

Question: According to the text, which of the following is defined as a value that the model calculates during training?

- A) Learning rate
- B) Batch size
- C) Weights
- D) Epochs

Correct Answer: C

Question: What is the consequence if the learning rate is set too high during training?

- A) The model converges very slowly.
- B) The model never converges, but instead bounces around the weights and bias that minimize the loss.
- C) The model automatically switches to full-batch gradient descent.
- D) The model converges quickly but becomes extremely noisy.

Correct Answer: B

Question: What characterizes Stochastic Gradient Descent (SGD) regarding batch size?

- A) It uses the entire training dataset (full batch) per iteration.
- B) It uses only a single example (a batch size of one) per iteration.
- C) It averages gradients from a batch size greater than 1 but less than N data points.
- D) It only updates weights and bias after the completion of an entire epoch.

Correct Answer: B

Question: In the context of model training, what does one "epoch" represent?

- A) The number of iterations required to update the parameters once.
- B) The total number of model parameter updates performed during the entire training process.
- C) The time it takes for the Mean Squared Error (MSE) to converge to a lower value.
- D) The model having processed every example in the training set once.

Correct Answer: D

Question: Which performance metric is also known as the True Positive Rate (TPR) and measures the proportion of all actual positives that were classified correctly?

A) Specificity

B) Accuracy

C) Precision

D) Recall

Correct Answer: D