**Problem 1:**

Using Keras, build a MLP to classify the CIFAR-10 dataset. Note that each record is of size

1\*3072. Starting with the MNIST example code, build a MLP to classify the data into the 10

classes.

Modify the following parameters and discuss the effect of changing parameters on loss and

accuracy.

1. No of epochs

2. Batch size

3. Network configuration

a. Number of neurons in a layer

b. Number of layers

4. Learning rate

5. Activation functions

6. Dropout rates

Ensure you are building the model with the training data set and validating against the provided

test data set.

• You are expected to provide a recommendation for the best model you would

recommend for classification. Which model (with parameter values) would you choose

and why?

• Comment on how good your model is ? Does it overfit/underfit data ? What could you

do to improve the model?