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# 21CSC3E1CL

Sl. No.

## M.Sc. III Semester Degree Examination, April/May - 2023

### **COMPUTER SCIENCE**

#### Artificial Intelligence

Time : 3 Hours Maximum Marks: 70 **Note :** Answer any five full questions. (Q.No 1 is Compulsory) Define AI. Explain AI Goals. 1. (a) 7 Discuss on issues in design of search programs. (b) 7 2. Explain the role of AI in mobile Payment and E-commerce. 7 (a) (b) Give any real-life example of AI usage. 7 Explain about problem reduction in AI. 3. (a) 7 Explain cryptarithmatic problem with suitable example. 7 (b) 4. Write the approaches of knowledge representation. (a) 7 Differentiate between Forward v/s Backward Chaining. 7 (b) Explain cut and I/O operations in Prolog with an example. 5. 7 (a) How can we demonstrate relationships in Prolog. Write a pseudo-code for it. (b) 7 6. (a) Explain the process of image-based search in AI. 7 Differentiate between BFS and DFS. (b) 7 7. (a) Explain Representing simple facts in logic with suitable example. 7 How can we represent relationships by using "trees" and "lists". 7 (b) 8. Write a short note for the following. (a) Prolog. 5 Hill Climbing. 5 (b) (c) AI Techniques. 4

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