2018

M.Sc. 1st Seme. Examination

ELECTRONICS

PAPER—ELC-105

(Practical)

Full Marks : 50

Time : 3 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Computation & Programming Laboratory

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

1. Write a program in 'C' to check a number whether it is Armstrong or not.

2. Write a program in 'C' to find the value of exp(x) with the help of exponential series considering the accuracy of 0.000001 and also find the number of terms calculated to achieve the desired accuracy.

(Turn Over)

3. Write a program in 'C' to generate Fibonacci series upto 'n' terms. Where 'n' should enter through keyboard.

4. Write a program in 'C' that will read a positive integer and determine its binary equivalent.

5. Write a program in 'C' to evaluate the first 20 terms of the following series :

$$1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \ldots\ldots$$

6. Write a program in 'C' to check a year whether it is Leap year or not.

7. Write a program in 'C' to find the largest number from an array of 'n' numbers.

8. Write a program in 'C' to convert a binary number to its decimal equivalent.

9. Write a program in 'C' to check a number whether it is odd or even.

10. Write a program in 'C' to find the value of Sin(x) with the help of sine series considering the accuracy of 0.000001 and also find the number of terms calculated to achieve the desired accuracy.

11. Write a program in 'C' to check a number whether it is palindrome or not.

12. Write a program in 'C' to find out whether a number enter through keyboard is prime or not.

13. Write a program in C to convert a decimal integer into it's equivalent octal form.

14. Write a program in 'C' to find the roots of a quadratic equation where the coefficient a, b and c must be entered through keyboard.

15. Write a program in 'C' to sort an array of 'n' numbers in descending order considering Bubble sort technique.

16. Find the root of $x^3 - x - 4 = 0$ using Bisection method upto accuracy of 0.001 using program in C.

Distribution of marks

Program	10
Execution	20
Discussion & Accuracy	5
Viva Voce	10
Laboratory Note Book	5
Total	50

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