**410BA: Healthcare Analytics**

**Assignment 2023**

**Q 1)** Short notes on Any 5

1. Healthcare Data Sources and Basic Analytics
2. Biomedical image Analysis
3. Electronic Health Records
4. International Classification of Diseases(ICD)
5. Computerized Physician Order Entry(CPOE)
6. Temporal modeling for identifying fraudulent behavior
7. Visual Analytics for Healthcare
8. Social Media Analytics for Healthcare.

**Q 2) Answer the following**

1. Which data analytics are used in healthcare?
2. Give the Semantic representation of “John Loves Marry”.

**Q 3**) **a)** Define the terms chromosome, fitness function, crossover and mutation as used in Genetic algorithms. Explain how Genetic algorithms works.

**b)** Explain back propagation algorithm for neural nets.

**Q 4) Answer**

**a)** Explain with an example learning in Decision Trees.

**b)** Explain in detail learning from observation and explanation based learning.

**Q 5) a)** How searching is used to provide solutions and also describe some real world problems.

**b)**  What factors justify whether the reasoning is to be done in forward or backward reasoning?