SVKM'S NMIMS

MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT& ENGINEERING/ SCHOOL OF TECHNOLOGY MANAGEMENT

Academic Year: 2023-2024

Program/s: MCA	Year: II Semester: III	
Stream/s ;Batch B1_		
Subject: DevOps	Time: 1 hrs	
Date: 16/10/2024	No. of Pages:1	
Marks: 10		

M2 Examination

Instructions: Candidates should read carefully the instructions printed on the question paper and on the cover of the Answer Book, which is provided for their use.

- 1) Question is compulsory.
- 2) All questions carry equal marks.
- 3) Answer to each new question to be started on a fresh page.
- 4) Figures in brackets on the right hand side indicate full marks.
- 5) Assume Suitable data if necessary.
- 6) In case of hardware or software issues take screen shot of the issue and paste in the answer sheet. Continue solving the question by writing the flowchart or algorithm or steps.
- 7)Candidates should create a word document of the solution and paste their steps, screenshot of outputs / commands executed/results in the document. Further any code written should also be paste.

Q1	CO- 1; SO-1; BL-1	Integrate a basic Python project into SonarCloud and analyze its code quality. Configure the project to show issues like code smells, bugs, and security vulnerabilities.	Roll no ending with 1,5
Q2	CO-1; SO-1; BL-1	Scale a running Kubernetes deployment from 2 replicas to 5 replicas, and verify that the scaling was successful.	Roll no ending with 2,6
Q3	CO- 2; SO-2 ; BL-2	Write an Ansible playbook that installs Apache on a remote server and ensures the service is started.	Roll no ending with 3,7
Q4	CO- 3; SO-3 ; BL-3	Configure Jenkins to deploy a Docker container running Nginx to a local Docker host. The pipeline should build the Docker image and start the container.	Roll no ending with 4,8
Q5	CO-2; SO-5; BL-2	Write a Terraform configuration to create a local Docker container running Nginx. The container should be created using the Docker provider in Terraform.	Roll no ending with 0, 9