Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 21644

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

First Semester

Civil Engineering

GE 2112/CS 16/080230001 — FUNDAMENTALS OF COMPUTING AND PROGRAMMING/FUNDAMENTALS OF COMPUTING AND COMPUTER PROGRAMMING

(Common to All Branches)

(Regulations 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List the factors needed to classify computers.

2. Write first ten numbers in radix 4 number system.

3. What are the various types of software?

4. What is a protocol?

5. What is pseudo code?

6. Difference between while and Do-While Loop.

7. What are the main feature and applications of C language?

8. Write a code segment using while statement to print numbers from 10 down to 1.

9. What is array?

10. How is a pointer variable initialized?

PART B — (5 × 16 = 80 marks)

11. (a) Explain the following :

(i) Organization of a computer. (4)

(ii) Input unit. (4)

(iii) Central processing unit. (4)

(iv) Output unit. (4)

Or

(b) Explain the different components of a computer system with a block diagram. (16)

12. (a) (i) Explain in detail the types of computer software. (8)

(ii) Explain in detail the various steps involved in Software Development. (8)

Or

(b) (i) Explain the common types of internet access. (6)

(ii) Write short notes on web browser. (5)

(iii) Explain a typical structure of URL. (5)

13. (a) (i) Draw the flowchart for finding the roots of a quadratic equation. (8)

(ii) Write an algorithm to find the largest of three numbers. (8)

Or

(b) Discuss in detail about the features of office packages. (16)

14. (a) What are the categories of operators in 'C'? Discuss any two operators with suitable programs. (16)

Or

(b) (i) Write a 'C' program to generate Fibonacci series for a given number. (8)

(ii) Write a 'C' program to find a factorial of a given number. (8)

15. (a) (i) Write a C program to find sum of the diagonal elements of a matrix. (10)

(ii) Write a C program to count the number of words in a string using pointers. (6)

Or

(b) (i) Explain the various storage classes in C. (8)

(ii) Write a C program to exchange the values of two variables using function. (8)

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