21103329

Reg No   :   ....

Name   :   ....

B.Sc/BCA DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, DECEMBER 2021

Second Semester

Core Course - CS2CRT06 - OBJECT ORIENTED PROGRAMMING USING C++

(Common for B.Sc Computer Applications Model III Triple Main, B.Sc Computer Science Model III, B.Sc Information Technology Model III, Bachelor of Computer Applications)

2017 ADMISSION ONWARDS

2CCA821B

Time: 3 Hours   Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1.   What are enumerated data types?

2.   What are jump statements?

3.   Explain two uses of scope resolution operator.

4.   Define private member functions.

5.   What are static data members and static member function?

6.   What is a parameterized constructor?

7.   What are constructor and destructor? What are the uses of constructor and destructor?

8.   Define Inheritance. List the different types of inheritance.

9.   What is nesting of classes?

10.   What is a virtual function?

11.   Explain the file stream operations.

12.   List the file mode operators.

(10×2=20)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. What are characteristics of OOPS?

14. What is inline function? Explain with an example.

15. Write a program to perform addition of time in hours and minutes format using objects as function arguments.

16. Explain Constructor Overloading.

17. Write a program to overload ++ operator (both prefix and postfix).

18. Discuss the effect of inheritance on the visibility of class members.

19. Describe virtual base class with an example.

20. What is the purpose of using 'this' pointer?

21. What are the different input and output functions used in files?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Explain the following: (a) Function Prototyping (b) Return by Reference

23. Explain friend functions. Write a program to swap the private data of two classes using friend functions.

24. What is difference in overloading binary operators using friend functions and member functions? Explain.

25. Differentiate between multiple inheritance and multilevel inheritance.

(2×15=30)