

Reg. No.

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**B.E. / B.TECH. DEGREE EXAMINATIONS, MAY/JUNE 2017**

**FIRST SEMESTER**

**GE16151-COMPUTER PROGRAMMING**

*(Common to all branches)*

*(Regulation 2016)*

**Q. Code: 704635**

**Time: Three Hours**

**Maximum : 100 Marks**

Answer **ALL** questions

**PART A - (10 X 2 = 20 marks)**

1. Compare RAM and ROM.
2. Give the advantages and limitations of Pseudo code.
3. Write a C program to print "Hello World" without using semicolon in the program.
4. Illustrate continue statement in C program with an example.
5. What is an array? Give an example.
6. List the operations that can be performed on strings.
7. Differentiate actual parameters and formal parameters.
8. What is pointer in C programming? What are its benefits?
9. Compare structures and unions.
10. Is it better to use a macro or a function?

**PART B - (5 X16 = 80 marks)**

11. (a) (i) Describe in detail about various generations of computers. **(16)**  
**(OR)**  
(b) (i) Convert  $(6245.14)_8$  and  $(111001.101)_2$  to their decimal **(8)** equivalent.  
(ii) Convert  $(59.6825)_{10}$ ,  $(FAC)_{16}$  and  $(561)_8$  to their binary **(8)** equivalent.
12. (a) (i) Explain the concept of operator precedence and associativity **(8)** of operators with examples.  
(ii) Explain the bitwise operator with an example. **(8)**  
**(OR)**

- (b) (i) Write a C program to print the following pattern (8)
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- (ii) Write a C program to calculate the sum of maximum of 10 (8)  
numbers. The program should calculate the sum until user  
enters positive number.
13. (a) (i) Write a C program to remove duplicate element in an array. (16)
- (OR)**
- (b) (i) Explain in detail about String handling functions in C. (8)
- (ii) Write a C program to copy one String into another String (8)  
without using String Handling functions.
14. (a) (i) Distinguish between Library functions and User defined (8)  
functions in C and Explain with examples.
- (ii) Write a C program to find the sum of the digits using recursive (8)  
function.
- (OR)**
- (b) (i) Write a C program for concatenation of two strings using (8)  
pointers.
- (ii) What is a pointer to pointer? Write syntax and explain with (8)  
example C program.
15. (a) (i) Write a C program for illustrating a function returning a (8)  
structure.
- (ii) Write a C program using nested structures to read 3 employees (8)  
details with the following fields; emp-id, name, designation,  
address, da, hra and calculate gross salary of each employee.
- (OR)**
- (b) (i) Write a C Program to find sum and product using macros. (8)
- (ii) Explain in detail about the usage of Extern and Static variable (8)  
in C program.