A. Computer

1. Definition of Computer

According to Hartono (1999: 2) "a computer is an electronic machine which can receive input data and has storage the data for giving some information and works automatically".

Wikipedia (2010) stated that a computer is a programmable machine that receives input, stores and manipulates the data, and provides output in a useful format.

Based on the definition above computer can be identified as asset of the tools which coordinate process the data memory and show the information based on the programmed instruction that is useful for helping our activity.

2. Development of Computer

Wikipedia (2010) stated that the first use of the word computer was recorded in 1613, referring to a person who carried out calculations, or computations, and the word continues to be used in that sense until the middle of the 20th century.

The history of the modern computer begins with two separate technologies - automated calculation and programmability - but no single
device can be identified as the earliest computer, partly because of the inconsistent application of that term.

Nearly all modern computers implement some form of the stored program architecture, making it the single trait by which the word "computer" is now defined. The technologies are used in computers have changed dramatically since the first general-purpose computers still use the von Neumann architecture design. This design was first formally described by John von Neumann in the paper First Draft of a Report on the EDVAC, distributed in 1945. A number of projects to develop computers based on the stored-program architecture commenced around this time, the first of these being completed in Great Britain. The first to be demonstrated working was the Manchester Small-Scale Experimental Machine (SSEM or Baby), while the EDSAC, completed a year after SSEM, was the first practical implementation of the stored program design. Shortly thereafter, the machine originally described by von Neumann's paper (EDVAC) was completed but did not see full-time use for an additional two years.

Computers using vacuum tubes as their electronic elements were in use throughout the 1950s, but by the 1960s had been largely replaced by transistor-based machines, which were smaller, faster, and cheaper than other to produce, required less power, and were more reliable. The first transistorized computer was demonstrated at the University of Manchester in 1953. In the 1970s, integrated circuit technology and the subsequent creation of microprocessors, such as the Intel 4004, further decreased size
and cost and further increased speed and reliability of computers. By the late 1970s, many products such as video recorders contained dedicated computers called microcontrollers, and they started to appear as a replacement to mechanical controls in domestic appliances such as washing machines. The 1980s witnessed home computers and the now ubiquitous personal computer. With the evolution of the Internet, personal computers are becoming as common as the television and the telephone in the household.

3. Basic Part of Computer

In (http://en.wikipedia/wiki/parts_of_computer) stated that all computers have 3 basic parts:

a. Input and Output unit (I/O)

The Input unit takes in the information and the Output unit gives the result.

b. CPU (Central Processing Unit)

Pronounced as separate letters it is the abbreviation for central processing unit. The CPU is the brains of the computer. Sometimes referred to simply as the central processor, but more commonly called processor, the CPU is where most calculations take place. In terms of computing power, the CPU is the most important element of a computer system.

According to Lucas (1986: 81) CPU is the heart of the computer; it contains the logic of the machine. The CPU is the part of the computer
that interprets the instruction and executes them. Generally, the CPU has registers that add subtract, multiply and divide these fixed points numbers.

c. Software

According to Lucas (1986: 79), software constitutes the instructions that tell the computer what to do. An instruction is an order, for example; there is usually an instruction in a computer to add two numbers together.

d. Computer Memory

In (http://en.wikipedia.org/wiki/computer_program), Computer memory refers to devices that are used to store data or programs (sequences of instructions) on a temporary or permanent basis for use in an electronic digital computer.

Lucas (1986: 82) said that memory is passive; that is, all it does is storing data and programs; Lucas also said that there are two kinds of memory, those are:

1) RAM (Random Access Memory)

RAM is the most versatile kind of memory and is used in the computers to store and retrieve data and programs. The CPU can write data into this memory and read from it. Random access memory is used dynamically during computations. It will hold different data and instructions all day long as different programs are executed on the computer.
2) ROM (Read Only Memory)

ROM content are fixed by a computer vendor and the computer can read only these content. ROM is used to hold the various microinstructions. The content of ROM is needed when the computer is operating. A part of the instructions in the ROM will move to RAM. There are some instructions in the ROM are; instruction to read operation from the disk, instruction to control all of the instruments in the unit system and instruction to show messages in the screen.

e. Computer Program

From (http://en.wikipedia.org/wiki/computer_program), Computer program means a sequence of instructions written to perform a specified task for a computer. A computer requires programs to function, typically executing the program's instructions in a central processor. The program has an executable form that the computer can use directly to execute the instructions. The same program in its human-readable source code form, from which executable programs are derived, enables a programmer to study and develop its algorithms.

According to Spencer (1981: 30) computer program is a set of instructions that tells the computer how to perform some specific calculation or operation.
B. Vocabulary

1. Definition of Vocabulary

In The Free Dictionary.com (2010), stated that having enough vocabularies is necessary to be fluent in speaking. Vocabulary is always used whenever someone speaks, listens, or reads. A vocabulary usually grows and evolves with age, and serves as a useful and fundamental tool for communication and acquiring knowledge. A list of words and often phrases, usually arranged alphabetically and defined or translated; a lexicon or glossary.

According to Napa (1991: 6), vocabulary is regarded as an important one to learn/ study/ have because the fact that vocabulary is one of the component of language and that no language exist without words. Words are signs or symbols for ideas. They are the means by which people exchange their thoughts. The more words we learn, the more ideas we should have, so we can communicate the ideas more effectively.

From the definition above, it can be inferred that vocabulary is words or list of words with their meanings and they are known by their speaker and used to communicate among those speaker and it is employed by a language, group or individual.
2. The Nature of Vocabulary

Wikipedia (2010) stated that someone who will communicate his ideas directly to other people will speak or say the word. So we he must continue to learn new words as long as we live. After leaving school, vocabulary growth reaches a plateau. People may then expand their vocabularies by engaging in activities such as reading, playing word games, and participating in vocabulary programs.

Wilkins (1978: 111) has noted, “The fact is that while without grammar very little can be conveyed, without vocabulary nothing can be conveyed”

Vocabulary is very important thing in our English mastery. When we speak, write, or listen in English, of course we always use vocabulary. Without mastering vocabulary well, we won’t speak fluently. As we now that the lack of vocabulary often brings troubles for the English learners. We will speak without hesitation with rich vocabulary in our mind.

3. The Teaching of Vocabulary

Teaching is an act to give someone knowledge, or to instruct someone to be more master in certain field or understand in learning. According to Finnochiaro (1974: 73), there are several premises and comments related to the teaching of vocabulary as follows:

a. Not all of the word a student hears during any lesson need become a part of his “active” vocabulary during that lesson or even in later
lesson. Some words in the new language (and in our native language) will remain “passive,” that is, we understand them when we hear them and read them, but we don’t use them ourselves in speaking or writing. The vocabulary for active use should be systematically presented and practiced.

b. Vocabulary should always be taught in normal speech utterances.

c. New vocabulary items should always be introduced in known structures.

d. The vocabulary items should be centered about one topic.

e. Whenever a familiar word is met in a new context, it should be taught again and practiced. If possible, only one context should be taught at one time.

f. Vocabulary items should be taught in the same way we teach everything else. We give our students an understanding of the meaning in many ways. We dramatize; we illustrate using our students and ourselves; we show pictures; we paraphrase; we give equivalent if necessary; we use any appropriate technique.

g. Vocabulary should be practiced as structures are practiced in substitution drills; transformation drills; question and answer, etc.

h. Vocabulary items should be reintroduced many times with all the structures and in all the situations in which they can logically be used.

i. Students should be encouraged to learn and use nouns, verbs, adjectives, and adverbs.
From the explanation above, we can conclude that vocabulary is important to be learnt by students who are studying English. The vocabulary is a component of the language and that no language exists without words. Words are signs or symbols for ideas. So, the mastery of vocabulary teaching will be achieved if the vocabulary teaching is effective.

4. The Learning of Vocabulary

Learning vocabulary in Junior High School is important. Wilkins in Nugroho (1994: 6) said that “The fact is that while without grammar very little can be conveyed, without vocabulary nothing can be conveyed”.

Previously, it is important to know that is stated by John and Mario (1986: 2) that the acquisition of vocabulary is:
a. Not a liner but a branching process. Words are not learnt mechanically as a little package of meanings but associatively.
b. Not impersonal but personal process.
c. Not a solitary but a social process. We expand our apprehension of word meaning by interchanging and sharing them with others.
d. Not purely intellectual but an effort fully experiential process.

To avoid the students bored in learning vocabulary, the students can learn vocabulary items using; word games, crosswords, puzzle, snake coil, word selection, word definition, letter and number game, search-a-word, missing letters, word formation, matching, identifying words, and
completion. The purpose is, of course, to make the materials more enjoyable, interesting, and challenging (Pieter A. Napa: 1993).

Learning vocabulary can develop English skills of reading, listening, speaking and writing. Therefore, it is good for the students who learn English to learn vocabulary well. The students can learn vocabulary by reading text, mention several things in their environment, watching television, listening to the songs, etc.

C. Computer Vocabulary

On Wikipedia (2010), “The prevalent language for communication on the internet/computer is English. This may be a result of the origin of the internet as well as English role as a lingua franca.

Mariette (1996: 1) said that the vocabulary combines computer technology, teaching and many other aspects. They include types of educational software and their components, the structure of their knowledge units, their menus and various display fields, as well as the sequence of learner machine dialogue, types of question and answer used, various feedback methods of the systems, objectives targeted, and teaching strategies applied during the learning process. The vocabulary also includes terms from artificial intelligence, different learning process, cognitive science, and measuring evaluation methods.

According to Setyaningsih (1995: 13), programming language is a program that is used to translate the instruction or command that is written in
computer language. It is consist of many computer vocabularies. For example in Microsoft Office Word it can be mentioned as follows: *new, open, close, save, preview, print, exit, cut, copy, paste, replace, ruler, zoom, symbol, picture, tables, diagram, file, object, font, paragraph, numbering, auto format, auto correct, insert, delete, select, convert, formula, search, e-mail, columns, bold, italic, underline, center, draw, line, arrow, color, rotate, text*, etc.

In (http://wiktionary.org/ wiki/programming_language), Programming language is code of severed words and symbols used in computer programs, which give instructions to the computer on how to accomplish certain computing tasks.

Many people can study vocabulary through many ways. One of them is through operating computer. Although it is an unconscious way in learning, operating computer also has important role in learning vocabulary. In other way, vocabulary also has main role in mastering operating computer. All information and instruction in computer are presented in English. We can understand and do as command if we comprehend the meaning of instruction that given. There are also many words or expressions in computer instructions. So, people who master vocabulary enough tend to be competence in operating computer.