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MLI-007

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

Term-End Examination

June, 2022

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.*

P. T. O.

(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. The questions are not case sensitive.*

Part A : C++

1. What is an “Open System” and “Closed System” ?
Write the differences between them.

Or

Explain structured analysis development method.

2. Write an algorithm and draw a corresponding flowchart to find the multiplication of three given numbers.

Or

Write short notes on the following :

- (a) Bitwise operators
- (b) BREAK statement

3. Explain the following statements of C++ with the help of an example for each :
- (i) DO---WHILE
 - (ii) CONTINUE
 - (iii) SWITCH

Or

Write a program in C++ to count the number of uppercase alphabets in a given string. Write appropriate class, data members and member functions.

4. With the help of any C++ program, explain the purpose of <iostream.h>.

Or

What is meant by *Constructor* ? Give an example.

5. Write short notes (in about **250** words each) on any **two** of the following :
- (a) Abstract Class
 - (b) Destructors
 - (c) FRIEND
 - (d) Inheritance

Part B : Java

1. Explain the following :
 - (i) Machine Language
 - (ii) Fourth Generation Languages

Or

Explain any **two** roles played by a Systems Analyst.

2. Write a program in Java to perform $a*b/c$, where a, b and c are integers.

Or

Define “extends” keyword. Also, write a program segment in Java that demonstrates the usage of it.

3. Write a program in Java that accepts a string as input and then converts all lowercase characters to uppercase and vice-versa.

Or

Is Java platform independent programming language ? Justify your answer.

4. Write a short note on “final” keyword in Java. Illustrate it with an example.

Or

Explain the access control modifier “private” in Java with an example.

5. Write short notes (in about **250** words each) on any *two* of the following :
- (a) Wrapper Classes
 - (b) Exception Handling
 - (c) Packages
 - (d) Typecasting

Part C : Visual Basic

1. Explain the process of creating a form and labeling fields in Visual Basic.

Or

In VB procedures, what is meant by “passing by value” ? How does it differ from “passing by reference” ?

2. Explain the process of creating a database in VB. Discuss the procedure to create a table in VB.

Or

Write an event procedure that accepts a string and counts the number of characters in it that are not vowels.

3. Explain the process of deleting a record in the table.

Or

Write the syntax for the following control structures with an example for each :

- (a) Do---while loop
 - (b) For next loop
4. Explain the following functions with an example for each :
 - (i) CHR
 - (ii) CVDATE

Or

Explain the following from events of VB with an example for each :

- (i) GotFocus
 - (ii) KeyPress
5. Write short notes on any *two* of the following in about **250** words each :
 - (a) Object Linking and Embedding
 - (b) Debug Window
 - (c) Picture Box
 - (d) DLLs