(i) Printed Pages : 2   Roll No. ....

(ii) Questions   : 9   Sub. Code : | 0 | 1 | 8 | 6 |
                                  Exam. Code : | 0 | 0 | 0 | 2 |

B.A./B.Sc. (General) 2nd Semester

(2053)

INFORMATION TECHNOLOGY

Paper : B Computer Programming Using C

Time Allowed : Three Hours]   [Maximum Marks : 65

Note :— Attempt **five** questions in all, selecting **one** question from each of the Units I to IV. Question No. **9** is compulsory. All questions carry equal marks.

UNIT–I

1. (a) What are the steps for a computer based problem solving ? Discuss each step in brief.   8

   (b) Classify the Computer Programming languages.   5

2. (a) How does the method of stepwise refinement affect the development of an algorithm ?   8

   (b) What is the significance of Program Documentation ?   5

UNIT–II

3. (a) C is a structured Programming language. Justify.   8

   (b) How do you declare and initialize a one dimensional array ?   5

4. (a) Explain the loop control structures available in C program.   8

   (b) What are break and continue statements ?   5.

UNIT–III

5. (a) What is recursion ? Explain. Write a recursive function for finding the factorial of a number. 8

   (b) What is a pointer variable ? How do you declare a pointer variable ? Give the Pointer operators and their significance. 5

6. (a) Explain the methods of calling a function. Give examples. 8

   (b) What is an array of Pointers ? How do you create an array of pointers ? 5

UNIT–IV

7. (a) What are macros ? How do they differ from functions ? Explain with examples. 8

   (b) What is a Structure in C ? How is it created ? What is nested structure ? Give example. 5

8. (a) What do you mean by file handling in C ? Explain the following in C with suitable examples :

   fopen, fclose, putc, getc 8

   (b) Describe the various Built-in string functions in C language. 5

(Compulsory Question)

9. (a) What is an identifier ?

   (b) What is the use of stdio.h file ?

   (c) What do you mean by Modularization ?

   (d) Give the relational operators in C.

   (e) Define storage class of a variable.

   (f) What are ternary operators in C ?

   (g) What is the purpose of exit( ) function ? 2×6+1