

**Instruction to students: Attempt all questions**

*This is going to be a theoretical exam essay to examine if you grasped all the foundations of Neural networks and fuzzy logic. Please submit it to the invigilator once you are done.*

1. What does Single-Layer Neural Network mean?
2. In detail, discuss the difference between supervised learning and unsupervised learning
3. What is an Activation function?
4. Briefly discuss what you understand by Genetic algorithm
5. What is the difference between Fuzzification and defuzzification?