CSE 404: Artificial Intelligence Lab Tutorial Exam 2020

Full marks: 20

Maximum Allowable Time:

30 mins for Writing + 10 mins for Scanning & Uploading in the Classroom

There are 5 (five) questions. Answer Any 4 (four) questions.

1.	How backtracking can be done in PROLOG? Explain with an example.	5
2.	Write PROLOG code for the following expression:	5
	$[10, if \ x \leq 5]$	
	$y = f(x) = \begin{cases} 10, & \text{if } x \le 5\\ 20, & \text{if } 5 < x \le 10\\ 30, & \text{if } x > 10 \end{cases}$	
	30, if x > 10	
3.	Explain the terms weak AI, strong AI, heuristics, and meta-heuristics.	5
	You have to show an example of each term.	
4.	Describe the reasons behind using A* search in game problems.	5
5.	Differentiate among BFS, DFS, and Best First Search with an example.	5