

AWS Certified Machine Learning - Specialty Practice Questions

Requirement: Share 65 ML Specialty practice questions.

Important Note: The practice questions should appropriately belong to ML Specialty in terms of exam objectives & difficulty level.

Delivery Timeline: < Date >

Question Response Types

There are two types of questions:

- Multiple Choice Single Response – **1** correct answer **3** incorrect responses (distractors).
- Multiple Choice Multiple Response – **2** or more correct answers out of **5** or more options.

Important Note

- Do write Question Number for quick identification. Q# 1, Q# 2 & so on.
- Please mention Domain (based on ML Specialty exam blueprint), Topic & Sub-Topic (If Applicable) with every question.
- Note that we're expecting standard scenario based questions & NOT straight-forward definition kind of questions.
- The options should not have any obviously incorrect option. We need to word the options so that all of them should appear correct for the students, but a subtle point should mark the correct answer without any ambiguity. So, one answer should be the best choice without any doubt.
- The answer / explanation section should contain explanations on why the answer is correct and others are incorrect. It should also contain the relevant resource link (for details) preferably from AWS documentation.
 - Example
 - Option A is incorrect because..
 - Option B is CORRECT because...
 - Option C is incorrect because..
 - Option D is incorrect because..
- Try to balance the domains based on weightage % defined in the exam blueprint.
- Any AWS service or feature must be approximately 6 months old to figure out in Practice Tests. Put a note in the explanation for any latest service or feature that might be on the borderline of appearing in the real exam.

- **Plagiarism** in any form - Question or in Explanation will be **rejected**. Questions & Explanations should reflect your own professional experience & AWS skills. Author's who indulge in plagiarism will be **blacklisted** & dropped from our author's list.
- The ownership of the questions once approved & published on Whizlabs LMS platform, lies solely with Whizlabs Software Pvt. Ltd. You can't share or publish it elsewhere in any circumstances.

Sample Format of Questions

Question : #

Main Topic : < >

Sub Topic : [optional]

Domain: < >

Question text:

<Scenario based. Should be clear in terms of requirements. No ambiguity. No duplicate options. In case of multiple answers, at the end, you should include number of expected answers. e.g. **Choose 2 answers**, choose 3 answers etc. For single answers this is NOT required>

A) Option A...

B) Option B...

C) Option C...

D) Option D...

Answer: A and C

Explanation:

Option A is CORRECT because...

Option B is incorrect because...

Option C is CORRECT because...

Option D is incorrect because...

[Insert the explanation in clear and lucid language here.]

Diagram: [Optional] [Insert the architectural or conceptual diagram here.]

Reference: [Insert the references here - which may include links to AWS Documentation, Blog, re:Invent video, Authority YouTube video].

ML Specialty has 4 Domains

S. No.	Name of the Domain	Weight	Estimated No. of Questions (out of 65 As per weightage %)
1	Data Engineering	20%	13
2	Exploratory Data Analysis	24%	16
3	Modeling	36%	23
4	ML Implementation and Operations	20%	13

-----Question Section Starts-----

Question: 1

Main Topic : Machine Learning

Sub Topic : Create data repositories for machine learning

Domain: Data Engineering

Question text:

You are a machine learning expert working for a marketing firm. You are supporting a team of data scientists and marketing managers who are running a marketing campaign. Your data scientists and marketing managers need to answer the question “Will this user subscribe to my campaign?” You have been given a dataset in the form of a CSV file which is formatted as such:

UserId, jobId, jobDescription, educationLevel, campaign, duration, willRespondToCampaign

When you build your schema for this dataset, which of the following data descriptors would you use to define the willRespondToCampaign attribute? Please choose 2 answers.

- A) CATEGORICAL
- B) NUMERIC
- C) TEXT
- D) BINARY
- E) targetAttributeName
- F) rowId

Answer: D and E

Explanation:

Option A is incorrect because you choose the CATEGORICAL data type for an attribute that holds a limited set of unique strings. For example, a user name, the region, and a product code are categorical values. The willRespondToCampaign attribute takes on either ‘yes’ or ‘no’ values, which are binary in nature.

Option B is incorrect because you choose the NUMERIC data type for an attribute that holds a quantity as a number. For example, count, height, and acceleration rate are numeric values.

Option C is incorrect because you choose the TEXT data type for an attribute that is a string, or a set of words. Amazon ML converts text attributes into tokens and uses white space as a delimiter. For example, document title becomes document and title, and document-title here becomes document-title and here.

Option D is correct because you choose the BINARY data type for an attribute that only has two possible values, such as yes or no, or true or false. The attribute willRespondToCampaign has only two possible answers: yes or no.

Option E is correct because for each user observation you are trying to discern “Will this user subscribe to my campaign?” You assign the targetAttributeName field value to the name of the attribute that you are trying to predict. You must assign a targetAttributeName when you create or evaluate your model.

Option F is incorrect because you choose the rowId field value as an optional flag associated with an attribute in the input data. If you specify an attribute as the rowId, it is included in the prediction output. This attribute allows you to associate each prediction with its observation. The willRespondToCampaign attribute would make a poor identifier for each observation since it only takes two values: yes, or no.

Reference:

Please see the AWS Developer Guide titled **Creating a Data Schema for Amazon ML** (<https://docs.aws.amazon.com/machine-learning/latest/dg/creating-a-data-schema-for-amazon-ml.html#assigning-data-types>) for a complete description of the schema attributes.