



K18P 1395

Reg. No. : .....

Name : .....

**First Semester M.C.A. Degree (Reg./Supple./Imp.)  
Examination, December 2018  
(2014 Admn. Onwards)  
MCA 1C04 : FUNDAMENTALS OF PROGRAMMING**

Time : 3 Hours

Max. Marks : 80

**SECTION – A**

Answer **any ten** questions. **Each** question carries **three** marks.

1. What is compiler ?
2. What are the functions of pseudo code ?
3. Mention the properties of tokens.
4. What are the qualifiers in C-Program ?
5. Compare and contrast break and continue statement.
6. Give the general syntax of function in C-program.
7. Write a recursive function to find the sum of first N-natural numbers.
8. What are the functions of dynamic memory allocation ?
9. Differentiate between array of pointers and pointer to array.
10. What is enumeration ? Give an example.
11. Define macro. Give an example.
12. Mention the functions used for reading and writing in file. (10×3=30)

**SECTION – B**

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

13. a) i) Discuss the classification of programming languages. 5  
ii) Explain how algorithms are different from flowchart with suitable examples. 5
- OR
- b) Discuss features of C-program with proper explanation. 10

P.T.O.



14. a) i) Discuss type casting and type def with suitable examples. 5  
 ii) List and explain different types of if statements in C. Write a program using nested, if to find the largest among a list of six integers. 5

OR

- b) With a suitable programming examples explain auto, register, static and extern. 10

15. a) i) What is the relevance of function in structured programming ? What is a function prototype ? 5  
 ii) Write a function to search a list of integers passes to it and return the location of the value, if the search is successful and -1 otherwise. 5

OR

- b) Discuss three sorting techniques. (Write code snippets for each technique). 10

16. a) i) Differentiate between Structure and Union. Give examples for each. 5  
 ii) Declare a structure for storing the details of a book. Use it in a program to read the details of a book and print it. 5

OR

- b) i) Write a note on arrays of pointer. 5  
 ii) The annual examination is conducted for 10 students for three subjects. Write a program to read the data and determine the following :  
 a) Total marks obtained by each student.  
 b) The student who obtained the highest total marks. 5

17. a) i) Write a program which accepts three numbers as command line argument and print the smallest value. 5  
 ii) Write short note on C-Preprocessors and Conditional compilation. 5

OR

- b) Give detailed account of file processing in C-Program. 10