***Present about Learning Stage for Multilayer Perceptron for Regression and classification Problems:  
Backpropagation algorithms with Mean Square Error (MSE) Cost function (for Regression) and Cross Entropy Cost Function (for classification).***

The learning stage for a multilayer perceptron (MLP) for regression and classification problems involves training the model using a dataset and an optimization algorithm. The most common optimization algorithm used for training MLPs is the backpropagation algorithm.

For regression problems, the mean square error (MSE) cost function is typically used to evaluate the error between the predicted output and the true output. The MSE cost function is defined as the average squared difference between the predicted and true output values.

For classification problems, the cross entropy cost function is often used to evaluate the error between the predicted class probabilities and the true class labels. The cross entropy cost function is defined as the sum of the negative log likelihoods of the predicted class probabilities.

During the training process, the backpropagation algorithm is used to adjust the weights and biases of the connections between the neurons in the MLP in order to minimize the cost function and improve the model's predictions. This is done by propagating the error back through the network and using gradient descent to update the weights and biases in the direction that reduces the cost.

Overall, the learning stage for an MLP involves training the model using the backpropagation algorithm and an appropriate cost function to minimize the error between the predicted and true output values.