
 **1. "Explain a time when your model worked well in testing but failed in production. What went wrong and how did you fix it?"**

Why it's asked: Interviewers want to know if you've faced real-world data drift, overfitting, or unseen deployment challenges.

 **2. "How would you design a data validation pipeline for incoming real-time data from an unreliable source?"**


Why it's asked: Tests your knowledge of data engineering + ML operations — especially in edge or IoT use cases.

 **3. "If you're given a dataset with 1,000 features and no description, how would you proceed with feature selection?"**


Why it's asked: Assesses your ability to combine statistical thinking with unsupervised techniques like PCA, VIF, etc.

 **4. "How do you explain a model decision that goes against business intuition?"**


Why it's asked: Tests storytelling and conflict-resolution skills — critical when your model contradicts human judgment.

 **5. "What would you do if your model's ROC-AUC is high, but your business KPI (like revenue) isn't improving?"**


Why it's asked: Separates analysts from real data scientists. Focus on business impact over technical performance.

 **6. "Tell me about a time you had to say 'no' to using machine learning. What did you choose instead?"**


Why it's asked: Evaluates maturity and judgment — not every problem needs an ML model.

 **7. "How would you handle imbalanced data if you're not allowed to use oversampling or undersampling techniques?"**

Why it's asked: Forces creative thinking — think cost-sensitive learning, class weights, anomaly detection.

 **8. "A stakeholder insists on using a dashboard that shows misleading metrics. How do you handle the situation?"**

Why it's asked: Tests ethics, communication, and ability to advocate for data integrity.

 **9. "Describe your version control and documentation practices for ML models."**

Why it's asked: Checks how production-ready and team-compatible you are — MLflow, Git, Notebooks, model cards, etc.

 **10. "If you could only collect 5 features for your model, how would you choose them and why?"**

Why it's asked: Tests prioritization, business alignment, and interpretability in a constrained environment.