

Code: 21F00303

MCA III Semester Regular & Supplementary Examinations December/January 2024  
**DEV OPS AND AGILE PROGRAMMING**  
(Master of Computer Applications)

Time: 3 hours

Max. Marks: 60

Answer all the questions

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- 1 (a) Explain briefly the principles and values of Agile. 6M  
(b) Explain pair programming regarding DevOps. 6M  
**OR**
- 2 (a) What are the fundamental differences between DevOps & Agile? 6M  
(b) Explain Real Customer Involvement methodology in Agile. 6M
- 3 (a) How do you handle bugs in Agile? Explain No Bugs in Agile. 6M  
(b) Explain in detail about Ten minute Build in agile methodology. 6M  
**OR**
- 4 (a) Give a clear idea of Iteration planning with an example. 6M  
(b) Illustrate the steps of involved in Release planning. 6M
- 5 (a) What is meant by Customer testing? Explain how it is different from other testing methods. 6M  
(b) How to do Performance optimization in agile? 6M  
**OR**
- 6 (a) Define an Incremental requirements in agile. 6M  
(b) What is the method of Refactoring in agile and explain how it is useful? 6M
- 7 (a) Discuss Continuous Delivery in detail. 6M  
(b) Explain the difference between Agile and Devops. 6M  
**OR**
- 8 (a) Explain minimum viable product in detail. 6M  
(b) Discuss continuous integration in Devops. 6M
- 9 (a) What are the key concepts of Devops? 6M  
(b) Discuss the CAMS model in detail. 6M  
**OR**
- 10 (a) What is meant by Test driven development? Explain with an example. 6M  
(b) Illustrate the concept of Organizational Learning. 6M

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Code: 21F00303

MCA III Semester Supplementary Examinations May 2024  
**DEV OPS AND AGILE PROGRAMMING**  
(Master of Computer Applications)

Time: 3 hours

Max. Marks: 60

Answer all the questions

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- 1 (a) What is meant by Energized work and explain the XP thinking? 6M  
(b) Explain Eliminate waste. How agile can reduce project waste? 6M  
**OR**
- 2 (a) What is the purpose of Iteration demo in agile? 6M  
(b) What is process improvement in agile? 6M
- 3 (a) What is version control in agile. Explain its types. 6M  
(b) Define Estimation. Explain the techniques of estimation. 6M  
**OR**
- 4 (a) Explain the concept of documentation in agile. 6M  
(b) What is meant by Risk Management? Define how to control risk in agile. 6M
- 5 (a) Illustrate spike solutions in agile with an example. 6M  
(b) Examine the concept of TDD and write the steps to it. 6M  
**OR**
- 6 (a) Explain the process of Incremental design and architecture in agile methodology. 6M  
(b) How Test driven development is useful for software development? 6M
- 7 (a) What is meant by Devops and explain its principles? 6M  
(b) Explain the benefit of the CI/CD Pipeline. 6M  
**OR**
- 8 (a) State difference between CI/CD vs DevOps. 6M  
(b) Differentiate between agile and Devops. 6M
- 9 (a) What are the benefits of infrastructure automation in DevOps? Which tool is commonly used for infrastructure automation in DevOps? 6M  
(b) Define Root cause analysis. Explain the five steps of root cause analysis. 6M  
**OR**
- 10 (a) Explain culture, Automation and Measurement in CAMS model. 6M  
(b) Illustrate the concept of Blamelessness culture in detail. 6M

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Code: 21F00303

MCA III Semester Supplementary Examinations August/September 2023

**DEV OPS AND AGILE PROGRAMMING**

(Master of Computer Applications)

Time: 3 hours

Max. Marks: 60

Answer all the questions

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|----|--|----|
| 1  | (a) What is an agile? Explain agile retrospective.                         | 6M |
|    | (b) Discuss Extreme programming practices.                                 | 6M |
|    | <b>OR</b>  |    |
| 2  | (a) Explain Pair programming in XP iteration cycle.                        | 6M |
|    | (b) Describe about Xp-primary practices.                                   | 6M |
|    | <b>OR</b>  |    |
| 3  | (a) Explain Best practices of release management.                          | 6M |
|    | (b) Discuss the benefits of version control systems.                       | 6M |
|    | <b>OR</b>  |    |
| 4  | (a) Describe User stories in Agile Software Development.                   | 6M |
|    | (b) What is estimation in Agile and why agile estimations are essential?   | 6M |
|    | <b>OR</b>  |    |
| 5  | (a) How TDD fits into Agile development? Explain.                          | 6M |
|    | (b) What Is Refactoring? Discuss why Refactoring Is Important.             | 6M |
|    | <b>OR</b>  |    |
| 6  | (a) Explain when to use a Spike.   | 6M |
|    | (b) Discuss in detail about performance optimization methodology.          | 6M |
|    | <b>OR</b>  |    |
| 7  | (a) Describe Agile methodology to develop the MVP.                         | 6M |
|    | (b) Explain how to implement deployment automation.                        | 6M |
|    | <b>OR</b>  |    |
| 8  | (a) Discuss the necessity of continuous delivery.                          | 6M |
|    | (b) Explain about Continuous deployment.                                   | 6M |
|    | <b>OR</b>  |    |
| 9  | (a) Generalize the Core values of DevOps.                                  | 6M |
|    | (b) With the help of neat sketch explain Test-driven development cycle.    | 6M |
|    | <b>OR</b>  |    |
| 10 | (a) Why is there a need for Configuration Management? Discuss.             | 6M |
|    | (b) What are the Best DevOps Tools for Infrastructure Automation? Explain. | 6M |

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Code: 21F00303

MCA III Semester Regular Examinations March 2023  
**DEVOPS & AGILE PROGRAMMING**  
(For students admitted in 2021 only)

Time: 3 hours

Max. Marks: 60

Answer all the questions

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- 1 (a) What is Agile methodology? Explain four stages of sprint. 6M  
(b) How does Xp differ from traditional, non-agile methodologies? 6M  
**OR**
- 2 (a) Explain the process and roles of extreme programming. 6M  
(b) Discuss about Extreme programming life cycle. 6M
- 3 (a) Describe about Agile bugs classification. 6M  
(b) Explain how version control helps high performing development and DevOps team prosper. 6M  
**OR**
- 4 (a) Explain How risks are managed in Agile projects. 6M  
(b) What is iterative planning in Agile and when is it completed? 6M
- 5 (a) Discuss how agile teams validate their own work. 6M  
(b) Explain three phases of Test Driven Development. 6M  
**OR**
- 6 (a) Describe the two forms of spikes. 6M  
(b) Explain Basic Rules Regarding Performance. 6M
- 7 (a) Differentiate Between Agile and DevOps. 6M  
(b) What is the Purpose of a Minimum Viable Product? Explain. 6M  
**OR**
- 8 (a) Explain the ways to measure deployment automation. 6M  
(b) Discuss the business benefits of continuous integration. 6M
- 9 (a) Explain CAMS Approach to DevOps in detail. 6M  
(b) What is Configuration Management in software testing? Discuss. 6M  
**OR**
- 10 (a) Describe the Implementation of Infrastructure Automation & DevOps. 6M  
(b) Discuss the Purpose of a Root Cause Analysis. 6M

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