SIT1305 – Machine Learning

PART A (5 Marks)

1. What do you mean by competitive learning?
2. What are the various test to comparing two classification algorithms?
3. What is Type-I and Type-II error?

PART –B (5 Marks)

1. Assume Scopus tries to predict the number of views of each article, using a machine learning algorithm. The features for the algorithm would be author name and articles of the same author. Which evaluation metric would be used for the above problem?

   a. Accuracy
   b.F1 score
   c. Precision
   d. Mean Square Error

2. In Reinforcement Learning, what characterizes the state of the world.

   a. Bayesian learning
   b. Markov Property
   c. Formalization process
   d. Learning property

3. _____ network is a form of self organizing maps.

4. The four types of reinforcement algorithm are _____, _____, _____ and _____.

5. A training dataset is absent in _____ learning algorithm

PART C (5 Marks)

1. Discuss Adaptive Resonance Theory in detail (ART)