15154

M.Sc DEGREE EXAMINATION DECEMBER 2015
I SEMESTER
Statistics
PAPER IV: C PROGRAMMING

Time : 3hours (No additional sheet will be supplied) **Max Marks : 75**

PART- A (5x3=15 marks)
Answer any FIVE questions.
Each question carries THREE (3) marks.
Each answer should not exceed ONE (1) page.

1. What special rules apply to integer constant?
2. Name and describe the four basic data type in C?
3. What is the purpose of set char function?
4. What is conditional execution?
5. Name the four storage class specifications included in C?
6. How are individual array elements identified?
7. What is a union? How does a union differ from a structure?
8. What is meant by opening a data file? How is this accomplished?

PART- B (4x15=60 marks)
Answer all questions.
Each question carries FIFTEEN (15) marks.
Each answer should not exceed SIX (6) pages

9. (a) Describe the two equality operators included in C. How do they differ from the relational operators?
   (b) How are library functions accessed? How is information passed to library function from the access point?

(OR)

10.(a) How is the type of a conditional expression determined? When its operands differ in type?
   (b) Describe the five arithemetic operators in C. Summarize the rules associated with their use?

11.(a) What is the purpose of the s count function? How is it used within a C program?
   (b) What rules apply to nested loops? Can one type of loop be embedded within another?

(OR)

12.(a) Describe how the exp and log functions can be used to carry out exponentiation operations?
   (b) Explain the difference between a function declaration and function definitions. When is a function declaration required?

13.(a) What is the purpose of static variable in a single file program? What is its scope?
   (b) How is an array name interpreted when it is passed to a function?

(OR)

14.(a) Why is it sometimes desirable to pass a pointer to a function as an argument?
   (b) For what types of applications is it particularly useful to pass one function to another?

15.(a) How can the size of a structure be determined? In what units is size reported?
   (b) For what kinds of applications are unions useful?

(OR)

16.(a) Describe two different approaches to updating a data file. What approach is better, and why?
   (b) When will be defining a buffer area for use with stream. Oriented data file, what does symbol FILE represents?
