

**Code No: 841AC****R17****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA I Semester Examinations, April/May – 2019****COMPUTER PROGRAMMING USING C****Time: 3hrs****Max.Marks:75****Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART - A****5 × 5 Marks = 25**

- 1.a) What is flowchart? Explain different symbols used for flowchart. [5]
- b) Explain continue and break statements in C. [5]
- c) What is array? How to declare array? Explain applications of array. [5]
- d) Explain declaration and initialization of array of strings. [5]
- e) How does the fopen ( ) works? Explain it with example. [5]

**PART - B****5 × 10 Marks = 50**

2. Draw the flow chart and write the algorithm to find the roots of a quadratic equation for all the cases. [10]

**OR**

3. Discuss about the following operators in C language with example  
a) Bitwise operators    b) Increment and decrement operators    c) Logical operators [10]

4. Explain about switch statement and Write a program to perform arithmetic operations using switch. [10]

**OR**

- 5.a) What is recursion? What are the advantages and disadvantages of recursion? [10]
- b) Write a C program to find the factorial of a numbers using recursion. [10]

6. Write a C program to print the multiplication table for numbers 1 to n using two dimensional arrays. [10]

**OR**

- 7.a) Explain the concept of array of pointers with examples. [10]
- b) Explain the declaration of pointers and pointer to pointer with examples. [10]

- 8.a) Discuss command line arguments in detail with examples. [10]
- b) How to copy and compare structure variables? Illustrate with example. [10]

**OR**

9. Write a C program to find the length of a string and reverse the given string without using string handling functions. [10]

10. Write a C program to display the contents of the file in reverse order. [10]

**OR**

11. Explain the following file handling functions:  
a) fseek()    b) ftell()    c) rewind()    d) feof() [10]

