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Candidate's Seat No: _____

IMSc IT CAD (NEP) Sem.-3 Examination

DSC-C-CAD-233T

DevOps Foundation

December-2025

Time : 1.00 Hour]

[Max.Marks : 25

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Do not write anything on the question paper.

		Marks
Q.1	Define DevOps and explain its role in DevOps.	(05)
Q.2	Explain the differences between Continuous Integration, Continuous Delivery, and Continuous Deployment with examples.	(05)
	OR	
Q.2	Explain the concept of Value Stream Mapping (VSM) in DevOps and its benefits.	(05)
Q.3	Describe the key stages of a CI/CD pipeline and explain their importance in achieving automation and reliability.	(05)
	OR	
Q.3	Describe how DevOps practices support cloud-native applications .	(05)
Q.4	The term "DevOps" is a combination of: A) Development and Operations B) Design and Optimization C) Deployment and Options D) Delivery and Operations	(01)
Q.5	Which of the following best describes DevOps? A) A programming language B) A software development methodology combining culture, automation, and collaboration C) A database management technique D) A testing framework	(01)
Q.6	In DevOps, CALMS stands for: A) Culture, Automation, Lean, Measurement, Sharing B) Code, Analysis, Lifecycle, Management, Strategy C) Collaboration, Agile, Lean, Metrics, Security D) Communication, Automation, Logic, Monitoring, Security	(01)

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Q.7	In Continuous Deployment, every change that passes automated tests is: A) Held for manual approval B) Deployed automatically to production C) Deleted after testing D) Stored for future review	(01)
Q.8	Lean methodology in DevOps focuses on: A) Increasing workload B) Reducing waste and maximizing value C) Delaying releases D) Building large teams	(01)
Q.9	The main goal of DevOps is to: A) Increase hardware performance B) Combine development and operations for faster delivery C) Replace manual coding with AI D) Eliminate testing activities	(01)
Q.10	Which of the following is a key characteristic of DevOps culture? A) Blame-oriented environment B) Collaboration and shared responsibility C) Isolated teams D) Manual release cycles	(01)
Q.11	GitOps can be defined as: A) Manual infrastructure provisioning B) Using Git as a single source of truth for infrastructure and application states C) Manual pull requests for code only D) Tracking database logs in Git	(01)
Q.12	A key outcome of adopting DevOps is: A) Increased delivery speed with improved quality B) Higher downtime and manual errors C) Longer deployment cycles D) Poor communication	(01)
Q.13	Which of the following is <i>not</i> a phase in the DevOps lifecycle? A) Plan B) Develop C) Design D) Monitor	(01)

--Best of Luck --