Program: B.Tech.
Semester: 6th
Name of Subject: DevOps: Software Architecture
Subject Code: PCIT-115
Paper ID: 17207

Time Allowed: 02 Hours   **Max. Marks: 60**

NOTE:

05-07-21(E)

1. Each question is of 10 marks.
2. Attempt any six questions out of nine
3. Any missing data may be assumed appropriately

1. Illustrate the concept of Devops. Explain how it works? Also explain various Devops tools in detail.
2. Explain the concept of continuous integration and delivery in detail. Why we need version control system? Explain different types of version control system.
3. Distinguish between GIT and Github. How will you create a repository in GIT. Explain various commands of GIT.
4. Illustrate the concept of docker container in detail and also explain various states of docker container and how do you get the number of containers running paused and stopped?
5. (a) Why is Jenkins used? How to link Jenkins to GIT repositories?
   (b) Why should anyone use docker and what does it offer?
6. (a) How you can copy a commit made in one branch to another? What are the different ways you can refer to a commit?
   (b) What do you know about pulling and pushing repositories? Compare and explain them in detail.
7. What is the purpose of GIT clone? How to clone repository to system? Write the workflow of branching and merging with some examples.
8. Explain the concept of Docker and docker architecture. How to create custom docker images and pushing images to docker hub?
9. Explain devops and in which stage does Jenkins fit in? What is the requirement of using Jenkins? Mention the advantages and disadvantages of Jenkins.

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