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MCA/IS/107/13(Pr.)

MCA 1st Semester Examination, 2013

PROGRAMMING IN DATA STRUCTURE LAB.

(Practical)

PAPER—MCA-107

Full Marks : 50

Answer any **one** question (**Lottery basis**)

The figures in the right-hand margin indicate marks

1. Write a C program to accept three integer numbers as the length of three sides of a triangle. Test the validity of lengths and classify the triangle. 40

2. Write a C program to find the Greatest Common Divisor (GCD) of two non-negative integer values. 40

(Turn Over)

(2)

3. Write a C program to print the non-prime numbers between n_1 and n_2 where the values of n_1 and n_2 would be provided by examiner. 40
4. Write a program to display the prime factors on an integer, which will be provided by the user. 40
5. Write a program to count the frequency of the letter 'e' in a file "my file.txt" which is already present in your current directory. 40
6. Write a program to calculate the sum of first n odd integers. 40
7. Determine the value of the following series upto n terms : 40

$$x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \dots$$

8. Write a program to 'perform addition, deletion and multiplication of two matrices depending upon the users choice. 40
9. Write a program in C to compare two files and print the lines where they differ. 40
10. Write a program to convert an integer into it's equivalent binary form using bit-wise operators. 40
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