Reg. No. ☐☐☐☐☐☐☐

Sixth Semester B.C.A. (NEP) Degree Examination, August/September, 2024
(Regular)
Artificial Intelligence and Applications

Time : 2 Hrs   Max. Marks : 60

Instructions to Candidates:
All sections are compulsory.
Draw diagrams wherever necessary.

I.   Answer any TEN questions of the following.   (2x10=20)

1.   List the AI tasks. Give alteast two examples for each task.
2.   What are PEAS properties of agent?
3.   What is environment? List the types of environment.
4.   State the difference between informed and uninformed search.
5.   Mention the different heuristic search techniques.
6.   What is adversarial search?
7.   What are the issues in knowledge representation?
8.   List the basic logical operators in propositional and predicate logic.
9.   What is decision tree?
10. What is reinforcement learning?
11. What is expert system?
12. What is knowledge engineering?

II.   Answer any FOUR questions of the following.   (5x4=20)

13. Explain rationality and rational agent.
14. Write a note on : Local maximum, plateau and ridge.
15. Explain mapping between facts and representation.
16. Explain statistical learning methods.
17. What are the different methods of knowledge acquisition.

III. Answer any TWO questions of the following.   (10x2=20)

18. Explain the different disciplines in foundation of AI.
19. Explain "Generate and Test" algorithm with an example.
20. a)   Explain the types of expert systems.
     b)   State the difference between propositional and first order logic.

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