K17P 0235

Reg. No. : ....

Name : ....

First Semester M.C.A. Degree (Reg./Supple./Imp.) Examination, January 2017
MCA1C04 : FUNDAMENTALS OF PROGRAMMING
(2014 Admn. Onwards)

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. Compare and contrast flowchart and algorithm.

2. Explain the general structure of a C-Program with suitable example.

3. What are the significant features of scanf() and printf() functions ?

4. With syntax and example, discuss for-loop statement in 'C'.

5. What are the differences between break, continue and goto statement.

6. What are the merits of functions in a 'C' Program ?

7. Distinguish between local and global variables.

8. Discuss the string operation function with examples.

9. Write a 'C' Program to print today's date.

10. Compare and contrast recursion and iteration function.

11. What are the various modes of operations that could be performed on a sequential file ?

12. Discuss important preprocessor directives.

K17P 0235

SECTION – B

Answer all questions, **each** question carries **ten** marks.

13. a) i) What are the significant features of linker and loader. 5

     ii) Discuss the features of 'C' Programming language. 5

          OR

   b) i) Describe the classification of various programming language. 5

     ii) Write flowchart and algorithm for prime number generation. 5

14. a) i) Describe the primitive data types of 'C' Program with suitable examples. 10

          OR

   b) i) Explain the different storage class specifications in 'C' with suitable examples. 10

15. a) i) Write a program to find GCD of 2 numbers. 5

     ii) Discuss the different decision control and looping statements in 'C' with suitable examples. 5

          OR

   b) i) Write a 'C' Program to illustrate the recursive function. 5

     ii) Compare and contrast pointed and arrays, formal and actual arguments. 5

16. a) i) Write a 'C' Program to find the largest of two numbers using pointers. 5

     ii) Explain the concept of dynamic memory allocation. 5

          OR

   b) i) Explain in detail any four string manipulation functions. 5

     ii) Give the various ways of initialization of single and two dimensional arrays. 5

17. a) i) Distinguish between sequential and random files. 5

     ii) Explain the different macro directives with suitable examples. 5

          OR

   b) i) Discuss any two header files features in 'C' program. 5

     ii) Write a command line program in 'C' to append one file at the end of another. 5