

Reg. No.

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**Question Paper Code : 27268**

1st year

**B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2015**

**First Semester**

**Civil Engineering**

**GE 6151 : COMPUTER PROGRAMMING**

**(Common to all branches)**

**(Regulation : 2013)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. What is a pseudo code ?
2. What is an algorithm ?
3. What is compilation process ?
4. Discuss the working modulo operator.
5. Declare a character array of size 5 and assign vowels to it.
6. Give some examples of string functions.
7. What is function definition ?
8. What is an address operator and indirection operator ?
9. Write a note on register storage class.
10. What is the use of #define pre-processor ?

**PART – B (5 × 16 = 80 Marks)**

11. (a) Explain in detail with block diagram about the digital computer organization and discuss the function of each block. 16

**OR**

- (b) Perform the following : (4 × 4 = 16)

(i)  $(1011.11011)_2 = ( \quad )_{10}$

(ii)  $(10111)_2 \times (1011)_2 = ?$

(iii)  $(D8BC)_H = ( \quad ? \quad )_2$

(iv)  $(4871)_{10} = ( \quad ? \quad )_8$

12. (a) What are the various operators available in C ? Discuss each one of them with suitable examples.

**OR**

- (b) Explain in detail about various decision making structures available in C with illustrative examples.

13. (a) Write a C program for finding the largest element and smallest element in a matrix.

**OR**

- (b) Write a C program to multiply two matrices.

14. (a) Discuss about call by value and call by reference with illustrations.

**OR**

- (b) What is recursion ? Explain a recursive function with suitable example. Write a recursive function to find the factorial of a number.

15. (a) What is a structure ? Create a structure with data members of various types and declare two structure variables. Write a program to read data in to these and print the same.

**OR**

- (b) Write short notes on : (4 × 4 = 16)

(i) Union

(ii) Static storage class

(iii) #include statement

(iv) #ifndef...#endif