Roll No	Exam Code: J-19
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Subject Code—0402

M.C.A. (First Year) EXAMINATION

(Batch 2009 Onwards)

(5 Years Integrated Course)

COMPUTER PROGRAMMING & PROBLEM SOLVING USING C

MCA-102

Time: 3 Hours Maximum Marks: 70

Section A

Note: Attempt any *Seven* questions. $7 \times 5 = 35$

- 1. What is Flow-chart? Explain different symbols used in flow chart. Draw flow chart to find largest of 3 numbers.
- **2.** Justify the need for computer language. Also write the character set of C language.

- **3.** What are identifiers and keywords? Write rules for naming identifiers.
- **4.** Explain different operators available in C language with their order of precedence.
- **5.** Explain the different data types available in C language and also explain their declaration with example.
- **6.** Explain input-output functions of C language with example.
- 7. What are pre-processor commands? Explain any *two* commands.
- **8.** Explain the difference between while and dowhile.
- **9.** Explain the use of break and continue statements with example.
- **10.** What is function? Why is it used?

Section B

2

Note: Attempt all the questions.

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11. Explain various looping control statements with example.12

Or

What are recursive functions? Write and explain a recursive function to find factorial of a number.

12. What is string? How is it used in C program?Explain various string operations/functions with example.12

Or

Explain Pointer. How arrays can be passed (as function arguments) using pointer. Explain with example.

13. Compare and contrast structure and union.Create a structure student (roll no., name, marks) and write a program to print Roll No. and name of students having more than 75% marks.

Or

What are datafiles? Explain various functions for manipulation of data files.