**CI/CD**

1. What are the fundamental differences between DevOps & Agile?

# Deveops is a practice of bringing development and operations team together.

Deveops main concept is to manage end to end engineering process.

Devops focuses on testing and delievery

Agile is an iterative approach of collaboration, customer feedback, rapid release.

Agile focuses on constant changes.

1. What is the need for DevOps?

# DevOps alloes the companies to create and improve products at a faster pace than traditional software development method.

1. What are the advantages of DevOps?

# Increases the productivity, low maintenance, standardize process for easy replication and faster delievery.

1. Explain with a use case where DevOps can be used in industry/ real-life.

# DevOps is used in many industries manufacturing and e commerce industries are some them. With the basic waterfall method which required a full deployment which takes 4 hour twice a week, to get it its agile mel. Where as now woth DevOps you can deploy 50 a day.

1. What are the success factors for Continuous Integration?

# At the centre of continuos integration strategy is an automated and repeatable build.

All the team members should be notified if there is compiler or test fail.

Making the application accessible.

Conclusion.

1. What are the differences between continuous integration, continuous delivery, and continuous deployment?

# Continuous integration is the practice of testing the changes to the code as early as possible.

Continuous delievery is the process of being ready to release or deliever any version at any time or on any platform.

Continuous deploy ment is the process of continues deployment.

1. What role does the Quality Assurance (QA) team play in DevOps?

# QA bounds the development and operations teams together to achieve the end result.

1. Describe an efficient workflow for continuous integration?

# CI server monitors the source control repository and when it detects a change it triggers a build. After building it successfully CI server will perform the necessary activities to make the artefacts available for testing.

1. What are the best practices for DevOps implementation?

# Test automation, continuous integration, Continuous delivery. Continuous deployment.

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1. How will you approach when a project needs to implement DevOps?

# Start with small project and teams,

Choose the right project and right team,

Choose right tools,

Customer and process focused.