

13. (a) What are different storage classes in C ?
Mention the multiple uses of the keyword
STATIC. Give suitable examples.
- (b) Write short note on Library functions and
their uses.

Or

- (a) Write short note on String and operations
of strings.
- (b) What are the basic similarities between
pointers and arrays ? **7+4**

Roll No.

Exam Code : J-19

Subject Code—0372

M.C.A. (First Year) EXAMINATION

(5 Years Integrated Course)

(For Batch 2009 Onwards Main & Reappear)

COMPUTER PROGRAMMING AND
PROBLEM SOLVING USING C

MCA-102

Time : 3 Hours

Maximum Marks : 70

Section A

Note : Attempt any *Seven* questions. **7×5=35**

1. What is a Programming Language ? Discuss
the evolution of Programming Languages.
2. What are Preprocessor Directives ? Explain
with proper illustrations.

3. What do you understand by Header files ?
Discuss their purpose.
4. What is the difference between while and do while statement ?
5. Differentiate between algorithm and flowchart.
Also write an algorithm to calculate the sum of first ten numbers starting from 1.
6. What are nested loops ? Explain with example.
7. Describe the term union. How does a union differ from structure ? Explain with examples.
8. 'C' is a middle level language'. Comment on this statement.
9. Explain recursion with the help of a C function.
10. How do you declare an array of 10 pointers pointing to integers ?

Section B

Note : Attempt all the questions.

11. (a) What are the different input and output functions in C ? Explain along with suitable illustrations.
- (b) Differentiate between Keywords and Identifiers.

Or

- (a) Briefly explain about the various types of operators involved in formation of expressions.
- (b) Discuss different problem solving methods. **8+4**

12. What do you understand by the concept of structured programming ? Discuss and explain various control structures used in C.

Or

Briefly explain function in C ? What is the relationship between formal arguments and actual arguments ? How can they be declared within a function ? **12**