

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--

Question Paper Code: 11006

B.E. / B.Tech. DEGREE EXAMINATION, OCTOBER 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: Algorithm
2. Convert the binary number $(111011101)_2$ to decimal number.
3. Write about bitwise operators.
4. What is type casting? Give example.
5. Give the code for initializing a array variable of type double with size=5.
6. What is a NULL pointer in C?
7. How to declare a pointer to a pointer?
8. What is the output of the following program:

```
main()  
{ char p [] = "%d/n";  
  p[1]='c';  
  Printf(p,65)  
}
```

9. Define union

10. What are the different file access modes in C?

PART - B (5 x 16 = 80 Marks)

11. (a) (i) Draw the basic organization of a digital computer and explain its components. (8)
(ii) Present the pseudo code and flowchart for displaying the first 100 even numbers. (8)

Or

- (b) (i) Convert the decimal number $(588)_{10}$ to binary, Hexa and Hexadecimal equivalent. (8)
(ii) Give the algorithm and flowchart for generating sine series. (8)

12. (a) (i) Write a program using conditional operators to determine whether a year entered through the keyboard in a leap year or not. (8)
(ii) Write a program to generate all the prime numbers from 1 to 300. (8)

Or

- (b) (i) Describe, how the input and output operations are handled in C. Give examples for each. (10)
(ii) Write a C program to find the arithmetic mean, variance and standard deviation for 20 data. (6)

13. (a) Depict how to declare and initialize multidimensional arrays. Also write a C program to subtract 3x3 matrices. (16)

Or

- (b) (i) Explain the different string manipulation functions in C. (8)
(ii) Write a C program to search a name in the given list. (8)

14. (a) illustrate how are functions declared and defined in C. Also using swapping of two integers, discuss about the passing of values to function. (16)

Or

- (b) With neat examples, explain about pointers arithmetic and passing pointers to a function in C. (16)

15. (a) (i) Describe structure data type with neat examples and compare it with unions. (10)
- (ii) Write a C program to create a class student which contains sno, sname, dept, dob.
Also read and display them. (6)

Or

- (b) Write short notes on:
- (i) Preprocessor directives (8)
- (ii) Storage classes (8)
-

