C++ Imp

chapter 1

1.(a) or(b):

যৌ লাই ফরক ফাকে তারিকাল

1. How can oop relate with real world problem, হোল
2. Non-linear behaviour of complexity.
3. computation as simulation.
4. Abstraction mechanism.
5. Advantage of oop over pop // structure & class.

1(b)/2a.

→ Friend function (role, how it violate data hiding, ----)

→ Data hiding. (How it can be achieved).

→ ~~paramaterized~~

→ Default argument.

→ static data member

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2(a)/2(b) constructor বাদে

→ Types of constructor

→ constructor overloading

→ copy constructor.

→ What is DMA ? How can we achieve it.?

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3(a) | 3(b) | 4(a) Inheritance

→ Diamond problem
→ Inheritance and its types.
→ form of Inheritance.
→ Ambiguity in multiple Inheritance / How can we solve it.
→ POS (subclass, sub-type) → code.
→ composition / containership → code
→ Difference b/w is-a rel^n and has-a rel^n.
→ Virtual-base class

Polymorphism.

4(a) | 4(b) | 5(a)

→ Explain run time & compile time polymorphism.
→ ~~function~~ operator overloading.
Unary operator ⇒ (++)
Binary operator.
→ add 2 complex no.
→ ———

→ Type casting
class to Basic
class to class
→ convert polar to rectangle

→ virtual function | pure virtual
→ this pointer
→ function overriding.

5(b)/6(a)/ Templates / Exception Handling.

→ purpose of using template template,
→ types:-
    function template
    class template

→ WAP to swap 2 int, 2 float
→ simple programs.
    eg: sum of 2 float, 2 int

Exception handling.

→ What are Exceptions? write its types.
→ How can we handle it.?
→ simple example
    → 0 आताना

6(b)/ Theory.

→ CRC card
→ sequence Diagram,
→ Differentiate overloading & overriding.
→ programming in large & small
→ Reusability uses non-interface.

Short note:

→ Inline function.
→ Message passing mechanism
→ Polymorphism বাদে
→ Chapter-1 বাদে
  - Abstraction mechanism
→ Overloading and overriding.
→ virtual fun.
  etc