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Total No. of Printed Pages: [01]

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BCA (Semester –5th)
ARTIFICIAL INTELLIGENCE
Subject Code: BCAP1561
Paper ID: [160126]

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

- Q1. Attempt the following:
- a) What is production system in artificial intelligence?
 - b) List various AI techniques.
 - c) Explain the concept of Problem Space in AI.
 - d) What do you mean by Constraint Satisfaction
 - e) Write Advantages of AO* Algorithm.
 - f) Explain in brief about AND-OR Graph.
 - g) Define the term Knowledge Representation.
 - h) Explain in brief about Importance of Knowledge.
 - i) What are Expert Systems?
 - j) List types of Experts System

Section – B

(5 marks each)

- Q2. Explain in detail about importance of AI.
- Q3. Write a detailed note on Hill Climbing
- Q4. Explain in detail about various issues in Knowledge Representation.
- Q5. Write a detailed note on Expert System Shells.
- Q6. Explain in detail about Architecture of Expert System.

Section – C

(10 marks each)

- Q7. Write a detailed note on issues in Design of the Search Problem. (10)
- Q8. Explain the following search strategies
i) best first search ii) A* search (5+5=10)
- Q9. Write a detailed note on various Approaches used in Knowledge Representation. (10)