DevOps is more than tools and automation.
- 1.4.3 Clarify that DevOps is not a new profession.

2. DevOps Principles
- 2.1 Value Stream
- 2.1.1 Define the concept value stream.
- 2.1.2 Explain the concept value stream map (VSM).
- 2.1.3 Clarify how a VSM may help optimize processes in the business.
- 2.1.4 Explain why value stream thinking is the core of DevOps.
- 2.2 Deployment Pipeline
- 2.2.1 Define the concept deployment pipeline.
- 2.2.2 Identify the challenges when implementing a deployment pipeline.
- 2.3 Version Control
- 2.3.1 Define the concept version control.
- 2.3.2 Explain why version control is important.
- 2.4 Configuration Management
- 2.4.1 Define the concept configuration management.
- 2.4.2 Explain why configuration management is important for DevOps.
- 2.5 Definition of Done (DoD)
- 2.5.1 Explain why a clear DoD is important for working with a DevOps mindset.

Day 2: Exploring Key Practices and Practical Applications

3. DevOps Key Practices
- 3.1 Differences with Traditional Practices
- 3.1.1 Clarify how DevOps facilitates more frequent releases.

- 3.1.2 Clarify how DevOps focuses more on adding value to the business.

- 3.1.3 Explain that DevOps requires automation.

- 3.1.4 Clarify how DevOps deals with solving incidents and defects differently.

- 3.1.5 Clarify how DevOps needs continuous improvement.

- 3.2 DevOps Practices

- 3.2.1 Outline the importance of a diverse team.

- 3.2.2 Outline the importance of visualizing work.

- 3.2.3 Outline why work in progress (WIP) and batch sizes should be limited.

- 3.2.4 List how DevOps incorporates operational requirements into Development.

- 3.2.5 Explain the importance of supporting innovation.

- 3.2.6 Identify ways to deal with bottlenecks.

4. Practical Applications of DevOps

- 4.1 Applicability

- 4.1.1 Characterize situations in which DevOps is feasible.

- 4.1.2 Identify conditions that make adoption of DevOps interesting for the business.

- 4.2 Limitations

- 4.2.1 Identify a lack of readiness to adopt DevOps.

- 4.2.2 Characterize monolithic IT infrastructure and architecture as a limitation for adopting DevOps.

- 4.3 Using Commercial off-the-shelf Software (COTS)

- 4.3.1 Clarify the risk of COTS in strategic business lines.

- 4.3.2 Identify solutions for working with COTS when there is no other option.

- 4.4 Evolving Architecture and Organizational Models

- 4.4.1 Identify the difficulties a rigid IT department poses on implementing DevOps.

- 4.4.2 Characterize the need for a flexible mindset to change and innovation.

- 4.5 Iterative Progression

- 4.5.1 Recall that DevOps may start small and can be built up from there.

- 4.5.2 Recall that DevOps is a way of thinking, which may start anywhere in the organization.

This structured format provides a comprehensive overview, guiding participants through the essentials of DevOps, ultimately equipping them with the skills and knowledge necessary to contribute effectively in a DevOps environment.