

PRN No.	
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PAPER CODE	0315-244C(88)
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(AY:2025-26) December 2025 (ENDSEM) EXAM
TY (SEMESTER - I)

COURSE NAME: ML OPERATIONS Branch: AI COURSE CODE: CA31234C

(T.Y (Pattern 2023))

Time: [1Hr 30 Min]

[Max. Marks: 40]

Instructions to candidates:

- 1) **Figures to the right indicate full marks. Use of scientific calculator is allowed**
- 2) **Use suitable data wherever required**
- 3) **All questions are compulsory. Solve any two sub question each from Questions 1 and 2**
- 4) **Solve any one sub question (2 marks) from Questions 3 ,4 ,5 and 6 and sub question of 4 marks is compulsory from questions 3,4,5,and 6**

Q. No.	Question Description	Max. Marks	CO mapped	BT Level
Q.1	a) Differentiate between MLOps, Devops and Dataops with examples.	[4]	CO1	Underst and
	b) Describe the architecture of an end-to-end MLOps system using any tools like MLflow.	[4]	CO1	Underst and
	c) How does data versioning help ensure reproducibility in ML workflows?	[4]	CO1	Underst and
Q2	a) Discuss data versioning in MLOps? Explain how DVC helps manage datasets.	[4]	CO2	Underst and
	b) Explain how Weights & Biases supports collaborative ML development.	[4]	CO2	Underst and
	c) How does a Model Registry help in ML Operations?	[4]	CO2	Underst and
Q3	a) Describe how GitHub Actions can automate ML workflows. OR	[2]	CO3	Underst and
	b) What is the purpose of using feature stores in MLOps.	[2]	CO3	Underst and
	c) Give an example of integrating model evaluation results with a CI/CD system.	[4]	CO3	Analyze

Q4	a) State two benefits of using Flask for ML models: OR	[2]	CO4	Underst and
	b) Explain the difference between batch and real-time model deployment.	[2]	CO4	Underst and
	c) How can you handle environment variables and secrets in Dockerized ML models?	[4]	CO4	Analyze
Q.5	a) What is Docker and why is it used in MLOps? OR	[2]	CO5	Underst and
	b) What is Interpretability? Enlist different types of Interpretability.	[2]	CO5	Underst and
	c) Explain How SHAP Works?	[4]	CO5	Analyze
Q.6	a) Define Explainable ML and why it is important. OR	[2]	CO6	Underst and
	b) List two advantages of SHAP over LIME.	[2]	CO6	Underst and
	c) Explain different steps in Fairness Audit?	[4]	CO6	Analyze

Note: [BT-level-1 Remember 2 Understand 3 Apply 4 Analyze 5 Evaluate 6 Create]