Code : 15EC63C

Register Number | | | | | | | | | | |

VI Semester Diploma Examination, Oct./Nov.-2019

OBJECT ORIENTED PROGRAMMING USING C++

Time : 3 Hours] **[Max. Marks : 100**

Instructions : (i) Answer any **six** questions from Part – **A**. (5 × 6 = 30 marks)

(ii) Answer any **seven** questions from Part – **B**. (7 × 10 = 70 marks)

PART – A

1. Write a program to calculate area of a rectangle and display it. **5**

2. Write a program to read the value of a, b and c and display the value of x, where $x = a/b - c$ **5**

3. Write a program to display the following output using for loops : **5**

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

4. Explain friend function and friend class. **5**

5. Define class and object. Give an example. **5**

6. List rules for overloading operators. **5**

7. What is Polymorphism ? How is polymorphism implemented in C++ ? **5**

8. Write a note on structure and union. **5**

9. Write a note on virtual function. **5**

PART – B

10. (a) Explain FOR AND WHILE LOOP with SYNTAX. **5**
    (b) Write a note on identifiers or variables in C++. **5**

11. Describe declaration and initialisation of one & two dimensional arrays with syntax and example. **10**

12. (a) Explain hybrid inheritance. **5**
    (b) Discuss the limitation of structure. **5**

13. Explain the keywords private, public and protected. Discuss memory allocation for objects. **10**

14. (a) Explain constructors and destructors. **6**
    (b) Write a note on JAVA. **4**

15. Write a program to show overloading of any one unary and any one binary operator. **10**

16. (a) Explain break and continue statements. **5**
    (b) Write a note on arrays. **5**

17. Define Inheritance. Explain different forms of inheritance with suitable diagram. **10**

18. What is a virtual function ? List rules for virtual functions. **10**

19. (a) Explain in line functions. **5**
    (b) Summarize rules for operator overloading. **5**
