

B.C.A(Hons)Semester V Examination, 2020
Paper Name: Intelligent Systems Paper Code: BCA 505
Subject: Computer Application

F.M:80

Time:3Hrs.

1. Answer any six Questions.

6x5=30

- (a) What is Artificial Intelligence? Give some real-world applications of Artificial Intelligence.
- (b) What is state space? Explain how it is useful in Artificial Intelligence.
- (c) Differentiate between Breadth First Searching and Depth First Searching.
- (d) Distinguish between Forward and backward chaining.
- (e) What is fuzzy logic? What is its usage?
- (f) Define a well-formed formula (WFF). Distinguish between fact and Predicate.
- (g) State some rules of inference.
- (h) What are the limitations of Predicate logic as a tool for Knowledge representation? Illustrate through examples.

2. Answer any five Questions.

5x10=50

- (a) Explain Bayesian network with example.
- (b) Describe syntactic analysis and semantic analysis in brief.
- (c) Briefly explain the features of an expert system and write down its components .
- (d) What is semantic net? Explain how knowledge is represented using semantic net.
- (e) What is pruning ? Briefly explain the concept of Alpha-Beta Pruning.
- (f) What is heuristic searching? Write down A* algorithm.
- (g) Write short notes on any one of the following
 - (i) Minimax algorithm
 - (ii) Genetic Algorithm