

LESSON ONE

INTRODUCTION

1.1 Definition

Computer is a device capable of solving problems or manipulating data by accepting data, performing prescribed operations (mathematical or logical) on the data, and supplying the results of these operations.

Computer can also be defined as a device that takes input, processes it, and produces result (output) automatically under program control. Computer operation must follow these three stages. Namely;

[i] Input

[ii] Processing

[iii] Output

Computer performs both mathematical and logical operations. For example, a computer can be used to determine whether a business will be successful or not.

1.2 Data and Information

Data: According to ICT, Data can be referred to as raw facts and figures that have not been processed. It can be values, numbers, or instructions input by computer users. Data makes no meaning due to the fact that it has not been processed.

Information: This is referred to as raw facts and figures that have been processed. It can be values, numbers, or instructions input by computer users. Information makes meaning due to the fact that it has been processed. It conveys more meaning because it has been processed manually, mechanically or electrically. Information at a point in time may become a data element at another point in time. Data becomes information after processing.

1.3 History of Computers

Computer had passed through different generations. It was identified and classified into generations with respect to ***components used, space occupied (size), speed and year introduced***. The first traceable computer capable of automatically performing a long sequence of arithmetic and logical operations used a device called **relays** was designed by Professor Howard G. Aiken and Grace Hopper at Harvard University and named Mark 1. It was used by the US Navy for gunnery and ballistic calculations, the

1.3.1 First Generation Computers (1946 to 1959)

Vacuum tubes were used in place of relays in this generation. The size was reduced to 400m³ and processing speed was 300 milliseconds