

Match the scenario with the feature/capability that can be applied to help/alleviate the problem.

The development team has completed working on a page offering festival discounts to customers. However they are waiting for some related features from third party vendors so that deployment can be done together. Customer is keen on having the discount feature urgently as there is bound to be tight competition for sales among contemporaries.

☒ Feature toggle ☐ Microservices ☐ Big room planning ☐ Service virtualization ☐ Infrastructure as code

Q2 of 25

Choose the statement which represents the benefit of adoption of DevOps practices in projects following Agile approach to software development.

☒ Helps in quick development and delivery to customers with good quality ☐ Helps in quick development of software with good quality ☐ Helps in quick deployment of stable software to pre-production environments ☐ Helps in resolving conflicts in versions of code

Q3 of 25

A team comprising of ten members was working on a retail project in Waterfall mode and the first version of the software has been released. In view of the market dynamics and competition, the client wants the team to switch to Agile methodology for its next release due in 8 months. What changes should the team bring in their working to adopt Agile way of software development?

- A) Work towards building a cross-functional team
- B) Plan to adopt technical practices/XP practices to sustain the pace
- C) Drop all documentation from its processes
- D) Identify means for collaboration and communication between teams

☐ A and C ☒ A, B and D ☐ B, C and D ☐ All of the given options

Q4 of 25

Your project has a 2-week sprint cadence and by the end of the sprint the feature (or developed code) should be deployed into QA environment. You notice that the version going for release is not the same as the one being tested. What best practices would you recommend to avoid this?

☒ Ensure using an artifact repository and any change made to the code or tests will go through the entire CICD pipeline ☐ Ensure using static code analysis tools before the code is checked in ☐ Ensure to use Git as the source code version control repository ☐ There should be a separate sprint for checking code quality and testing

Q5 of 25

Match the scenario with the feature/capability that can be applied to help/alleviate the problem.

An infrastructure team that maintains a data centre with many servers receives a ticket frequently from an internal team to reconfigure it. The frequency is as much as thrice in a week. Presently, the staff repeats the configuration manually. The steps are always the same.

☐ Feature toggle ☐ Microservices ☐ Big room planning ☐ Service virtualization ☒ Infrastructure as code

Q6 of 25

Duplicate lines of codes metric measures & blank ____.

☒ Quality of code ☐ Percentage of API documented ☐ Number of build failures ☐ Unit test success rate

Q7 of 25

Benefits of infrastructure automation include:

☐ Ease of creating and managing changes to environments or related configuration ☒ Consistent, production-like environments across deployment pipeline ☒ Small sized binaries ☒ Maintaining the quality of code

Q8 of 25

Choose the option which represents the need for DevOps adoption

1. To increase frequency of deployment
2. To ensure quality software is deployed
3. To ensure service levels are maintained for operations, maintenance and production support
4. To combine Dev and Ops teams together

☐ Options a,b,c only ☐ All the given options ☐ b,c,d only ☒ Options a,c,d only

Q9 of 25

A static code analysis tool helps ensure & blank .

☒ Code quality ☐ Functionality that is built is correct ☐ Validate that the feature coded is correct ☐ Sequence of build is correct

Q10 of 25

When should a security testing be done?

☐ After code is deployed to production ☐ After code is compiled but before deploying to QA environment ☒ Before code is compiled and before deploying to QA environment ☐ After Dynamic application security scan has successfully passed

Q11 of 25

Which of these represent the advantages of adopting DevOps practices using an end-to-end automated pipeline?

A. Faster & Frequent Deployments

B. Improved quality, environment stability and application availability

C. Quick time to market

☐ Options A and B only ☐ Options A and C only ☐ Option B only ☒ All the given options

Q12 of 25

Artifact repository ensures & blank _____.

☒ the right version of the build is used for QA and the completely tested version goes for release ☐ quality of test cases ☐ maintenance of test objects and their versions ☐ correctness of builds

Q13 of 25

A Dev team working on an e-commerce project has adopted continuous integration, delivery and deployment. However, they are not using an artifact repository in the pipeline. What could possibly go wrong?

- ☐ Source code versions might go inconsistent due to multiple team members pushing the code
- ☐ Inconsistency of versions in build, test and release stages
- ☐ Testing and production environment would need to be set-up manually
- ☐ Code quality might get compromised

Q14 of 25

_____ metric helps track production release agility over a period of time.

- ☐ Total number of releases per week
- ☐ Total number of deployments per week
- ☐ Lead time provisioning
- ☐ Capacity

Q15 of 25

Match the scenario with the feature/capability that can be applied to help/alleviate the problem.

An online services company is ever expanding its services and new services get added often. Some of them get terminated if the service becomes obsolete. The company receives a million calls everyday from different types of customers for different services. The developers need an architectural style which consists of lightweight components which can be easily plugged in and out.

- ☐ Feature toggle
- ☐ Microservices
- ☐ Refactoring
- ☐ Design patterns
- ☐ Infrastructure as code

Q16 of 25

Your production support team wants to pro-actively know when an issue is likely to occur. They can then take corrective action. Which among the capabilities mentioned would you implement?

- ☐ Continuous Delivery
- ☐ Logging and continuous monitoring
- ☐ Continuous Testing
- ☐ Continuous Integration

Q17 of 25

Which of the following is a definition of code coverage?

- ☐ Lines of source code that has been tested before deploying to QA environment
- ☐ Measure used to describe the degree to which the source code of a program has been tested
- ☐ Number of environments in which the code is deployed and tested
- ☐ Number of test cases written

Q18 of 25

Which among the following is an orchestration tool?

- ☐ Jenkins
- ☐ Ansible
- ☐ Puppet
- ☐ JaCoCo

Q19 of 25

From the options given, choose the stage(s) which are likely to be automated as part of continuous integration [multiple response]

- ☐ Source code version control
- ☒ Static analysis of code
- ☐ Unit testing of code
- ☐ Code coverage
- ☒ Version control of binaries
- ☐ Continuous integration invocation

Q20 of 25

Tracking coding rule violations, code complexity and duplications in code help &blank__.

☒ developers write good quality code ☐ track efficiency of test cases ☐ track build processing time ☐ plan for better build success rates

Q21 of 25

Which of the options represents the aspects to be taken care while choice of tools is being made?

1. Repeatability
2. Reliability
3. End-end automation
4. Autobuild quality in the pipeline
5. Customer's appetite for tooling

☒ All the given options ☐ a,b,c and d only ☐ a,b,d,e only ☐ b,c,d,e only

Q22 of 25

Which of the following can be used for releasing feature and enabling and disabling them without changing the code?

☐ Rapid prototyping ☒ Feature toggle ☐ Test driven development ☐ Using an orchestrator tool

Q23 of 25

Dailybuy is an e-commerce website focusing on selling domestic items and delivering them to the doorsteps of their customers. They were struggling with very slow site updates and the site was down multiple times in a week due to maintenance and feature releases. This was affecting their sales tremendously and they were slowly losing to their competitors. Which of the following practice(s) can help this team?[multiple response]

☐ Continuous integration ☐ Continuous delivery and deployment ☐ Continuous testing ☒ Continuous monitoring

Q24 of 25

What are the benefits of Continuous Integration? [Multiple response question].

☒ Automated Build integrates various tools ☐ Lesser deployment risk as smaller changes are deployed
☐ Provides ability to completely rebuild and test applications ☒ Visible progress of value as changes are available in production

Q25 of 25

Which of the following statements represent a salient feature of a pure DevOps team structure? [Multiple response question].

☒ Team has single backlog with both Dev & Ops tasks ☒ Each team member is capable of selecting any item & working on it ☐ Teams keep separate backlogs but take each other's user stories in their backlogs
☐ Few Ops team members can become part of Dev team and perform tasks which are application specific