



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 : 5
 - a) Total marks obtained by each student.
 - b) The student who obtained the highest total marks.

- 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
