

Oracle Cloud Infrastructure 2025 Data Science Professional

Questions & Answers Demo

Version: 6.0

Question: 1

A bike sharing platform has collected user commute data for the past 3 years. For increasing profitability and making useful inferences, a machine learning model needs to be built from the accumulated dat

a. Which of the following options has the correct order of the required machine learning tasks for building a model?

A. Data Access, Feature Exploration, Data Exploration, Feature Engineering, Modeling

B. Data Access, Data Exploration, Feature Exploration, Feature Engineering, Modeling

C. Data Access, Data Exploration, Feature Engineering, Feature Exploration, Modeling

D. Data Access, Feature Exploration, Feature Engineering, Data Exploration, Modeling

Answer: C

Explanation:

Detailed Answer in Step-by-Step Solution:

Data Access: The first step in any machine learning workflow is accessing the raw data. This involves retrieving the user commute data collected over the past 3 years from the bike-sharing platform's storage system.

Data Exploration: Once data is accessed, it's explored to understand its structure, quality, and patterns (e.g., missing values, distributions). This step helps identify what preprocessing is needed. Feature Engineering: After understanding the data, features are created or transformed (e.g., commute duration, time of day) to improve model performance. This step precedes feature exploration because you need engineered features to analyze further.

Feature Exploration: This involves analyzing the engineered features (e.g., correlation analysis, importance ranking) to refine them or select the most relevant ones for modeling.

Modeling: Finally, the prepared data and features are used to train and evaluate a machine learning model.

Option C (Data Access, Data Exploration, Feature Engineering, Feature Exploration, Modeling) follows this logical sequence, aligning with standard ML workflows.

The correct order reflects the machine learning lifecycle as outlined in Oracle's OCI Data Science documentation. Data Access is the initial step to retrieve data, followed by Data Exploration to assess it (e.g., using OCI Data Science Notebook Sessions with tools like pandas). Feature Engineering transforms raw data into meaningful inputs, followed by Feature Exploration to analyze feature importance (e.g., using ADS SDK's correlation tools). Modeling is the final step where the model is built and trained. This sequence is consistent with Oracle's recommended practices for building ML models in OCI Data Science (Reference: Oracle Cloud Infrastructure Data Science Service Documentation, "Machine Learning Lifecycle").

Question: 2

You have been given a collection of digital files required for a business audit. They consist of several different formats that you would like to annotate using Oracle Cloud Infrastructure (OCI) Data Labeling. Which THREE types of files could this tool annotate?

A. Video footage of a conversation in a conference room

- B. Images of computer server racks
- C. A typewritten document that details an annual budget
- D. A collection of purchase orders for office supplies
- E. An audio recording of a phone conversation

Answer: A,B,C

Explanation:

Detailed Answer in Step-by-Step Solution:

Understand OCI Data Labeling Capabilities: OCI Data Labeling is designed to annotate data for machine learning, supporting specific file types like images, text documents, and videos. Evaluate Options:

A . Video footage: Supported for tasks like object detection or action recognition.

B. Images: Supported for image classification, object detection, etc.

C . Typewritten document: Supported as text data for tasks like entity extraction or classification.

D . Purchase orders: While potentially text-based, this is ambiguous without format clarification (e.g., PDF, image). OCI supports text annotation, but "purchase orders" isn't a specific file type—it's assumed as text here.

E . Audio recording: Not supported, as OCI Data Labeling focuses on visual and textual data, not audio.

Select Three: A (video), B (images), and C (text documents) are explicitly supported file types.

OCI Data Labeling supports annotating datasets of images, text, and videos, as per the official documentation. Video footage (A) can be annotated for tasks like object tracking, images (B) for classification or detection, and typewritten documents (C) for text-based annotations (e.g., named entity recognition). Audio files (E) are not supported, and while purchase orders (D) could be text, the question specifies "typewritten document" as a clearer match. (Reference: Oracle Cloud Infrastructure Data Labeling Service Documentation, "Supported Data Types").

Question: 3

Which TWO statements about Oracle Cloud Infrastructure (OCI) Open Data service are true?

A. Open Data includes text and image data repositories for AI and ML.

B. Audio and video formats are not available.

C. Each dataset in Open Data consists of code and tooling usage examples for consumption and reproducibility.

F. Subscribers can pay and log into Open Data to view curated datasets that are otherwise not available to the public.

Answer: A,D

Explanation:

Detailed Answer in Step-by-Step Solution:

Analyze OCI Open Data: OCI Open Data is a free service providing access to public datasets for AI/ML use cases.

Evaluate Statements:

A: True—Open Data includes text and image datasets (e.g., geospatial images).

B: False—Video and other formats may be available depending on the dataset; no strict exclusion exists.

C: False—Datasets may include metadata, but code/tooling examples aren't guaranteed.

D: True—It's designed for data scientists and analysts who work with datasets.

E: False—It's not a user-contributed repository; it's curated by Oracle.

F: False—Open Data is free and public, not subscription-based.

Select Two: A and D align with the service's purpose and offerings.

OCI Open Data provides access to datasets like text and images (A) for AI/ML, aimed at data professionals (D). It's a free, curated service, not user-contributed (E) or paid (F), and while it focuses on certain formats, it doesn't explicitly exclude audio/video (B). (Reference: Oracle Cloud Infrastructure Open Data Documentation, "Overview of Open Data").

Question: 4

You are running a pipeline in the OCI Data Science service and want to override some of the pipeline's default settings. Which of the following statements about overriding pipeline defaults is true?

A. Pipeline defaults can be overridden only during pipeline creation.

B. Pipeline defaults can be overridden only by the Administrator.

C. Pipeline defaults can be overridden before starting the pipeline execution.

D. Pipeline defaults cannot be overridden once the pipeline has been created.

Answer: C

Explanation:

Detailed Answer in Step-by-Step Solution: Understand OCI Data Science Pipelines: Pipelines automate ML workflows with configurable steps. Check Override Mechanism: Defaults (e.g., compute shape, storage) can be modified before execution via the OCI Console, SDK, or CLI.

Evaluate Options:

A: False—Overrides can occur post-creation, before running.

B: False—Any authorized user, not just admins, can override defaults.

C: True—Settings can be adjusted before execution starts.

D: False—Defaults can be changed post-creation, pre-execution.

Conclusion: C is correct as it reflects the flexibility of pipeline configuration.

OCI Data Science Pipelines allow users to override default settings (e.g., compute resources, environment variables) before execution, as noted in the official documentation. This can be done via the UI or programmatically, offering flexibility beyond creation time (A) and without admin-only restrictions (B). (Reference: Oracle Cloud Infrastructure Data Science Pipelines Documentation, "Configuring Pipelines").

Question: 5

How are datasets exported in the OCI Data Labeling service?

A. As a binary fileB. As an XML fileC. As a line-delimited JSON fileD. As a CSV file

Answer: C

Explanation:

Detailed Answer in Step-by-Step Solution:

Understand OCI Data Labeling Export: After annotation, datasets are exported for ML use. Check Supported Formats: OCI Data Labeling exports annotations in a structured, machine-readable format.

Evaluate Options:

A: Binary isn't a standard export format for annotations.

B: XML isn't used; JSON is preferred for flexibility.

C: Line-delimited JSON is the correct format, aligning with ML workflows.

D: CSV is common but not the default for OCI Data Labeling.

Conclusion: C matches the official export format.

OCI Data Labeling exports annotated datasets as line-delimited JSON files, which store each annotation as a separate JSON object per line, suitable for ML pipelines. This is explicitly stated in the documentation. (Reference: Oracle Cloud Infrastructure Data Labeling Service Documentation, "Exporting Datasets").