

**POST GRADUATE DIPLOMA IN LIBRARY  
AUTOMATION AND NETWORKING (PGDLAN)**

**Term-End Examination**

00152

**June, 2014**

**MLI-007 : PROGRAMMING**

*Time : 2 hours*

*Maximum Marks : 50*

*(Weightage : 40%)*

---

**Note :**

- (i) *There are **three** parts in this Question Paper.*  
**Part A : C++**  
**Part B : Java**  
**Part C : Visual Basic**
- (ii) *Candidates are advised to attempt only the part opted by them.*
- (iii) *Mention clearly the part attempted before answering.*
- (iv) *All parts carry equal marks.*
- (v) *Answer **all** questions. All questions carry equal marks. Illustrate your answers with suitable examples and diagrams, wherever necessary. Write the relevant question number before writing the answer.*
- 
-

## **PART A : C++**

**1.1** List and briefly explain the modules you can consider for a library management system to be developed using C++.

**OR**

**1.2** What is a Macro ? How does it differ from an Inline Function ?

**2.1** Explain the process of creating an object in C++. Give an example.

**OR**

**2.2** How are Data members and member functions of a class accessed ?

**3.1** How are the functions overloaded in C++ ? Explain with the help of an example.

**OR**

**3.2** List any five operators which can be overloaded. Give examples.

**4.1** Explain Private inheritance and Protected inheritance. What are the differences between them ?

**OR**

**4.2** What are Virtual Functions ? Give an example. Also, list at least two advantages of Virtual Functions.

**5.0** Write short notes on any *two* of the following in about 250 words each :

- (a) Input and Output statements in C++
- (b) Multiple Inheritance
- (c) Nested Classes
- (d) Exception Handling

## **PART B : Java**

**1.1** Explain the two components of Java Platform.

**OR**

**1.2** Explain the process of creating packages using Java.

**2.1** Explain the process of creating interfaces using Java.

**OR**

**2.2** Write a short note on Typecasting.

**3.1** Explain any two conditional statements using examples.

**OR**

**3.2** What are labelled loops ? Give an example.

**4.1** Explain the following with examples :

(i) **instance of operator**

(ii) **final keyword**

**OR**

**4.2** What are Wrapper Classes ? Give an example.

**5.0** Write short notes on any *two* of the following in about 250 words each :

- (a) Arithmetic Operators in Java
- (b) User Defined Exceptions
- (c) Access Control
- (d) Bitwise Operators

## **PART C : Visual Basic**

- 1.1** Explain the process of creating form and writing code in VB, with an example.

**OR**

- 1.2** Explain the features of Visual Basic IDE.

- 2.1** Explain any five tools/controls of Visual Basic available in tool-box.

**OR**

- 2.2** Explain the process of creating an OLE object at design time.

- 3.1** Explain the process of adding a record and deleting a record in a table.

**OR**

- 3.2** List various arithmetic, logical and relational operators in VB.

- 4.1** What is a Database ? Explain the process of using a Data Manager.

**OR**

- 4.2** Explain the process of changing design of an existing table.

**5.0** Write short notes on any *two* of the following in about 250 words each :

- (a) Control Arrays
  - (b) Picture Box
  - (c) Debug Window
  - (d) Variable Types
-