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Question Paper Code : 53124

B.E./B.Tech. DEGREE EXAMINATIONS, APRIL/MAY, 2019.

First Semester

Civil Engineering

GE 6151 — COMPUTER PROGRAMMING

(Common to All Branches)

(Regulation 2013)

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

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1.   State the components of a computer.

2.   Convert the following numbers in one format to other format mentioned:
$(0100101000000001)_2 = (x)_{16}$ and $(E7A9)_{16} = (x)_{10}$.

3.   What are variables? Give examples.

4.   Define implicit type conversion.

5.   List out any four string handling functions in C language.

6.   Define array. Write the syntax for 2D array.

7.   Write the need for functions.

8.   What is recursive function?

9.   What do you mean by structures?

10.   Give the use of preprocessor.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the various classifications of computers in detail.

Or

(b) Explain the various number systems in detail.

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 count the number of vowels in your name. (6)

(ii) Write a C program to multiply two matrices. (10)

Or

(b) (i) Write a C program to check whether the given string is palindrome or not. (6)

(ii) Write a C program to arrange the given 10 numbers in descending order. (10)

14. (a) Explain about pass by value and pass by reference with an example program for each.

Or

(b) With an example program explain about pointer to an array and array of pointers.

15. (a) (i) What is storage class? List and explain with example. (8)

(ii) Define and declare a structure to store date, which including day, month and year. (8)

Or

(b) Write a C program to create mark sheet for students using structure. (16)

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