

**Paper Code : BCA-602**

**BCA (VI SEM) EXAMINATION:-MAY-JUNE2021**

**COURSE-BCA**

**Paper Name- Artificial Intelligence**

**Time-3 Hrs.**

**Max. Marks: 70**

**Note:**

- 1) In the first section there are six questions; answer any *four* of them in Maximum 150 words each.
- 2) In the Second section there are four questions; out of them answer any *Two* in Maximum 500 words each.

**Short Answer Type**

**( 4 x10 = 40)**

- 1) Write short note on Artificial and Biological Neurons with suitable diagrams ?
- 2) What are the reasons that Fuzzy Logic function has rapidly become one of the most successful technology for developing sophisticated control systems ?
- 3) What is Inference Engine in Production System?
- 4) Explain the concept of Intelligent Agent in AI ?
- 5) Differentiate between DFS (Depth First Search) and BFS (Breadth First Search)?
- 6) Compare and Contrast Supervised Learning with Unsupervised Learning?

**Long Answer Type**

**( 2x15 = 30)**

- 1) What is Production System in AI ? Use Production Rules to Sort a String ( Initial String : 'cbaca' to Final String: 'aabcc') explaining its steps in detail.
- 2) Explain Water-Jug Problem with State Space Search method ?
- 3) Elaborate the concept of Fuzzy Logic System Architecture ? Enlist real world applications of Fuzzy Logic.
- 4) What are Learning Rules in Neural Networks ? Explain.