

Enrol. No. 19955312007

THIRD SEMESTER END TERM EXAMINATION: NOVEMBER, 2013

B. SC. (H) MATHEMATICS

BCM306

PROGRAMMING WITH C PLUS PLUS

Max Marks: 70

Time: 3 Hrs

Note: Attempt questions from all sections as directed.

Section - A : Attempt any five questions out of six. Each question carries 06 marks. [30 Marks]

Q1. What does 'this' pointer do? Explain using an example and what are the applications of 'this' pointer.

Q2. What is a friend function? What are the merits and demerit of using friend function? Explain with example.

Q3. Differentiate between following terms with examples. (3x2)

- i) Abstraction and Encapsulation.
- ii) Function Overloading and Function Overriding.

Q4. What is a static data member? How they are used in static function. Explain with example.

Q5. Distinguish between the following terms:-

- Try, Catch, Throw
- Inheritance and Polymorphism
- Data Abstraction and Encapsulation

Q6. How does Object Oriented approach differ from Procedure Oriented Program?

Section - B: Attempt any two questions out of three. Each question carries 10 marks. [20 Marks]

Q7. i) Illustrate the reserved word inline with two examples.

ii) Explain the constructors and destructors. Support your answer with examples.

(5+5)

Q8. Explain the concept of Abstract Classes, Scope Resolution Operator and Templates with suitable examples.

(3+3+4)

Q9. Explain with suitable example:

(4+3+3)

- i) Pure Virtual Function
- ii) Copy Constructor
- iii) File Handling

Section - C
: Compulsory question

[20 Marks]

Write a program to perform complex number arithmetic operations using operator overloading.

(10)

Describe the syntax of multiple inheritance. When we do use such an inheritance? Also explain resolution Inheritance and how can we resolve it. Explain it with suitable example. (10)

Section - C

Q10. i) Write

ii) De
Ambiguity