

Code No.: AI731PE

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**CMR ENGINEERING COLLEGE: : HYDERABAD  
UGC AUTONOMOUS**

**IV–B.TECH–I–Semester End Examinations (Supply) – April - 2025**

**DEVOPS  
(CSM)**

**[Time: 3 Hours]**

**[Max. Marks: 70]**

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART-A**

**(20 Marks)**

1. a) Differentiate between DevOps and Agile Model. [2M]
- b) Explain about the artifact repository. [2M]
- c) Explain in detail about coupling. [2M]
- d) What is version control, and why is it important in DevOps? [2M]
- e) What is Docker? [2M]
- f) Discuss about shared authentication. [2M]
- g) Explain about Jenkins Plugins. [2M]
- h) Name some popular CI/CD tools. [2M]
- i) Why are there so many different deployment Systems? Explain.. [2M]
- j) What is Unit Testing? [2M]

**PART-B**

**(50 Marks)**

2. Discuss in detail about release management and agile development model. [10M]
- OR**
3. Explain about DevOps life cycle. [10M]
4. Write a brief note on software architecture. Explain about the Monolithic Scenario. [10M]
- OR**
5. Compare the waterfall and Agile DevOps model. [10M]
6. Discuss about Hosted Git Servers and the pull request Model. [10M]
- OR**
7. Explain about Docker advantages and Disadvantages. [10M]
8. What are triggers? Explain about job chaining and build pipelines. [10M]
- OR**
9. Explain the CI/CD pipeline and its stages. [10M]
10. Explain the following. [10M]
  - i) Visualization Stacks
  - ii) Automated Integration Testing
- OR**
11. Discuss about Kubernetes using Application. [10M]

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