

CHAPTER-4:
ALGORITHMS AND FLOWCHARTS
ANSWER KEY-8th Std

E. Answer the following:

1 Ans: The step by step procedure to solve any logical and mathematical problem is called an Algorithm. To solve any problem on a computer, we plan the input and apply the required methods step by step to get the desired result. Three Characteristics of an algorithm are: INPUT, GENERALITY, DEFINITENESS

2 Ans: A flowchart is a pictorial representation of the steps or an algorithm used to solve a particular problem. The process of drawing a flowchart for an algorithm is known as Flowcharting. Two advantages of Flowchart are: COMMUNICATION and EFFECTIVE ANALYSIS

3 Ans: Input/Output box is used for accepting inputs and giving output respectively of the program.

4 Ans: Process box is used for writing the processing instructions and doing calculations.

5 Ans: Decision box is used for checking or applying any condition in the program.

**CHAPTER-5:
INTRODUCTION TO JAVA & BLUEJ**

E. Answer the following:

1Ans : Objects are real world entities or items that can be either a non-living or living entity. Every object is defined through its state and behavior: state defines the objects attributes and behavior defines its function. For example, a pen as an object has its attributes, such as brand name, model, colour, price, etc. Its behaviour (function) is writing.

2Ans: A class is regarded as blueprint to create objects. It defines data and functions common to all objects of a certain kind. A class consists of two aspects: variables and functions.

3Ans: The word Polymorphism means “many forms”. Polymorphism helps the programmer to use the same function name for more than one purpose. For example: Your mobile phone has polymorphic ability i.e., it can be used to send SMS, play music, play games, make a call etc.

4Ans: Operators are special symbols, which are used to perform calculations. They are applied to the variables and constants to form an expression. We need Operators to solve multiple problems such as Arithmetic calculations, Relational operations, Logical operations, Unary operations and Assignment Operations.

5 Ans: Keywords are the reserved words of a Java program with some special meaning and can be used for that purpose only. The keywords cannot be used as identifiers that is, variable name, class name or method name. All the keywords are written in lower case letters only, for example: public, void, class, etc.

6 Ans: A Variable is a named location in the memory, which stores value temporarily whereas Constants mean the fixed values that do not change during execution of a program.