**CS5720 Neural network and Deep learning**

**Spring 2025**

**Quiz1. For Chapter 3**

**Student name:**

**Submission Requirements:**

* Once finished your Quiz, submit it on the BB.
* No handwriting accepts.
* No late submission accepts

1. **Multiple Choice Question (50 points)**

**Instructions:** Select the correct answer. Each question is worth **10 points**.

1. What is the default execution mode in TensorFlow 2.x?
   1. Graph Execution
   2. Eager Execution
   3. Static Execution
   4. Deferred Execution
2. Which function is used to reshape a tensor in TensorFlow?
   1. tf.reshape()
   2. tf.transpose()
   3. tf.expand\_dims()
   4. tf.reduce\_mean()
3. What does @tf.function do in TensorFlow?
   1. Converts a function into a computational graph
   2. Runs operations immediately in eager mode
   3. Disables GPU acceleration
   4. Optimizes Python functions for multi-threading
4. What is the primary use of TensorBoard?
   1. Training deep learning models
   2. Storing model checkpoints
   3. Visualizing and monitoring model training
   4. Optimizing computational speed
5. Which command is used to launch TensorBoard from a notebook?
   1. %tensorboard --logdir logs/
   2. tensorboard.start()
   3. launch\_tensorboard()
   4. tensorflow.visualize()
6. **Short Answer Questions (20 points)**
7. What is the function of tf.reshape()?

Answer:

1. **Fill-in-the-Blank (Code Completion) (30 points)**
2. Please write print result.

import tensorflow as tf

tensor = tf.constant([3, 6, 9])

result1 = tensor + 3

result2 = tensor / 3

print(result1.numpy())

print(result2.numpy())

Answer: