



K16P 0101

Reg. No. : .....

Name : .....

I Semester M.C.A. Degree (Reg./Sup./Imp.) Examination, February 2016  
(2014 Admn. Onwards)

**MCA 1C04 : FUNDAMENTALS OF PROGRAMMING**

Time : 3 Hours

Max. Marks : 80

**Instructions :** Section – A : Answer **any ten** questions, **each** question carries **three** marks.

Section – B : Answer **all** questions, **each** question carries **ten** marks.

**SECTION – A**

Answer **any ten** questions. **Each** question carries **three** marks : (10×3=30)

1. Define an algorithm and give the salient features of algorithm.
2. What are the milestones of 'C' programming language ?
3. What are the primitive data types in 'C' programming ?
4. List out the significant features of various storage classes.
5. What are the decision making statements ?
6. What is a function, explain the different types of parameter passing ?
7. What are the various functions of string operations ?
8. Compare and contrast structure and union.
9. What are preprocessor directives, mention the different preprocessor directives ?
10. Give the different ways of initialisation of single and two dimensional arrays.
11. What is structure, how it is different from a union ?
12. How to read and write contents of file in different mode of operations ?

P.T.O.



## SECTION – B

Answer **all** questions. **Each** question carries **ten** marks :

13. a) i) With syntax and example, discuss for loop statement in 'C'. 5  
ii) Write a 'C' program to accept 10 floating point values from the keyboard and compute the maximum and minimum values among the list. 5  
OR
- b) i) List the differences between functions and macros with parameter. 5  
ii) Discuss the structure concept with suitable example. 5
14. a) i) Describe the following with suitable examples: 5  
a) getch ()  
b) getchar ().  
ii) Write a program to find factorial of a number using recursive function. 5  
OR
- b) i) Compare and contrast break and continue statements. 5  
ii) Write a program to sort 'n' numbers. 5
15. a) Explain the importance of arrays, with suitable examples, discuss the initialization of a 1D, 2D arrays. 10  
OR
- b) Write a 'C' program to find inverse of a matrix of order  $n \times n$ . 10
16. a) i) Explain the various types of storage classes in 'C'. 5  
ii) Write a 'C' program to find the largest of two numbers using pointer. 5  
OR
- b) i) With suitable example, explain the concept of array of structures. 5  
ii) Explain any four string handling functions with suitable examples. 5
17. a) i) Write a program to copy the contents of one file into another file. 5  
ii) List out various pre-processor directives, explain any two pre-processor directives neatly. 5  
OR
- b) i) List out any four header files, explain any two of them. 5  
ii) Compare and contrast binary and ASCII file. 5