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

## Question Paper Code: 31121

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2016

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. What are the components of the computer systems?
2. Convert binary number 100110 into its octal equivalent.
3. What are keywords in C?
4. What is the difference between '=' and '= =' operator?
5. What are the main elements of an array declaration?
6. How strings are represented in C language?
7. Write short notes about main () function in 'C' program.
8. What are the uses of pointers?
9. Write the format of the following functions: (a) fseek (b) fopen.
10. What are the advantages of unions over structures?

PART - B (5 x 16 = 80 Marks)

11. (a) Explain various generations of computers with its features. (16)

Or

(b) Discuss about the program control structure and program paradigms in detail. (16)

12. (a) Explain in detail about 'C' declarations and variables. (16)

Or

(b) Explain about the various decision making statements in 'C' language. (16)

13. (a) (i) Explain the need for array variables. Describe the following with respect to arrays: Declaration of array and accessing an array element. (8)

(ii) Write a C program to perform the following matrix operations:

(a) Addition (b) multiplication (8)

Or

(b) (i) Explain the following functions with examples.

(a) strlen() (b) strcpy() (c) strcmp() (8)

(ii) Write short notes on reading and writing string. (8)

14. (a) (i) Discuss about the classification of functions depending upon their input and output parameters. (12)

(ii) What are the applications of recursive function? (4)

Or

(b) Explain in detail about different ways of passing (or calling) data to functions, call by value and call by reference. (16)

15. (a) Define structures and union. Explain them in detail. (16)

Or

(b) Develop a C program using structures to prepare the students mark statement. (16)

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