Question Paper Code : X20657

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020

First Semester

Civil Engineering

GE 6151 – COMPUTER PROGRAMMING

(Common to all Branches)

(Regulations 2013)

(Also common to PTGE 6151 – Computer Programming for First Semester – Civil Engineering/Computer Science and Engineering – Regulations 2014))

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

PART – A   (10×2=20 Marks)

1. List some important hardware and software technologies of fifth generation computers.

2. Write two characteristics and advantages of pseudocode.

3. What is the importance of keywords in C ?

4. List the various input and output statements in C.

5. Give the syntax of declaring an array and initializing it.

6. How do you declare strings in 'C' ?

7. Specify the advantages of functions.

8. How is pointer arithmetic done ?

9. What are the storage classes available in C ?

10. Define pre-processor directives in C.

PART – B   (5×16=80 Marks)

11. a) Explain about algorithm, pseudocode and flow chart with an example of finding the sum of 'n' number.

(OR)

    b) Explain the basic organization of a computer with a neat diagram in detail.

12. a) Write about the need and types of looping statements in C language
and discuss with examples. **(16)**

(OR)

b) Write about the need and types of branching statements in C language and
discuss with examples. **(16)**

13. a) Explain the concept of strings in detail. **(16)**

(OR)

b) i) Explain sorting of a one dimensional array with example program. **(8)**

ii) Write a program to check whether an element is present or not in an array
or not using binary search method. (8)

14. a) i) Write a C program to find the smallest and largest number from the
given 10 numbers using functions. **(10)**

ii) Explain the pass by reference with an example. **(6)**

(OR)

b) i) Write C program to find the factorial of a given number using recursion. **(8)**

ii) Write a C program to count the number of words in a string
using pointers. **(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)**

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