

Course: Computer Skills/ Applications  
Semester: 4<sup>th</sup>  
Instructor: Zakir Rahim  
Due Date: 21 August, 2020

Program:BS(DT/RAD/MIC)  
Total Marks: 30  
Time: 4 Hours

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**Instructions:**

- Students are required to solve the provided assignment and upload it on SIC within specified time.
  - The solutions must be type-written.
  - The solutions must be uploaded either in Ms-Word format or pdf format.
  - Students are required to save the file with their name and student id. For example ahmad\_12345.
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Bs. DT.  
Date, 21, 8, 2020.

Q1. (a) In your opinion what are the 3 most important characteristics of computers, Explain each characteristic? (5).

Answer...

Characterstic of computer..

1. automatic .:

Given a job, computer can work on it automatically without human intervention.

2. Speed:.

Computer can perform data processing jobs very fast, usually measured in microsecond (10<sup>-6</sup>) nanosecond (10<sup>-9</sup>) and picoseconds (10<sup>-12</sup>).

3 .Accuracy:.

Accuracy of computer is consistently high and the degree of its accuracy depends upon its design computer errors caused due to incorrect input data or unrebiable program are often referred as Gabbage - in Garbage-out ( GiGo) .

Part B..

Key Characteristic fourt Generations of computer:.

- . Small affordable, reliable, and easy to use pcs.
- .More powerful and reliable mainframe system and supercomputer.
- .Totally generally purpose machines.
- .Easier to produce commercially.
- .Easier to upgrade.
- .Rapid software development possible .

(b) Write key characteristics of fourth generation of computers? (5)

Q2. (a)Discuss the importance of Arithmetic logic unit and Control unit of a computer system?(5).

Answer:. part 1.

**Arithmetic logic unit:.**

Arithmetic logic unit of computer system is the place where the actual executions of intructions takes place during processing operation.

**Control unit:.**

Control unit of a computer system manages and the operation of all other components of the computer system.

**Computer system :..**

A computer system is a set of integrated devices that inpu,output ,process and stor data and information.

Computer system are currently built around at leats one digital processing divice.There are five main hardware components in a computer system .input processing, storage, output and communication device.

(b)Write a detailed note on importance of RAM (Random Access Memory)? (5)

Answer part 2..

**RAM Memory:..**

- . Volatile in nature
- . In case of power interruption all data in RAM is lost.
- . RAM can only store data as long as computer is ON.

### Types of main memory:

#### RAM memory are of two types:

##### 1. Dynamic RAM\*\*

Uses an external circuitry to periodically “regenerate” or refresh storage charge to retain the storage data.

##### 2 Static RAM\*\*

. Does not need any special regenerator circuit to retain the stored data.

. Faster, costlier and consumes more power.

Q3. Write a detailed note on Basic Organization of a computer System along with the functions of each part. (10).

### Answer\*\*.

Basic organization of computer system..

#### 1) Input unit \*\*

An input unit of a computer system performs the following function\*\*

- 1.. It accepts ( or reads) instruction and data from outside world.
- 2.. It converts these instruction and data in computer.
3. It supplies the converted instruction and data to the computer system for further processing.

#### 2. Output unit\*\*

An output unit of a computer system performs the following function.

1. It accepts the result products by the computer, which are in coded form and hence cannot be easily understood by us.

2. It converts these coded result to human acceptable creadable from.
3. It supplies the converted result to outside world.

### 3. Storage unit\*\*\*

The storage unit of a computer system holds or store the following.

1. Data and instruction requirid for processing recevid from input device.
2. Intermediate result of processing
3. Final reuslt of procesed to a output device.

### Two Types of storage \*\*

#### 1. Primary storage...

- . Used to hold runing program insturction .
- .Fast in operation.
- . Small capacity.
- . Expensive.

#### 2. Secondary storage ..

- . Use to hold stored program in struction.
- Slower than primary storage .
- Large capacity.

#### 4. Arithmetic logic unit...

Arithmetic logic unit of a computer system is the place where the actual executions of intructions takes place during processing operation.

#### Control unit..

Control unit of a computer system manages and the operation of all other components of the computer system .

**END.**