UNIVERSITY OF NORTH BENGAL

B.Sc. Honours 6th Semester Examination, 2022

CC13-COMPUTER SCIENCE (61)

ARTIFICIAL INTELLIGENCE

Time Allotted: 2 Hours   Full Marks: 40

The figures in the margin indicate full marks.

GROUP-A

Answer any *five* questions   1×5 = 5

1. Who is the Father of Artificial Intelligence?

2. Blind search used in which situation?

3. Which is the common language for AI?

4. What are the logic symbols in AI?

5. Write the form of a procedural domain knowledge in a rule based system.

6. How many types of quantification are there in AI?

7. Define Complete Algorithm.

8. Write the name of machine learning methods.

GROUP-B

Answer any *three* questions   5×3 = 15

9. Distinguish between BFS and DFS.

10. Write an algorithm for simple hill climbing.

11. Explain architecture of an Expert System. Give its three application areas.

12. Describe different types of knowledge required to build an Expert system.

13. List various task domains of AI.

GROUP-C

Answer any *two* questions $10\times2 = 20$

14. Explain the effect of overestimation and underestimation of it on A* Algorithm.

15. Explain the Resolution algorithm used for reasoning under predicate logic with an example.

16. Describe any four informed searching technique with suitable example.

17. What are the possible heuristic for the travelling salesman problem?

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