

# Keras Deep Dive Quiz

Test your knowledge on Keras model building, APIs, and deployment strategies.

**Question 1: Which of the following is NOT a way to build models in Keras?**

- A. Sequential API
- B. Functional API
- C. Subclassing API
- D. Pipeline API

**Question 2: What is the main advantage of the Keras API design principle called 'progressive disclosure of complexity'?**

- A. It makes Keras only suitable for beginners.
- B. It hides all complexity from the user.
- C. It allows users to start simple and gradually handle more complex use cases.
- D. It restricts users to a single way of building models.

**Question 3: Which Keras model-building API would you use if you need to create custom layers, metrics, and losses?**

- A. Sequential API
- B. Functional API with built-in layers
- C. Functional API with custom layers and metrics
- D. Only the Sequential API supports custom layers

**Question 4: What is the simplest way to build a Keras model?**

- A. Using the Sequential model
- B. Using the Functional API
- C. Subclassing the Model class
- D. Using TensorFlow GradientTape

**Question 5: Which method is used to add layers incrementally to a Sequential model?**

- A. append()
- B. add()
- C. insert()
- D. extend()

**Question 6: If you want to deploy a Keras model on a smartphone or embedded device, which framework should you use?**

- A. TensorFlow.js
- B. TensorFlow Lite
- C. Keras Sequential API
- D. TensorFlow Extended (TFX)

**Question 7: Which of the following is true about Keras components across different workflows?**

- A. Components from one workflow cannot be used in another.
- B. All workflows use completely different APIs.
- C. Components from any workflow can be used in any other workflow.
- D. Only the Sequential API components are reusable.

**Question 8: What is the purpose of the compile() method in Keras?**

- A. To build the model architecture
- B. To configure the model for training by specifying optimizer, loss, and metrics
- C. To train the model on data
- D. To evaluate the model performance

**Question 9: Which Keras API allows you to write everything yourself from scratch, including the training loop?**

- A. Sequential API
- B. Functional API
- C. Subclassing API
- D. Keras Datasets API

**Question 10: How can you use a saved Keras model in a browser-based JavaScript application?**

- A. By importing it directly into TensorFlow.js
- B. By converting it to TensorFlow Lite format
- C. By rewriting the model in JavaScript manually
- D. By using the Sequential API in JavaScript