## Teaching Plan

## Dept. Of Computer Science

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Discipline : Computer Science (Hons.)

Semester : VI Paper Code : CC13P

Subject : Artificial Intelligence Lab

Name of faculty : Gourab Maiti

Duration: 21st February,2023 to 10th June,2023

S1 No	Topics	No. of Lectures	Duration in Hours
1	Write a prolog program to calculate the sum of two numbers.	1	2
2	Write a prolog program to find the maximum of two numbers.	1	2
3	Write a prolog program to calculate the factorial of a given number.	1	2
4	Write a prolog program to calculate the nth Fibonacci number.	1	2
5	Write a prolog program, insert_nth(item, n, into_list, result) that asserts that result is the list into_list with item inserted as the n'th element into every list at all levels.	1	2
6	Write a Prolog program to remove the Nth item from a list.	1	2
7	Write a Prolog program, remove-nth(Before, After) that asserts the After list is the Before list with the removal of every n'th item from every list at all levels.	1	2
8	Write a Prolog program to implement append for two lists.	1	2
9	Write a Prolog program to implement palindrome(List).	1	2
10	Write a Prolog program to implement max(X,Y,Max) so that Max is the greater of two numbers X and Y.	1	2
11	Write a Prolog program to implement maxlist(List, Max) so that Max is the greatest number in the list of numbers List.	1	2
12	Write a Prolog program to implement sumlist(List,Sum) so that Sum is the sum of a given list of numbers List.	1	2

13	Write a Prolog program to implement two predicates evenlength(List) and oddlength(List) so that they are true if their argument is a list of even or odd length respectively.	1	2
14	Write a Prolog program to implement reverse(List, ReversedList) that reverses lists.	1	2
15	Write a Prolog program to implement maxlist(List, Max) so that Max is the greatest number in the list of numbers List using cut predicate.	1	2
16	Write a Prolog program to implement GCD of two numbers.	1	2
17	Write a prolog program to implement Semantic Network/Frame Structures.	1	2

## Reference Book:

- 1. Rich & Knight, Artificial Intelligence Tata McGraw Hill
- 2. Russell & Norvig, Artificial Intelligence A Modern Approach, Pearson Prentice Hall