UUCMS.NO.

B.M.S. COLLEGE FOR WOMEN
BENGALURU – 560004

V SEMESTER END EXAMINATION – JAN/FEB -2024

B.Sc.-COMPUTER SCIENCE

ARTIFICIAL INTELLIGENCE

Course Code: CS5DSC06   **QP Code:5027**

Duration: 2 ½ Hours Max   **Marks: 60**

I. Answer any TEN Questions: **(10X2=20)**

1. Define AI.

2. What is the best AI approach and why?

3. Differentiate between Propositional versus First-Order Predicate Inference .

4. What is the need for Non-monotonic reasoning in AI?

5. Write real world applications of Expert System.

6. What are some real world applications of ANN?

7. Justify the statement "Robot is AI".

8. Differentiate between Syntactic and Semantic processing in NLP.

9. Which according to you is the best AI approach "Think humanely or Think rationally". Justify

10. What is Two-player zero-sum game with an example.

11. What is Unification and Lifting.

12. List applications of Image processing.

II. Answer any SIX questions: **(6X5=30)**

13. Explain different Image Processing techniques.

14. Write a python program to implement Minimax search for 2 Player games.

15. Define Alpha-Beta pruning. Explain the same with appropriate example.

16. With a neat diagram of Intelligent Agents explain its components.

17. Explain Sussman anomaly with an appropriate example .

18. Explain STRIPS style operations on Block world.

19. Write the algorithm for Best First search and what kind of search technique does it follow.

20. Explain clearly different types of ambiguity encountered in Natural Language Processing.

III. Answer any ONE of the following.   **(1X10=10)**

21. Explain types of learning in Machine learning with appropriate examples.

22. Explain in detail the Fuzzy logic along with Fuzzy set operation and Reasoning.

23. Write a short note on the following
   a)   Truth maintenance system.
   b)   Propositional logic