Textbook exercise of L-7 Programming Basics

A. Tick the correct answer.

- 1) The direction of flow in any flowchart should be from <u>**Top to Bottom**</u>.
- 2) The symbol used to indicate input and output of a program is **Parallelogram**.
- 3) <u>Machine</u> language is directly understood by computer.
- 4) <u>**High Level**</u> language is machine-independent language.

B. State true or false.

- 1) An algorithm is a graphical representation of a flowchart.False
- 2) The flowchart helps in finding out errors.
- 3) Decision box is a rectangular symbol used for doing calculations.
- 4) The people who write computer programs are called users.
- 5) An assembly language does not need a translator.

C. Fill in the blanks.

- 1) Flowchart was developed by <u>Herman Goldstine</u> and <u>John Von Neumann.</u>
- 2) The rhombus-shaped symbol is known as <u>Decision Box</u>.
- 3) Natural language is sometimes called <u>Fifth</u> generation language.
- 4) The process of writing a program is called **<u>Programming</u>**.
- 5) <u>Assembler</u> converts the assembly language program into machine language.

D. Name the following flowchart symbols:

1.	Start/Stop Box	2.	Input / Output Box
3.	Decision Box	4.	Connectors

E. Define the following:

1. Machine Language:

Machine Language is also called First generation language. It is directly understood by the computer.

2. Assembly Language:

Assembly Language is also called Second generation language. It is not directly understood by the computer, for that we have to use translators.

True

False

False

False

F.Differentiate between the following:

Compiler		Interpreter		
A Compiler converts the entire HLL program into machine language at once.		 An Interpreter converts one line of program at a time. 		
It displays errors of the whole program together.		 It displays error of one line at a time and goes to the next line only after correction of the errors. 		
G. Answer the following questions:				
Q:1	What do you mean by Flowchart?			
A:1	• Flowchart is a diagrammatical representation of algorithm.			
	• The direction of flow in a flowchart is always from top to bottom or left to right.			
Q:2	What do you mean by computer language?			
A:2	 Computer Language is a special language understood by the computers. It consists of a set of words, symbols and codes that is used to write a computer program. It is also known as programming language. 			
Q:3	What do you understand by HLL?			
A:3	• A high-level language (HLL) has instructions which are almost similar to English language			
	• It is user-friendly and resembles the language that we use.			
	• It is machine- independent.			

H. Application Based Question

Q Several years ago, a programmer, who is no longer with the company, wrote a program for company using high-level language. Now, his colleague is working on the same program and has discovered that a program is not working. By which software he can detect the errors? Help him.

Α	Either by Compiler or Interpreter

