

Question Paper Code: 27268

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.

 $PART - A (10 \times 2 = 20 Marks)$

- 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?

$PART - B (5 \times 16 = 80 Marks)$

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:

 $(4 \times 4 = 16)$

- (i) $(1011.11011)_2 = ()_{10}$
- (ii) $(10111)_2 \times (1011)_2 = ?$
- (iii) $(D8BC)_{H} = (?)_{2}$
- (iv) $(4871)_{10} = (?)_8$
- 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:

 $(4 \times 4 = 16)$

- (i) Union
- (ii) Static storage class
- (iii) #include statement
- (iv) #ifndef...#endif