

Reg. No. :

Question Paper Code : 77156

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 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 super computer? Give an example.
2. Define pseudo code.
3. What is the importance of keywords in C?
4. List the various input and output statements in C.
5. What is an array? Give an example.
6. How is a character string declared?
7. Compare actual parameters and formal parameters.
8. What is the output of the following program?
main ()
{
int a=8, b=4, c, *p1=&a, *p2=&b;
c=*p1**p2-*p1/*p2+9;
printf("%d",c);
}
9. What do you mean by structures?
10. Give the use of preprocessor.



PART B — (5 × 16 = 80 marks)

11. (a) (i) Describe various generations of computers. (10)
(ii) Convert the decimal number 681.75 into binary, octal and hexadecimal equivalent. (6)
- Or
- (b) (i) Explain the basic organization of a computer with neat diagram. (10)
(ii) Draw a flowchart to check whether the given number is zero, positive or negative. (6)
12. (a) (i) Explain the different types of operators available in C. (8)
(ii) What are constants? Explain the various types of constants in C. (8)
- Or
- (b) (i) Describe the various looping statements used in C with suitable examples. (8)
(ii) Write a C program to solve the quadratic equation. (8)
13. (a) (i) Write a C program to add two matrices. (10)
(ii) Write a C program to search a given number in an array of elements. (6)
- Or
- (b) (i) Write a C program to arrange the given 10 numbers in ascending order. (10)
(ii) Explain the various string handling functions. (6)
14. (a) (i) Write a C program to find the factorial of a given number using function. (8)
(ii) Write a C program to exchange the values of two variables using pass by reference. (8)
- Or
- (b) (i) Write a C program to find the sum of the digits using recursive function. (8)
(ii) Write a C program using pointers to read in an array of integers and print its elements in reverse order. (8)
15. (a) Define a structure called book with book name, author name and price. Write a C program to read the details of book name, author name and price of 200 books in a library and display the total cost of the books and the book details whose price is above Rs.500. (16)
- Or
- (b) (i) Explain the various storage classes in C. (10)
(ii) What is union? Discuss with an example. (6)