

Roll No.....

Total No. of Units : 04

Total No. of Printed Pages : 03

Code No. : 04/303

Fourth Semester Examination, May 2019

M.Sc. MATHEMATICS

Paper - III

PROGRAMMING IN C (WITH ANSI FEATURES - II)

Time : 3 Hrs.

Max. Marks : 80

- Part A and B of each question in each unit consist of very short answer type questions which are to be answered in one or two sentences. Part C is short answer type and Part D is long answer type.

● Unit - I

Q.1 A. Define storage classes within two sentences. (2)

Q.1 B. Write the syntax for malloc (). (2)

Q.1 C. Write a program using calloc (). (4)

OR

How data can be free () through dynamic memory allocation?

Q.1 D. Write a program to store a character string in a block of memory space created by malloc and then modify the same to store a larger string. (12)

OR

Write any two rules for syntax related to ANSI and use those rules in the program.

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(2)

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Unit - II

Q.2 A. Write the syntax for concatenation of two string. (2)

Q.2 B. Find the field width in % 10.4 . (2)

Q.2 C. Write the code for addition of any two matrices. (4)

OR

Write a program for selection sorting algorithm.

Q.2 D. Write a program for transpose of any matrix.

OR

Write a program using for loop to print the following output :(12)

C
CP
CPr

Unit - III

Q.3 A. Explain the meaning of # endif. (2)

Q.3 B. Write the syntax for recursion. (2)

Q.3 C. Write a program using conditional compilation. (4)

OR

Write a program using line control.

Q.3 D. Write a program for nesting of macros with the reference of cube of any number. (12)

OR

Write a program to find compound interest using pointer to functions.

Unit - IV

Q.4 A. Explain doubly linked-list. (2)

Q.4 B. Write the syntax for enum declaration. (2)

Q.4 C. Differentiate between run time error and syntax error. (4)

OR

Define stream and write the uses for I/O.

Q.4 D. Write a program to create a linear linked list interactively and print out the list and total number of items in the list. (12)

OR

Write a program to create a single file and then display its contents.

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