

**R15****Code No: 821AC****JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****MCA I Semester Examinations, January - 2018****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) Write a program to convert the Fahrenheit into degree Celsius. [5]
- b) Explain the recursive function with an example and also give its limitations. [5]
- c) Explain the drawbacks of pointers in detail. [5]
- d) Explain the functions of read and write characters. [5]
- e) Explain about the rewind ( ) with an example. [5]

**PART - B****5 × 10 Marks = 50**

2. Explain the classification of computer software. [10]
- OR**
3. Explain the different types of operators are used in C. [10]
4. Explain about user defined functions and inter function communication. [10]
- OR**
5. a) Write a program to find the GCD of given numbers by using functions. [5+5]
- b) Explain the type qualifier with an example. [5+5]
6. Write a program to read a matrix and displays sum of the elements below the main diagonal. [10]
- OR**
- 7.a) Explain the pointers for inter function communication [5+5]
- b) What is an array? Explain how is an array represented in memory. [5+5]
8. Write a program to read and display the information of all the students in the class. Then edit the details of the  $i^{\text{th}}$  student and redisplay the entire information by using structures. [10]
- OR**
9. Write a program that uses a structure called date that has is passed to an is LeapYear function to determine if the year is a leap year. [10]
10. Explain the different types of File modes in C. [10]
- OR**
11. Write a program to compare two files to check whether they are identical or not. [10]

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