

Roll No. ....

Total Pages : 2

**BT-3/D-21**

**43210**

INTRODUCTION TO AI  
Paper : PC-CS-AIML-207A

Time : Three Hours]

[Maximum Marks : 75

**Note :** Attempt any *five* questions, by selecting at least *one* question from each unit.

**UNIT-I**

1. (i) Differentiate classical, romantic and modern periods of AI. (7)
- (ii) Explain the architecture of Google DialogFlow. (8)
2. (i) Discuss the role of various components involved in AI based vision and speech processing. (7)
- (ii) Differentiate Natural & Artificial Intelligence. Explain different types of problems which require AI techniques to be solved. (8)

**UNIT-II**

3. (i) Write and explain various steps involved in  $\alpha-\beta$  pruning. (8)
- (ii) Justify, "Is there need of AI in healthcare system". (7)

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4. (i) Write short note on Adversarial search. (7)  
(ii) Differentiate heuristic and informed search strategies with example. (8)

### UNIT-III

5. (i) Discuss the role of various components involved in knowledge based system. (7)  
(ii) Explain in detail the exact inference in Bayesian network. (8)
6. (i) Differentiate propositional logic and predicate logic. Explain forward and backward chaining algorithm in detail. (8)  
(ii) Discuss different types of ontologies in AI. (7)

### UNIT-IV

7. (i) Discuss, How artificial intelligence can help space exploration? (7)  
(ii) How AI will revolutionize the way for video games. (8)
8. (i) Justify, "Is AI the future of Finance"? (7)  
(ii) Explain the working of AI based Chatbot with example. (8)