

Code No: R10105

**R10****SET - 1****I B. Tech I Semester Supplementary Examinations, May - 2018****C PROGRAMMING**

(Com. to All Branches)

Time: 3 hours

Max. Marks: 75

Answer any **FIVE** Questions  
All Questions carry **Equal** Marks

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1. a) Explain arithmetic, relational and logical operators available in C language with examples. (8M)  
b) What is a data type? Explain basic data types with their sizes. How the range of data stored can be extended? (7M)
2. a) Discuss multi-way selection statements with example. (5M)  
b) What are bitwise logical operators? Explain them with suitable programming example. (4M)  
c) Write a C program to find the biggest of given three numbers using nested if-statement. (6M)
3. a) What are the differences between do while and while loops? Discuss about their usage. (6M)  
b) Write a program to count number of characters, words and lines and white spaces in the given text. (9M)
4. a) Explain about the two-dimensional array and its operations. (7M)  
b) Write a program to evaluate the average of the values in an array. (8M)
5. a) List the storage classes in C. Explain each of them with examples. (9M)  
b) Write a C program to print Fibonacci series using recursion. (6M)
6. a) Discuss various valid arithmetic operations that can be performed on pointers in C. (6M)  
b) What is pointer? Discuss about pointers to pointers with examples. (5M)  
c) Write a short note on dangling memory. (4M)
7. a) What is structure? Explain array of structures with example. (5M)  
b) What is bit-field? What are its uses? Explain with an example. (5M)  
c) How structure is declared and initialized? Explain with an example. (5M)
8. a) Explain the following functions: (i) getw() (ii) putw() (iii) getc() (iv) putc(). (7M)  
b) Two files DATA1 and DATA2 contain sorted lists of integers. Write a C program to produce a third file DATA which holds a single sorted, merged list of these two lists. (8M)