

15154

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

FIRST SEMESTER

Statistics

Paper IV — C - PROGRAMMING

Time : Three hours

Maximum : 75 marks

(No additional sheet will be supplied)

PART A — (5 × 3 = 15 marks)

Answer any FIVE questions.

Each question carries 3 marks.

Each answer should not exceed 1 page.

1. Distinguish between constants and variables in C.
2. Mention any two logical operators used in C and give examples.
3. Write the syntax for scanf and printf statements with formatted input/output.
4. Give an example of if...else statement. How do you handle multiple conditions?
5. What is a one dimensional array? How do you perform addition and multiplication operations on arrays?
6. Define a pointer. What is pointer arithmetic?
7. What is the difference between an array and a structure? Give example for structure.
8. What is a random access data file? How is data handled in it?

PART B — (4 × 15 = 60 marks)

Answer ALL questions.

Each question carries 15 marks.

Each answer should not exceed 6 pages.

9. Explain with examples the terms (a) Key words (b) tokens (c) C-expression with suitable examples.

Or

10. What is goto statement? Write a C-program using goto statement to read an integer value from keyboard and determine whether it is odd or even.

11. Distinguish between entry controlled and exit controlled loops. Write a C program to print the first n-natural numbers and their squares

Or

12. Define a function in C. Write a C-function to find the roots of a quadratic equation.

13. How do you pass arguments to a function? Give an example with addition of variables from two arrays.

Or

14. Give an example of a C-program to find the minimum/maximum of a n-values using pointers to arrays.

15. Define a structure. Write a program to read and process student data including marks in a test by using a structure.

Or

16. What are various protocols for opening and closing a data file? Can we use Scanf and Printf statements to handle a data file? Give an example.

