

First and last name	

# Question 1/20

In ML-Ops, Kafka's integration with which tool enables automated model deployment and scaling?

- A. TensorFlow
- B. PyTorch
- C. Kubernetes
- D. Apache Spark

#### Question 2/20

Which Kafka deployment architecture is suitable for ML-Ops workflows requiring high availability?

- A. Single-node
- B. Multi-node
- C. Distributed with replication
- D. Clustered with load balancing

### Question 3/20

How does Kafka support the reproducibility of machine learning experiments in ML-Ops?

- A. By automating model deployment
- B. By versioning model artifacts
- C. By logging and replaying streaming data
- D. By optimizing model hyperparameters

## Question 4/20

What role does Kafka play in model monitoring and drift detection in ML-Ops?

- A. Model training
- B. Model deployment
- C. Continuous ingestion and analysis of real-time data
- D. Model interpretation

## Question 5/20

Which Kafka feature enables seamless integration with machine learning orchestration tools like Apache Airflow?

- A. Kafka Connect
- B. Kafka Streams
- C. Kafka Admin Client
- D. Kafka Producer API



## Question 6/20

How does Kafka's real-time stream processing capability benefit model inference in ML-Ops?

- A. By increasing model inference latency
- B. By improving model interpretability
- C. By enabling low-latency decision-making
- D. By optimizing model performance metrics

#### **Ouestion 7/20**

In ML-Ops, Kafka can be used to implement which of the following data processing techniques?

- A. Feature engineering
- B. Dimensionality reduction
- C. Model training
- D. Hyperparameter tuning

## Question 8/20

Which Kafka component facilitates the integration of machine learning models with external data sources?

- A. Kafka Broker
- B. Kafka Producer
- C. Kafka Connect
- D. Kafka Consumer

## Question 9/20

How does Kafka's fault tolerance feature benefit ML-Ops deployments?

- A. By reducing model bias
- B. By ensuring data integrity
- C. By minimizing data loss during system failures
- D. By improving model explainability

#### **Ouestion 10/20**

What role can Kafka play in A/B testing of machine learning models?

- A. Model training
- B. Model deployment
- C. Routing real-time data to different model versions
- D. Model evaluation

#### **Ouestion 11/20**

How does Kafka's scalability benefit ML-Ops workflows?

- A. By reducing model complexity
- B. By improving model accuracy
- C. By handling large volumes of streaming data
- D. By minimizing model inference latency



## Question 12/20

Which Kafka component is commonly used for building real-time data pipelines in ML-Ops?

- A. Kafka Connect
- B. Kafka Streams
- C. Both Kafka Connect and Kafka Streams
- D. Kafka Admin Client

#### Ouestion 13/20

What role does Kafka play in model versioning and experimentation?

- A. Capturing and logging real-time model predictions
- B. Storing model artifacts in a centralized repository
- C. Orchestrating model training pipelines
- D. Validating model performance metrics

## Question 14/20

In ML-Ops, Kafka can be used to integrate machine learning models with which of the following?

- A. Relational databases
- B. Cloud storage services
- C. Streaming data sources
- D. Graph databases

## Question 15/20

Which Kafka feature is particularly beneficial for deploying machine learning models in real-time?

- A. Topic partitioning
- B. Low-latency message processing
- C. Exactly-once semantics
- D. Data replication

#### **Ouestion 16/20**

How does Apache Kafka facilitate ML-Ops workflows?

- A. By providing real-time data streaming for model training and inference
- B. By offering built-in machine learning algorithms
- C. By automating model deployment
- D. By managing Kubernetes clusters

#### **Ouestion 17/20**

Which component ensures the scalability and fault tolerance of the kafka system?

- A. Producer
- B. Consumer
- C. Zookeeper
- D. Broker



# Question 18/20

What is the default port used by Kafka for communication?

- A. 8080
- B. 9090
- C. 9092
- D. 8888

## Question 19/20

How does Kafka ensure fault tolerance and high availability?

- A. Through replication of topics
- B. By limiting the number of consumers
- C. By maintaining multiple brokers
- D. By disabling data compression

# Question 20/20

What is the role of a Kafka producer?

- A. Consuming data from Kafka topics
- B. Managing Kafka cluster
- C. Publishing data to Kafka topics
- D. Monitoring Kafka performance