

# Question Paper

Exam Date & Time: 23-Nov-2023 (02:00 PM - 05:00 PM)



## MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal School of Information Sciences (MSIS), Manipal  
First Semester Master of Engineering - ME (Cloud Computing ) Degree Examination - November / December 2023

### DevOps for Cloud [CDC 5001]

**Marks: 100**

**Duration: 180 mins.**

**Thursday, November 23, 2023**

**Answer all the questions.**

- 1) Briefly explain classical software life cycle models in product life cycle development and its disadvantages. L3, CO1, PO1 (10 MARKS) (10)
- 2) Interpret the following Git commands. L3, CO1, PO1 (2 Marks each) (10)  
a) git config b) git clone c) git stash d) git rebase e) git status
- 3) Briefly explain DevOps life cycle. L3, CO1, PO1 (10 Marks) (10)
- 4) Briefly explain Continuous integration with suitable example. L3, CO2, PO3 (10 Marks) (10)
- 5) Describe containers and their use. Explain briefly the various docker components. L3, CO2, PO3 (5+5 Marks) (10)
- 6) Discuss the importance of docker volumes. Classify the 3 types of docker volumes. L3, CO2, PO3 (4+6 Marks) (10)
- 7) Illustrate the need of container orchestration with a relevant example and Explain various components of worker node. L4, CO3, PO4 (6+ 4Marks) (10)
- 8) Explain Docker Compose Use Cases? Classify the benefits of Docker Compose. Provide the basic Commands in Docker Compose. L4, CO3, PO4 (2+4+4 Marks) (10)
- 9) Explain configuration management. Explain why configuration management is important. Classify some SCM Features. L5, CO4, PO5 (2+4+4 Marks) (10)
- 10) Briefly explain the architecture and features of Ansible with suitable block diagram L5, CO4, PO5 (5+5 Marks) (10)

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