**Module 1 Quiz**

**TOTAL POINTS 10**

Question 1

Which of the following is not a computer vision task?

1 point

Volumetric analysis

Pose estimation

Object detection

Semantic segmentation

Question 2

Which deep learning framework is the GluonCV toolkit based on?

1 point

Pytorch

Apache MXNet

Caffe

Chainer

Question 3

Which of the following is untrue about the symbolic paradigm in deep learning frameworks?

1 point

Symbolic programs do not need to be compiled before they can be executed

Symbolic programs provide opportunities to optimize computational graphs

Symbolic programs can be hard to debug when they throw an error

Symbolic programs are often constructed with variable placeholders

Question 4

What command in the Gluon API of MXNet converts an imperative computational graph to a symbolic graph?

1 point

.convert()

.to\_symbol()

.hybridize()

.optimize()

Question 5

What area of machine learning currently achieves State of the Art performance in computer vision tasks?

1 point

Reinforcement Learning

Metric Learning

Similarity Learning

Deep Learning

Question 6

What do image classification models predict?

1 point

A cluster centroid for the class of objects in the image

A hierarchy for objects in the image

Another image that is similar to the input image

A predefined label for the image

Question 7

Which computer vision tasks predicts pixel level masks for each distinct class of objects in the image?

1 point

Object extraction

Semantic Segmentation

Instance Segmentation

Super-resolution imaging

Question 8

What discovery by Hubel and Wiesel and implemented by Fukushima in the Neocognitron is crucial to the success of modern deep learning based computer vision systems?

1 point

Vision is intimately tied to recognition and understanding

Vision is achieved by convolution in the human brain

Vision is hierarchical and local at each level

Vision involves extensive feature engineering

Question 9

What exactly led to the resurgence of neural network models and deep learning for computer vision tasks in 2012?

1 point

Availability of large datasets thanks to the internet

More powerful computational software and resources

Hardware accelerators like GPUs

All of the above

Question 10

Which computer vision task is most appropriate for localizing appearances of barcodes in an image?

1 point

Image classification

Object Detection

Semantic Segmentation

Instance Segmentation