Exam. Code : 105701

Subject Code : 9032

B.Sc. IT Ist Semester (Old Sylb.—2016)

C-PROGRAMMING PART—I

Paper—II

Time Allowed—3 Hours] [Maximum Marks—75

Note :– Attempt any **five** questions. All questions carry equal marks.

1. Discuss the following logic development tools in detail : Flow chart, algorithm and decision tree. 15

2. (a) Write the general structure of a C program. 5

   (b) Differentiate between variable and constant. List various rules for naming a variable. 5

   (c) What are various data types supported by C language ? Give the memory requirement of each data type. 5

3. What are arithmetic, logical and relational operators available in C ? Explain each type of operator with the help of suitable examples. Also discuss the concept of operator precedence. 15

4. What are various ways to read and write a single character in C ? Discuss in detail giving suitable examples. 15

5. Describe various iterative control structures supported by C language with the help of suitable examples. 15

6. Define functions. What are the advantages of using functions ? What do you mean by function declaration and function definition ? What are the various methods of parameter passing to function ? Explain. 15

7. Write a program to print the sum and average of numbers between any two given numbers, which are divisible by a given number N. 15

8. What do you mean by an array ? How an array is declared and finalized ? Explain with examples. What do you mean by two dimensional arrays ? Also explain initialization and declaration of two dimensional arrays. 15