



Started on

Friday, 7 February 2025, 12:18 PM

State

Finished

Completed on

Friday, 7 February 2025, 12:26 PM

Time taken

8 mins 2 secs

Marks

15.00/15.00

Grade

100.00 out of 100.00

### Question 1

1.00/1.00

In the generator code, what is the purpose of the Reshape layer?

- ☐ To upsample the images
- ☐ To normalize the image values
- ☐ To flatten the images
- ☒ To reshape the dense layer into a 3D tensor for images✓
- ☐ To critique the images

The correct answer is: To reshape the dense layer into a 3D tensor for images

### Question 2

1.00/1.00

During training, what does the generator use to improve itself?

- ☐ Real images
- ☐ Feedback from both the user and the discriminator
- ☐ CIFAR-10 dataset
- ☐ Feedback from the user
- ☒ Feedback from the discriminator✓

The correct answer is: Feedback from the discriminator

### Question 3

1.00/1.00

Which technique can help in dealing with training instability in GANs?

- ☐ Dropout
- ☒ Gradient clipping✓
- ☐ All of the given options
- ☐ Noise addition
- ☐ Data augmentation

The correct answer is: Gradient clipping

### Question 4

1.00/1.00

Which activation function is used in the final layer of the generator model?



74%



- ☐ softmax
- ☐ sigmoid
- ☒ tanh✓
- ☐ leakyrelu
- ☐ relu

The correct answer is: tanh

### Question 5

1.00/1.00

In the provided code, why is discriminator.trainable set to False when setting up the combined system?

- ☐ None of the given options
- ☐ To speed up training
- ☒ To make sure only the generator is trained in this step✓
- ☐ To prevent overfitting
- ☐ To increase discriminator's accuracy

The correct answer is: To make sure only the generator is trained in this step

### Question 6

1.00/1.00

What is used to refine the models during training?

- ☐ LeakyReLU
- ☒ Adam Optimizer✓
- ☐ All of the given options
- ☐ Conv2D
- ☐ Batch Normalization

The correct answer is: Adam Optimizer

### Question 7

1.00/1.00

Why might someone want to use GANs on the CIFAR-10 dataset?

- ☐ To critique the images in the dataset
- ☒ To generate novel and relevant images to augment dataset✓
- ☐ To classify the images in the dataset
- ☐ To delete images from the dataset
- ☐ To reduce the size of the dataset

The correct answer is: To generate novel and relevant images to augment dataset



### Question 8

1.00/1.00

Which challenge refers to the generator producing limited varieties or even the same sample every time?

- ☐ Convergence Issues
- ☐ All of the given options
- ☐ Training Instability
- ☐ Data Augmentation
- ☒ Mode Collapse✓

The correct answer is: Mode Collapse

### Question 9

1.00/1.00

Which of the following best describes the role of the generator in a GAN?

- ☐ To critique images
- ☐ To evaluate the loss
- ☐ None of the given options
- ☒ To produce images✓
- ☐ To combine images

The correct answer is: To produce images

### Question 10

1.00/1.00

What are the two main components of a GAN?

- ☐ Generator & UpSampler
- ☒ Generator & Discriminator✓
- ☐ Generator & Evaluator
- ☐ Discriminator & Sampler
- ☐ Discriminator & Evaluator

The correct answer is: Generator & Discriminator

### Question 11

1.00/1.00

Which of the following is NOT a feedback given to the generator during training?

- ☐ This is a fake image
- ☐ This image looks like a car
- ☒ This image is pixelated✓



74%



- ☐ This is a genuine image
- ☐ This image looks blurry

The correct answer is: This image is pixelated

### Question 12

1.00/1.00

What does the discriminator do in a GAN?

- ☐ Combines images
- ☒ Evaluates if an image is real or fake✓
- ☐ Both create and evaluate images
- ☐ Enhances image resolution
- ☐ Creates images

The correct answer is: Evaluates if an image is real or fake

### Question 13

1.00/1.00

How many images are there in each class of the CIFAR-10 dataset?

- ☐ 12000
- ☒ 6000✓
- ☐ 5000
- ☐ 15000
- ☐ 10000

The correct answer is: 6000

### Question 14

1.00/1.00

Which architecture can help address convergence issues in traditional GANs?

- ☐ DBN
- ☒ WGAN✓
- ☐ RNN
- ☐ CNN
- ☐ LSTM

The correct answer is: WGAN

### Question 15

1.00/1.00



In the discriminator's code, which layer helps in reducing the dimensions of the input image?

- ☐ UpSampling2D
- ☐ BatchNormalization
- ☐ Reshape
- ☒ Conv2D with strides ✓
- ☐ Dense

The correct answer is: Conv2D with strides