Reg. No…….. Name…… **17U311**

B. Sc. DEGREE END SEMESTER EXAMINATION OCTOBER 2017

SEMESTER – 3: B. Sc. COMPUTER APPLICATIONS

COURSE: 15U3CRCAP6, OBJECT ORIENTED PROGRAMMING IN C++

(For Regular - 2016 Admission and Supplementary / Improvement 2015 Admission)

Time : Three Hours Max. Marks : 75

PART A

Answer ***all*** questions. Each question carries **1** mark.

1. What is the role of protected access specfier?
2. What are the different keywords involved in achieving Exception handling?
3. What is the role of static keyword on class member variable?
4. What is the reminder for 5.0 % 2 ?
5. What is Copy constructor?
6. What is an abstract class?
7. What is a Virtual destructor?
8. Who is invented C++ programming language?
9. What is function overloading?
10. What is a stream?

(10 x 1 = 10)

PART B

Answer ***any eight*** questions. Each question carries **2** marks.

11. Write a C++program that will ask for a temperature in Fahrenheit and display it in Celsius?
12. Define Pointer with example
13. Define the memory management operators with example
14. What are manipulators?
15. Compare Call by reference and Call by value
16. What is an Inline function?
17. Write the syntax of switch statement
18. Define operator function with example
19. Distinguish between multiple and hierarchical inheritance
20. Explain any four object oriented concepts (2 x 8 = 16)

PART C

Answer ***any five*** questions. Each question carries **5** marks.

21. What are the Data types available in C++?
22. Write a program to overload '+' operator for two matrixes.
23. What are friend functions? Explain the characteristics with a suitable example.
24. Write a program in C++ to illustrate the use of array of objects.
25. Write a program to find the volume of cube and rectangle box using function overloading.
26. What is exception? What are the advantages of using exception handling mechanism in a Program?
27. When do we make a class virtual? Explain with example.

(5 x 5 = 25)

PART D

Answer ***any two*** questions. Each question carries **12** marks.

28. What are the control statement available in C++? Explain with flowchart and example.
29. Explain inheritance, different types of inheritance. Write a program for multiple inheritances.
30. What is a virtual function and explain the rules? When do we make a virtual function "pure"? Explain with example.
31. Write a menu driven program to overload operators **'+','==' and '<='** for strings? Use Constructors and allocate memory at run time.

(12 x 2 = 24)

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