

MCA 4th Semester Examination, 2013

ARTIFICIAL INTELLIGENCE LAB

PAPER – MCA-407

Full Marks : 50

Time : $1\frac{1}{2}$ hours

Answer any **one** question selecting
it by a lucky draw

1. Write a program to find out the largest number of a list L.
2. Write a prolog program to calculate the sum of N natural numbers.
3. Write a program to find out the N th number in Fibonacci series.

(Turn Over)

(2)

4. Write a program to check whether a list L is palindrome or not.
5. Write a program to calculate the number of elements of a list.
6. Write a prolog program to delete all occurrences of a given element from a list.
7. Write a program to find out the reverse of a list L .
8. Write a prolog program to insert n elements at the end of a list.
9. Write a prolog program to generate all sublists of a given list.

(3)

10. Write a prolog program to find the sum of first n even positive integers.
11. Write a prolog program to show the factors of a positive integer.
12. Write a prolog program to show the prime factors of a positive integer.
13. Write a prolog program to show the alternative elements from a list starting from the first.
14. Check whether a given number is prime or not.
15. Show the LCM of 2 positive integer using prolog.

(4)

16. Sort a list of element in ascending order using prolog.

Marks Distribution

1. Brief Description of the Problem – 10 %
 2. Program listing – 40 %
 3. Result and Discussion – 30 %
 4. Viva – 20 %
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