## LAKSHMI NARAIN COLLEGE OF TECHNOLOGY(MCA), BHOPAL

## **Assignment**

## **MCA**

## Third Semester MCA 302 Artificial Intelligence

Q-1 Critique and judge the AI Techniques.	
Q-2 Differentiate between CAR and CDR functions of LISP with suitable	CO-I
examples.	
Q-3 Write control strategies and defend with suitable examples.	
Q-4 Compare and contrast Simple Hill Climbing Algorithm and Steepest Ascent	
Hill Climbing Algorithm.	CO-II
Q-5 Illustrate A* algorithm and write the meaning of parameters in $g, f', h'$ in the	
context of A* algorithm	
Q-6 Formulate the following sentences in predicate logic	
i) All elephants are gray.	
ii) All Indian were either loyal to Gandhi or hated him.	
iii) Whoever can read is literate.	
iv) Cars are allowed only on MG Road.	
v) Rahul likes all kinds of food.	CO-III
Q-7 Design a Frame for the information "Sunil is a professor whose age is	
35, married to Kalpana having two children Rahul and Meena, lives in	
HN 154, Nehru Nagar, Bhopal, Pincode 462031".	
Q-8 Reframe the following expression into clausal form illustrating the procedure	
$\exists x \forall y (\forall z \ P(f(x), y, z) \rightarrow (\exists u \ Q(x, u) \land \exists v \ R(y, v)))$	

Note: 1. Give suitable examples and diagrams wherever necessary

- 2. Each answer should be of minimum 200 words
- 3. Submit the assignment file on or before **26-09-2023** to the undersigned
- 4. Not necessary to use college sessional pages, any ruler pages can be used
- 5. Assignment file can be submitted through friend also, if out of station
- 6. Make neat and clean assignment file clearly mentioning your name, Enrollment number at the front page.

Dr. Sanjay Bajpai Director, LNCT-MCA Bhopal