

**Code No:811AC****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA I Semester Examinations, June/July - 2018****COMPUTER PROGRAMMING****Time: 3hrs****Max.Marks:60****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 20 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 8 marks and may have a, b, c as sub questions.

PART - A**5 × 4 Marks = 20**

- 1.a) Discuss the concept of Type Conversion with an example. [4]
- b) Write the differences between while and do-while statements. [4]
- c) What is an array? Write down its applications. [4]
- d) Explain briefly about nested structures. [4]
- e) Explain briefly about ftell() and rewind() functions. [4]

PART - B**5 × 8 Marks = 40**

- 2.a) Write down the advantages and disadvantages of structured programming.
 - b) Explain the terms precedence and associativity in evaluating an expression. [4+4]
- OR**
- 3.a) Mention various rules for naming a variable in C.
 - b) Describe various computing environments with neat diagrams. [4+4]

4. Explain briefly about selection statements in C with clear syntax and example. [8]

OR

- 5.a) Write a C program to generate a sequence of prime numbers between given range.
 - b) Briefly explain various function parameter passing mechanisms. [4+4]
- 6.a) Why is it necessary to give the size of an array in an array declaration?
 - b) Explain with an illustrative example program for declaring an array and accessing its elements. [4+4]

OR

7. Explain how a multidimensional array is defined in terms of a pointer to a collection of contiguous arrays of lower dimensionality with an illustrative C program. [8]

8. Explain the process of passing an entire structure to a function using a program. [8]

OR

- 9.a) Explain briefly about command line arguments.
- b) Discuss about various string I/O functions available in C. [4+4]

10. Describe the following I/O functions:
a) fopen() b) fprintf() c) fscanf() [8]

OR

- 11.a) Write a C program that copies the contents of a binary file of integers to a second file.
- b) Write down the differences between text files and binary files. [4+4]