GANPAT UNIVERSITY
U. V. PATEL COLLEGE OF ENGINEERING
B. TECH (COMPUTER ENGINEERING/INFORMATION TECHNOLOGY/ COMPUTER ENGINEERING-ARTIFICIAL INTELLIGENCE)
SEM – VI SECOND INTERNAL EXAMINATION – MAY 2022
2CEIT602: ARTIFICIAL INTELLIGENCE

Time: 1 Hour   **Total Marks: 20**

Instructions: (1) Figures to the right indicate full marks.
                          (2) Be precise and to the point in your answer.

Q.1 Develop a perceptron for the given function with bipolar inputs and bipolar outputs. Check   **[5]**
that, "Is it linearly separable or not?"

x1	x2	t
1	1	-1
-1	1	1
1	-1	1
-1	-1	-1

Q.2 Do as directed: **[6]**

   A. Explain the following term with examples: Marginal distribution, Joint distribution, Conditional probability distribution.

   B. What is Fuzzy Logic? How does it differ from Crisp Logic? Explain the meaning of soft, hard and partial in terms of 'Truth' and 'False' with an example.

Q.3 What is error in the perceptron? Explain error of a perceptron by implementing AND function   **[4]**
for two inputs in detail.

Q.4 Define Markov Decision Process (MDP). Write all Value functions defined for a finite   **[5]**
horizon in MDP.

END OF PAPER