RUAHA CATHOLIC UNIVERSITY (RUCU)

RCS 113: INTRODUCTION TO INFORMATICS– Quiz I

Weight: 25 Marks	Time: 15 Minutes	INSTRUCTION: All answers must be written on this paper.

Name: _____ Reg. No _____

1. Identify Input, Output, and Storage devices among the following. Write **INPUT** for an input device, **OUTPUT** for an output device and **STORAGE** for a storage device in the respective space provided for each item on the right hand side.

Jump drive	INPUT ✗	–STORAGE
SSD	INPUT ✗	–STORAGE
Trackballs	INPUT ✓	(Mouse)
Gamepad	OUTPUT ✗	INPUT
Plotters	OUTPUT ✓	(Printer)
Punch card reader	STORAGE ✗	INPUT
Light pen	INPUT ✓	
Microfiche	OUTPUT ✓	
Remote	INPUT ✓	
Digitizer	INPUT ✓	
Heater	OUTPUT ✓	
Sensors	OUTPUT ✗	Input
Paddle	OUTPUT ✗	INPUT
Actuator	INPUT ✗	OUTPUT
Magnetic tape	STORAGE ✓	
SD card	STORAGE ✓	

2. Read the characteristics below and write whether is true or false for Main memory and Secondary memory.

Characteristic	Main Memory	Secondary Memory
Very close connected to the processor	TRUE ✓	FALSE ✓
Holds programs and data that the processor is actively working with.	TRUE ✓	FALSE ✓
Used for long term storage	FALSE ✓	TRUE ✓
Data are organized into files	FALSE ✓	TRUE ✓
Fast access	TRUE ✓	FALSE ✓
The processor interacts with it millions of times per second.	TRUE ✓	FALSE ✓
Relatively huge capacity	FALSE ✓	TRUE ✓
Slow access	FALSE ✓	TRUE ✓
Stored data are easily changed	FALSE ✗	TRUE ✓
Holds programs and data	FALSE ✗	TRUE ✓

3. Give five examples of the data that computer takes as inputs.

1.	letter	✓
2.	Audios	✓
3.	Photos/pictures	✓
4.	videos	
5.	AD	

Numbers
Symbols
Videos
Programs.

4. Differentiate between the term memory and storage.

Memory	Storage
Ability of computer to process particular Amount of data	Ability of computer to store data and is classified into gb, kb

5. Bytes, Kilobytes and Megabytes are units used for the amount of data stored in a computer. State which of these units is most appropriate for the following items of data;

1.	A one-page text document.	kilobytes
2.	A ten-minute movie clip.	Megabytes
3.	A person's surname.	Bytes

6. Give the long form of the following abbreviations.

HDD	
DVD	disk video disk & DIGITAL VIDEO DISC
CD	compact disk
USB	

8/20

RUAHA CATHOLIC UNIVERSITY (RUCU)
RCS 113: INTRODUCTION TO INFORMATICS—Quiz 2

Weight: 20 Marks	Time: 15 Minutes	INSTRUCTION: All answers must be written on this paper.

Name:

Reg.No Ruf.BEH311 20281

1. Mention three types of network architecture.

   Peer to peer ✓

   Client server ✓

   ①

2. Mention two possibilities of a transmission medium.

   Wired medium ✓

   Wireless ✓

   ①

3. Describe three types of a communication mode as far as a computer network is concerned.

   | unicast ✓ |
   | Mult cast ✓ |
   | broadcast ✓ |

   ①⑤

4. Describe three types of a transmission mode as far as a computer network is concerned.

   | Simplex ✓ |
   | Half duplex ✓ |

   ①

5. Classification of computer networks is based on:

   | size |
   | number of user |
   | Application |

   05

6. The basic criteria for selecting a server based network are:

Geographical location ✓
Number of users ✓
Installation
Application ✓
Cost

1.5

7. Mention six network devices that you know.

Cables ✓
Computer
Internet
Electronic devices
USB

0

8. Mention four types of cables that are used in networks.

Bus
Topology
Star
Ring

0

9. The five basic factors for selecting the type of network physical topology are:

Geographical location ✓
Scalable ✓
Trouble shoot ✓
Number of users ✓
Installation ✓

1.5

18/40

Weight:40 Marks	Time: 1 Hr	INSTRUCTION: All answers must be written on this paper.

Name: ~~XXXXXXX~~   Reg. No ~~XXXXXX~~

1. Mention six devices that are both Input_Output devices.

Frush disk ✓
Touch pad ✓
Mouth ✓
Monitor ✓
Microphone ✓
Fax ✓

①

2. Indicate the technology used in each generation of the computer.

Type of Generation	Technology Used	Year
1st Generation	Vacuum ✓	1945 - 1956
2nd Generation	Transistor ✓	1959 - 1965 ✓
3rd Generation	Intergrated Circuit ✓	1965 - 1971 ✓
4th Generation	Microprossesor ✓	1971 - 1980 ✓
5th Generation	utrascale high computer	1980 - up to date

4.5

3. Indicate the computer generation pertaining to the characteristics shown below.

Computer can understand spoken words and imitate human reasoning.	2nd generation
Fast processing power and less power consumption and no air conditioning required.	5th generation
Used mouse and keyboard for input.	5th generation
Used assembly language and used faster peripherals like printer.	5th generation
Computer consumed a large amount of energy and they had very slow speed.	1st generation
Computers could calculate data in millisecond.	5th generation
Computer could calculate data in microseconds.	4th generation
Computer could calculate data in nanoseconds.	5th generation
All types of high level languages can be used.	5th generation
Used advanced programming and technologies.	5th generation

①

4. Indicate the types of computer pertaining to the characteristics shown below.

The cheapest computers and are designed for general usage.	Microcomputer
They are not designed for a single user and can be accommodated on a disk.	Mainflame
They can be accommodated in large air-conditioned rooms and can also process and store large amount of data.	Main flame computer
Specialized and task specific computers, used for research and exploration purposes.	Super computer

1.5

5. The CPU is comprised of three main components/parts. Mention and describe them.

CPU Component	Function
ALU	Althmetic logarithm unity.
CU	used in control unit
Memory/register	in memory/registration

1.5

6. Give the differences between the system software and application software.

System Software	Application Software
It has high speed	has low speed
It users low language	it use high language
It does not interact with use	It may interact woder users

3

Example are (slinux)

Example are microsoft word (0.5)

7. What are four primary functions of the processor?

To calculate data
To code data
To Analyze the data
It is used in Data storage

(1)

8. There are two primary manufacturers of computer microprocessors. Mention them.

Microprossesor
Microdevice

(0)

9. There are several factors that affect processor performance. Mention them.

Number of users
Space of RAM
Storage capacity
Clock speed
RAM capacity
hard disk capacity

(05)

10. What are the major four factors to consider when a computer is to be classified?

Size ✓
Storage ✓
Speed ✓
Function ✓
Cost ✓

(25)

11. Give factors that affect the performance of the operating system.

Number of users
Trouble shout
geographical location
Type of graphic used
space and capacity of register

(1)

12. What are the major four factors to consider when operating system is to be classified?

Fuaction of operating system
Speed of performance ✓
Ram management

(0)

13. Mention services of operating system.

Data processing Instruction to the user
is used in data processing and analysis
RAM management
Hard disk management
ROM management

(0)