1. a) What are intelligent systems? Explain features of intelligent system. [5]

b) Compare the biological system and Artificial Neural network. [5]

c) Define learning. Write down applications of AI. [5]

1. a) Differentiate between propositional and predicate Logic. Define Data, Information, Knowledge and Wisdom. [7]

b) Translate the following English sentences into FOL [8]

i) **Every gardener likes the sun.**

ii) **You can fool some of the people all of the time.**

iii) **No purple mushroom is poisonous.**

**iv) There are exactly two purple mushrooms.**

1. a) Draw Flowchart of Genetic Algorithm and explain it. [5]

b) What are the characteristics of Expert system? Explain stages in the development of an expert system. [10]

1. Write Short note. (Any One) [5]
2. Crossover and Mutation
3. Types of Agent.