(Please write your Exam Roll No.) Exam Roll No. .....

END TERM EXAMINATION

SECOND SEMESTER [B.TECH] MAY- JUNE 2017

Paper Code: ETCS-108 **Subject: Introduction to Programming**
(Batch 2013 onwards)

Time: 3 Hours **Maximum Marks: 75**

Note: Attempt any five questions including Q.No1 which is compulsory.

Q1 Differentiate between the following:- (5x5=25)
(a) Assembler and Linker
(b) Internal and External Documentation
(c) break and continue
(d) malloc () and calloc()
(e) while and do-while

Q2 (a) Draw a flowchart to find roots of a quadratic equation. (5)
(b) Write a C program to print the pattern. (7.5)

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Q3 (a) Explain the difference between static and constant with example. (4)
(b) What are enumerated data types? Explain with example. (4)
(c) Explain preprocessor directives with examples. (4.5)

Q4 (a) Explain dangling pointer and NULL pointer with examples. (3)
(b) Explain argument passing using pointers. (3)
(c) Explain various storage classes in C. Difference between primitive & non-primitive data types. (4+2.5=6.5)

Q5 (a) Differentiate between structure and union with example. (2.5)
(b) Explain call by value & call by reference in C. (4)
(c) Write a program to find the factorial of a number through recursion. (6)

Q6 (a) Write a program that copies the file called "abc.txt" to another file called "new.txt". (6)
(b) Explain formatted I/O functions for files. (2.5)
(c) Differentiate between sequential and random access files. (4)

Q7 (a) Write a program to check whether an input string is palindrome or not. (6.5)
(b) Write a program to count the number of vowels and words in the string "INTRODUCTION TO PROGRAMMING". (6)

Q8 (a) Write a program to multiply two matrices. (4)
(b) Explain ternary operator with example. (3.5)
(c) Explain the bitwise operators available in C. (5)

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