**R18** 

## Code No: 155EX

## JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD B. Tech III Year I Semester Examinations, January/February - 2023 DEVOPS

(Computer Science and Engineering – Data Science) Time: 3 Hours Max. Marks: 75 **Note:** 1) Ouestion paper consists of Part A, Part B. ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions. iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions. PART - A **(25 Marks)** How is Devops different from agile methodology? 1.a) [2] Explain about the artifact repository. b) [3] What is the principle of cohesion? c) [2] Explain in detail about coupling. d) [3] What is Gerrit? [2] e) f) Discuss about shared authentication. [3] What is Jenkins file system layout? [2] g) h) Explain about Jenkins plugins. [3] What is unit testing? i) [2] i) Why are there so many deployment systems? Ex [3] PART – B (50 Marks) 2. Explain about Scrum, Kanban, and the delivery pipeline in detail [10] 3. Discuss in detail about release management and agile development model. [10] 4. Describe Devops, architecture and resilience in detail. [10] **[101** Write a brief note on software architecture. Explain about the monolithic scenario. 5. 6. Explain about different Git server implementations and Docker intermission. [10] 7. Discuss about hosted Git servers and the pull request model. [10] 8. Describe the host server and build slaves in detail. [10] 9. What are triggers? Explain about job chaining and build pipelines. [10] 10. Explain the following:

11. Explain the following: a) Visualization stacks

a) Deploying with SaltStack

ation stacks b) Automated integration testing. [5+5]

b) Testing backend integration points.

[5+5]

OR