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Roll No. ....

**TCS-632**

**B. TECH. (COMPUTER SCIENCE AND  
ENGINEERING)  
(SIXTH SEMESTER)**

**MID SEMESTER**

**EXAMINATION, April, 2023**

**ARTIFICIAL INTELLIGENCE**

**Time : 1½ Hours**

**Maximum Marks : 50**

**Note :** (i) Answer all the questions by choosing any *one* of the sub-questions.

(ii) Each sub-question carries 10 marks.

1. (a) Explain intelligence and artificial intelligence with one example. (CO1)

**OR**

(b) Explain Automated Reasoning Visual Perception in artificial intelligence. (CO1)

**P. T. O.**

2. (a) "Surely computers cannot be intelligent they can do only what their programmers tell them." Is the latter statement true, and does it imply the former? (CO1)

OR

- (b) Explain Simulation and Modeling with Intelligence Behavior in artificial intelligence. (CO1)

3. (a) Explain Problem Solving Technique in artificial intelligence. (CO2)

OR

- (b) Explain the Parsing Techniques under Natural Languages Processing (NLP) in detail. (CO2)

4. (a) Explain Context Free and Transformational Grammars Processing Technique under Natural Languages Processing (NLP) in detail. (CO2)

OR

- (b) As per the standard production rule of Context Free Technique under Natural

(3)

Languages Processing (NLP),  $S = aSa$ ,  
 $S = bSb$  and  $S = c$ ; identify and integrate  
the string value of “abbcbba”. (CO2)

5. (a) Explain different Types of Transition Networks with advance properties. (CO2)

OR

- (b) Explain Case Grammars or FILLMORE’s Grammar in artificial intelligence. (CO2)