END TERM EXAMINATION

SECOND SEMESTER [B.TECH] MAY-JUNE 2016

Paper Code: ETCS-108	Subject: Introduction to Programming
	(Batch 2013 Onwards)
Time: 3 Hours	Maximum Marks: 75

Note: Attempt any five questions including Q.no.1 which is compulsory.

Q1   Write brief note on following:-   (5x5=25)
   (a) Structures Vs Unions.
   (b) Switch statement Vs Multiple if.
   (c) Break Vs Continue.
   (d) Linker, Loader Vs Compiler.
   (e) Formal Vs Actual Arguments.

Q2   (a) Differentiate between auto, static, extern local and global variable with respect to their lifetime, scope and access rights.   (6)
   (b) Differentiate between do-while and while-do loop with the help of an example.   (6.5)

Q3   (a) Write a program in C which reads a string and after finding its length, program print back the string in reverse order. Do not use any in built function.   (6)
   (b) What do you mean by enumerated data types? Are they different from strings? Explain their use.   (6.5)

Q4   (a) Differentiate between Sequential/Random files in terms of the time taken for insertion, deletion and updation of records.   (6)
   (b) Explain different classifiers for formatted outputs with example.   (6.5)

Q5   Give function name, syntax and corresponding header file to achieve the following:-   (12.5)
   (a) To open a file in read mode.
   (b) To clear the input buffer.
   (c) To clear the output buffer.
   (d) To read the buffered strings.
   (e) To read the character Un-buffered.
   (f) To read the whole line from input.

Q6   (a) Write a program in C which reads an array of size n, find how many numbers in the array are even, odd and count them and print the information.   (6)
   (b) Write a program in C which reads a array of integers. Each element of the array is replaced by its square. Print back the array.   (6.5)

Q7   (a) Differentiate between call by value and call by reference parameter passing mechanism with the help of an example.   (6)
   (b) In C, when arrays are passed to the function, which mechanism do they follow? Is there any relation between pointers and array's name? Explain.   (6.5)

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