

25/10/13

(6)

Roll No.

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

B.E / B.Tech ( Full Time ) DEGREE END SEMESTER EXAMINATIONS, NOV / DEC 2013

CSE

Semester 2

CS8203 PROGRAMMING USING C++

(Regulation 2012)

Time: 3 Hours

Answer ALL Questions

Max. Marks 100

**PART-A (10 x 2 = 20 Marks)**

1. Given variable and their value based on the assignments  $j = \&i;$   $k = \&j;$   

i	3
j	6485
k	3276

  
Find the address of i and j .
2. `int i=3; int *j;`  
`j=&i; i is stored at 65524; j is stored at 65522` Find the output  
`printf("%u",j);`  
`printf("%d",*j);`
3. Define encapsulation?
4. How is information hiding achieved in C++?
5. Differentiate static and non static data member.
6. What is an object ?
7. Write the statement to restrict all the exceptions.
8. Write 2 ways to access the data member of a class using this pointer.
9. Write the structure of a C++ program.
10. Name any 4 classes that support streams.

**Part – B ( 5 x 16 = 80 marks)**

11. (i) `struct book`  
`{ char name[25]; int callno; };`  
Write a program in c to call function `disp()` which displays the members of the structure `book`. Pass the address of the structure variable to function `disp()`. (5)
- (ii) Create an integer one dimensional array in `main()` using c. Pass array elements to function `disp()` using their address. Display the array elements in `disp()`. (5)
- (iii) Write a program to display a file using c. (6)

Roll No.

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

12. a) i) Explain function overloading with suitable examples. (8)  
ii) Write a C++ program to implement stack. (8)

(OR)

- b) (i) Function add takes 2 integer parameters and displays the sum of them. Function sub takes 2 integer parameters and displays the difference of them. Use pointer to function to invoke add and sub. (8)  
ii) Explain the use of default arguments with suitable examples. (8)

13. a) (i) Write a program to add 2 complex numbers using friend function by overloading +. Write the complete program and display the result in main(). (8)  
ii) Explain the various forms of constructors with an example for each. (8)

(OR)

b.i). Class A has method show(). Class B has method show() and prints "class b". Class C has method show() and prints "class c". Using pointer invoke show() of B and C. Write the complete program. (8)

- ii) Class Date has date, month, year data members. Class emp has dob and hire as data members and both contain the data members **date, month, year**. Provide constructor and display method to initialize and print the data members respectively. Create an object of type emp and print its data members. (8)

14. a) Explain how exception handling is achieved in C++. (16)

(OR)

- b) i) Write a generic program to swap 2 arguments. Write the main. (8)  
ii. A class contains 2 generic data members. Provide methods to initialize and display the data members. Write the main. (8)

15. a) i) Explain how memory is dynamically allocated in C++ with an example. (8)  
ii) Write a program using C++ to copy a file f1 to another file named one.dat. (8)

(OR)

- b) Explain the various forms of inheritance giving an example for each. (16)