

USN

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

10CCP13/23

**First/Second Semester B.E. Degree Examination, June/July 2015**  
**Computer Concepts and C Programming**

Time: 3 hrs.

Max. Marks:100

**Note: Answer any FIVE full questions,  
selecting at least two from each part.**

**PART - A**

- 1 a. i) Which of the following task is performed by a computer  
A) processing      B) input      C) output      D) all of these  
ii) The \_\_\_\_\_ section within the CPU contains the stored program  
A) secondary storage      B) primary storage      C) both A and B      D) neither A and B  
iii) A small unit consisting of integrated circuits is sometimes called as  
A) processor      B) chip      C) circuit      D) gadget  
iv) What hardware was used by first generation computers?  
A) vaccum tubes      B) valves      C) VLSI      D) ICs. (04 Marks)
- b. Describe the features of a computer. (06 Marks)
- c. What are printers? Explain the types of printers. (06 Marks)
- d. Explain the different types of microprocessors. (04 Marks)
- 2 a. i) Categorize the CD - ROM is the following memory device  
A) semiconductor memory      B) memory register  
C) magnetic memory      D) none of these  
ii) Two basic types of operating systems are  
A) sequential and direct      B) batch and interactive  
C) batch and time sharing      D) sequential and real time.  
iii) Which of the following topology is not broadcast type  
A) star      B) bus      C) ring      D) tree  
iv) Identify the odd term among the following group  
A) coaxial cable      B) optical fibre      C) twisted pair wire      D) microwaves (04 Marks)
- b. What is operating systems? Explain the different types of operating systems. (08 Marks)
- c. Explain the need of networking and benefits of networking. (08 Marks)
- 3 a. i) Which of the following is considered as a token in C language  
A) keyword      B) identifier      C) operator      D) all of the above  
ii) The keyword among the following passes the program control out of block  
A) continue      B) if      C) break      D) goto  
iii) In a C program, prior to using a variable, you must first \_\_\_\_\_ it  
A) initialize      B) declare      C) define      D) both A and B  
iv) What will be the output of the following int a = b = c = 3 ;  
printf("%d %d %d", a, b, c)  
A) 3 3 3      B) garbage value      C) 0 0 0      D) error. (04 Marks)
- b. Write a flowchart to input three numbers and print largest of three numbers. (06 Marks)
- c. Write a structure of a C program. (05 Marks)
- d. What is a variable? How it is declared and initialized? Give example. (05 Marks)

June/July 2015

10CCP13/23

- 4 a. i) Which of the following is a ternary operator,  
A) >= B) < C) ? : D) &&
- ii) Which is the floating point constant  
A) '400.0' B) 0.0457 C) "0.0457" D) 457
- iii) What is the associativity of == relational operator  
A) left to right B) right to left C) no associativity D) none of the above
- iv) Which statement is similar to a?b = c : d?  
A) ( a?b = c ) : d B) (a?b) = (c:d) C) a?(b = c : d) D) a?(b = c) : d. (04 Marks)
- b. What are operators? Explain the different types of operators. (10 Marks)
- c. Write a program to find the roots of a quadratic equation. (06 Marks)

**PART - B**

- 5 a. i) Array elements cannot be passed to a function using.  
A) call by value B) call by reference C) both A and B D) none of these
- ii) When a function does not return any value its return type is \_\_\_\_\_  
A) void B) null C) zero D) both A and B
- iii) Identify the error in the program segment  
function (int a, int b)  
{  
    int a ;  
    a = 40 ;  
    return (b) ;  
}
- A) the function should be defined as int function (int a, int b)  
B) variable is re-declared  
C) both A and B  
D) neither of A and B
- iv) The getch() and putchar() functions belongs to  
A) stdio.h B) conio.h C) string.h D) ctype.h (04 Marks)
- b. Write a program using function to sort an array of integers. (08 Marks)
- c. What are the parameter passing mechanism in C? Explain in brief. (08 Marks)

- 6 a. i) Which of the following 'C' statement branches unconditionally from one point to another point in the program?  
A) if B) goto C) switch D) if-else
- ii) When more than one if-else statements are used in a sequence. It is known as \_\_\_\_\_  
A) if else ladder B) nested if else C) if else block D) nested else
- iii) Which of the following executes one or more statements repeatedly until a condition is met?  
A) if B) switch C) for D) continue
- iv) A loop with no test condition is \_\_\_\_\_  
A) while B) do ---- while C) for D) none of these (04 Marks)
- b. Write a program using do ---- while loop to display numbers 1 to 10, without using arrays. (08 Marks)
- c. Differentiate between while and do ---- while loop. (08 Marks)

June/July 2015

10CCP13/23

- 7 a. i) How many dimensions an array can have?  
A) one dimension B) two dimension  
C) three dimension D) any no. of dimensions.
- ii) How many elements can be added or removed from an array at a time  
A) 2 B) 1 C) 4 D) 6
- iii) What is the output of the following code,  
`int x[2][2] = {3, 2, 5, 4};  
printf("%d", x[1][1]);`  
A) 3 B) 4 C) 5 D) 2
- iv) Elements of an array are stored in  
A) Random memory locations B) sequential memory locations  
C) scattered memory locations D) direct memory locations. (04 Marks)
- b. Write a program to print the product of two dimensional arrays. (10Marks)
- c. What is an array? Explain the types of an array with examples. (06Marks)
- 8 a. i) Open MP stands for  
A) open multiprocessing B) open main parallelism  
C) open multitasking parallelism D) open multiprocessor
- ii) The \_\_\_ function provides the number of processors, which is used to process a program.  
A) `omp-get-num-procs()` B) `omp-get-num-threads()`  
C) `omp-get-thread-num()` D) `omp-set-num-threads()`
- iii) Open MP is an API, which is based on  
A) join model B) Fork - Join model C) Joint - fork model D) structural model
- iv) The main components of open MP are directives, environmental variables and \_\_\_\_  
A) Runtime variables B) library functions  
C) instances variables D) none. (04 Marks)
- b. What is synchronization in open MP? Explain the different synchronization constructs. (08 Marks)
- c. Write a program to find the factorial of a number using open MP. (08 Marks)

\*\*\*\*\*