

Reg. No.....

Name.....

B. Voc. DEGREE EXAMINATION, OCTOBER, 2016

FIRST SEMESTER- CORE COURSE (SOFTWARE DEVELOPMENT)

VSD1S03TB - OBJECT ORIENTED PROGRAMMING IN C++

Time: Three Hours

Maximum: 80 Marks

PART A

I. Answer all questions (1 mark each)

1. Define Encapsulation
2. What do you mean by data type?
3. Define objects.
4. What is inheritance? Give one advantage.
5. What is a virtual function?
6. Define polymorphism.
7. Find the error in the following statement `cin>>x;>>y;`
8. Write an example C++ statement using new operator
9. Find the error in the following function prototype and write the correct statement

`int mul(int a,b);`

10. Find the error and correct the statement

`float a=b=12.34;`

(10 x 1 = 10)

Part B

II. Answer any eight of the following in one or two sentences (2 marks each)

11. Give the areas for applications of OOP.
12. Describe the structure of a C++ program.
13. Explain storage classes.
14. What are reference variables ? Give examples.
15. Notes on chained assignment and embedded assignment.
16. Give an example for the use of default arguments in a function.

17. When will you make a function inline?
18. Give the general form of a class declaration.
19. When do we declare a member of a class static?
20. What is a parameterized constructor?
21. How do we invoke a constructor function?
22. What is an operator function? Give the general form of an operator function.

(8×2=16)

Part C

III. Answer any six of the following in 50 words (6 marks each)

23. Explain the different control statements used in C++.
24. Describe the different concepts of object-oriented programming.
25. Write a program to display the following output using a single cout statement.

Maths=90

Physics=77

Chemistry=69

26. Explain structures .
27. Describe the mechanism of accessing data members and member functions in the following cases.
 - (a) Inside the main program
 - (b) Inside a member function of the same class
28. How is a member function of class defined outside the class.
29. Explain the different types of inheritance in C++
30. Why is it necessary to overload an operator?
31. Why do we need a virtual base class?

(6×4=24)

Part D

IV. Answer any two of the following (15 marks each)

32. What is function overloading? Explain with an example.
33. Write a program to implement single inheritance with a sample program.
34. Write a program for overloading unary minus operator.
35. What are friend functions? Explain with an example program.

(2 x 15 = 30)

$$(2 \times 15 = 30)$$