Reg. No. :

Question Paper Code : 20627

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2018.

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.   Differentiate between analog computer and digital computer.

2.   Define Algorithm.

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

4.   What are the basic data types in C?

5.   What is an array?

6.   What is string?

7.   Compare local variables and global variables.

8.   What is the use of pointer variable?

9.   Define union.

10.   What are the storage classes available in C?

PART B — (5 × 16 = 80 marks)

11. (a) Explain the basic organization of a computer with neat diagram. (16)

Or

(b) (i) Convert the decimal number 378 into binary, octal and hexadecimal equivalent. (6)

(ii) Write the pseudo code and draw a flowchart to find the given number is even or odd. (10)

12. (a) Explain the various types of operators available in C with suitable examples. (16)

Or

(b) (i) Describe the various looping statements used in C with suitable examples. (12)

(ii) Write a short note on constants. (4)

13. (a) (i) Write a C program to find the largest number among n numbers. (8)

(ii) Discuss the various string handling functions in C. (8)

Or

(b) Write a C program to multiply two matrices. (16)

14. (a) (i) Write a C program to generate the fibonacci series 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 Greatest Common Divisor (GCD) using recursive function. (8)

(ii) Write a C program to count the number of words in a string using pointers. (8)

15. (a) Define a structure called bank with account number, name of the customer, account balance. Write a C program to read the details of account number, name of the customer, account balance of 500 customers and print the account number, name of the customer and the account balance whose account balance is below Rs.1000. (16)

Or

(b) Explain the preprocessor directives with suitable examples. (16)

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