(Following Paper ID and Roll No. to be filled in your Answer Books)	
Paper ID : 199239	**Roll No.**

B. TECH.

Theory Examination (Semester-II) 2015-16

COMPUTER PROGRAMMING

Time : 3 Hours   *Max. Marks : 100*

Note: Attempt all sections.

Section-A

1.   Attempt all parts. Each part carries 2 marks.   (2×10=20)

   (a)   What is pointer and how is it initialised?

   (b)   Write is the role of ALU? Explain.

   (c)   What is the difference between following directives?

          #include<stdio.h>   and   #include "stdio.h"

   (d)   Describe the functions of Operating System.

   (e)   What are the escape sequences characters?

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(f)   What is enumerated data type?

(g)   What is the output of this C code?

```
int main()
{
        int x = 4;
        x = x << 1;
        printf("%d\n", x);
```

(h)   What happens if you create loop that is never ended?

(i)   Why C programming is called structured programming?

(j)   What is the value of x for x= -17%-2.

Section-B

2. **Attempt any five questions. Each part carries 10 marks.**
    (10×5=50)

    (a)   Write a program in 'C' to reverse a string through pointer.

    (b)   Write about the formatted and unformatted Input / Output functions in C.

    (c)   Write a program in 'C' print Fibonacci series using recursive function.

1   (2)   P.T.O.

(d)   Draw a flow chart and write an algorithm to find sum and average of 3 numbers.

(e)   Explain with the help of an example, static and extern variable.

(f)   Compare the switch- case and nested if statement in C language with suitable example.

(g)   Write a program in 'C' to find that the given number is prime or not.

(h)   Differentiate between structure and union in 'C'. Write a 'C' program to store the employee details using structure.

Section-C

Attempt any two questions. Each question carries 15 marks.
(15×2=30)

3.   (i)   Differentiate between break and continue with suitable example.

(ii)   Write the difference between type conversion and type casting.

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4. (i) List out various file operations in C. Write a C program to count the number of characters in a file

(ii) What are the different types of Operator in C language and also write down the difference between the associativety and precedence of operators.

5. (i) Write a program in 'C' to multiply the two matrices of size $M \times N$.

(ii) Explain the following:

(a) Preprocessor

(b) Double precision

(c) Array of Structures