Roll No. ....   Total Pages : 3

249401

May, 2019
MBA (IB) - 4th Semester
Object Oriented Analysis & Design with
Programming in C++ (MBA/ITM 209)

Time : 3 Hours]   [Max. Marks : 75

Instructions :

1. *It is compulsory to answer all the questions (1.5 marks each) of Part-A in short.*

2. *Answer any four questions from Part-B in detail.*

3. *Different sub-parts of a question are to be attempted adjacent to each other.*

PART–A

1. (a) What do you mean by object modelling technique?

                                                    (1.5)

    (b) What is a class specification?   (1.5)

    (c) What are Data Flow Diagrams?   (1.5)

    (d) Define the various phases of Object modelling technique?   (1.5)

    (e) What is function overloading?   (1.5)

(f) What are inline functions? (1.5)

(g) What are preprocessor directives? (1.5)

(h) Differentiate between two types of pointers used in C++? (1.5)

(i) What is encapsulation? (1.5)

(j) What do you mean by 'open and close principle'? (1.5)

PART–B

2. (a) What is the relationship between object model, functional model and dynamic model? (10)

   (b) What are the different types of things in UML? (5)

3. (a) Define static or compile time polymorphism? (5)

   (b) What is dynamic polymorphism? How is it achieved? (10)

4. Differentiate between constructors and destructors? What are the different types of constructors? Explain each of them with a pseudocode. (15)

5. (a) What is reusability? How is it achieved in C++? (5)

   (b) Write a suitable program to overload "+" operator for string concatenation? (10)

6. (a) Explain the various phases of system design. (10)

   (b) What are relationships in Object Oriented System Development? Explain the basic relationships? (5)

7. Explain the different types if Inheritance, each with its syntax and pseudocode. (15)

_____