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

Question Paper Code: 11006

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2014.

First Semester

Civil Engineering

01UCS106 - COMPUTER PROGRAMMING

(Common to all branches)

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 2 = 20 Marks)

1. Define Pseudo code.
2. List the types of number systems.
3. What is ternary operator? Give an example.
4. Define an identifier.
5. Define One-Dimensional array.
6. Define strrev( ).
7. What is recursion?
8. How will you declare a function?
9. List the types of storage classes in C.
10. Write any two rules for defining preprocessor.

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Explain the different generations of computers. (8)

(ii) Classify the different types of computer based on various categories. (8)

Or

(b) (i) Convert the decimal number $(3977)_{10}$ to octal number. (4)

(ii) Convert the octal number $(37)_8$ to decimal number. (4)

(iii) Convert the octal number $(377)_8$ to binary number. (4)

(iv) Convert the octal number $(7521)_8$ to hexadecimal number. (4)

12. (a) (i) Explain the various loop structures available in C with an example. (10)

(ii) Write the memory sizes of different data types. (6)

Or

(b) (i) Explain the different decision making statements with suitable examples. (10)

(ii) Explain in detail about unformatted Input / Output statements. (6)

13. (a) What are the advantages of using array? How arrays are declared and initialized? Write a program to perform 3 x 3 matrix addition. (16)

Or

(b) Illustrate the following string functions with an example.

(i) The strlen ( ). (4)
(ii) The strcat ( ). (4)
(iii) The strcmp ( ). (4)
(iv) The strcpy ( ). (4)

14. (a) With relevant examples, discuss the following.

(i) Call by value. (8)
(ii) Call by reference. (8)

Or

(b) Explain in detail about dynamic memory allocation and compare with static memory allocation. (16)

15. (a) (i) Compare Structure and Union. (6)

(ii) Write a program to print the student number, name and marks using structures. (10)

Or

(b) Write a program ro create a file namely course which contains course name, credit, number of students offering the course. (16)