QP CODE: 22103289

Reg No : ....

Name : ....

B.Sc/BCA DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2022

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

9D891CE3

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is purpose of new operator?

2. What do you mean by cascading of I/O operator?

3. How can we define a member function outside the class?

4. Explain the memory allocation of class data member and member function.

5. How to return objects from a function?

6. What is the purpose of copy constructor?

7. Name any four rules for overloading operators.

8. What are visibility labels or access specifiers?

9. What is abstract class?

10. What is use of pure virtual function?

11. What is a file?

12. Define file mode and write the various file mode parameters.

Part B

*Answer any **six** questions.*

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

13. Explain call by reference and return by reference with suitable examples.

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

15. Explain static member function with example.

16. Explain Constructor Overloading.

17. Write an overloading function for binary operator +.

18. Differentiate between multiple inheritance and hierarchical inheritance.

19. Explain nested classes with example.

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

21. Write a note on unformatted I/O operation.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. What are the different data types available in C++ with suitable example?

23. (a) What is array of objects? (b) Write a program to find the difference of two complex numbers using friend function?

24. a) Explain dynamic constructors with example? b) Write a program to implement matrix addition using operator overloading?

25. What is inheritance? What are the different types of inheritance?

(2×15=30)