

**B.C.A(Hons)Semester V Examination, 2021**

**Paper Name: Intelligent System**

**Paper Code:BCA 505**

**Subject: Computer Application**

**F.M:80**

**Time:3Hrs.**

**Group A**

**Answer any six questions.**

**6x5=30**

1. Differentiate between Strong Artificial Intelligence and Weak Artificial Intelligence?  
2+3
2. State five applications of Artificial Intelligence. 5
3. Explain different operators in propositional logic. 5
4. List some of the rules of inference. 5
5. List the characteristic features of an expert system. 5
6. Briefly explain Fuzzy logic with example. 5
7. Explain the concept of planning with state space search. 5
8. Discuss the limitations of Predicate logic with an example. 5

**Group B**

**Answer any five Questions.**

**5x10=50**

1. (a) Define a well-formed formula (wff).  
(b) Distinguish between forward and backward chaining. 4+6
2. Explain Bayesian networks with example. 10
3. Explain the steps involved in the knowledge engineering process. Give an example.  
10
4. (a) What are the basic aspects of the robotics?  
(b) Briefly explain Conditional probability with example. 4+6=10
5. What is Natural Language Processing? Discuss different components of Natural Language Processing. 3+7=10
6. Explain A\* algorithm with an example. 10
7. Explain the following with example (any one): 1x10=10
  - a. Minimax algorithm
  - b. Genetic algorithms