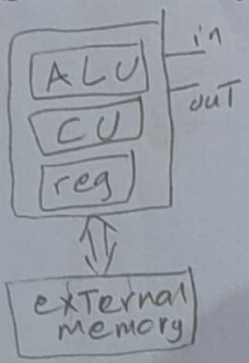
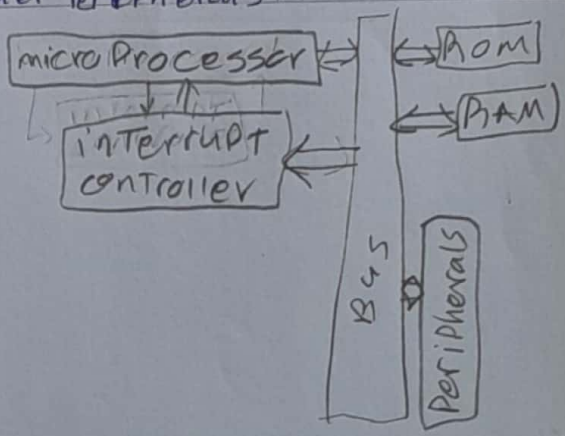
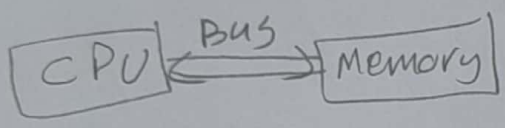
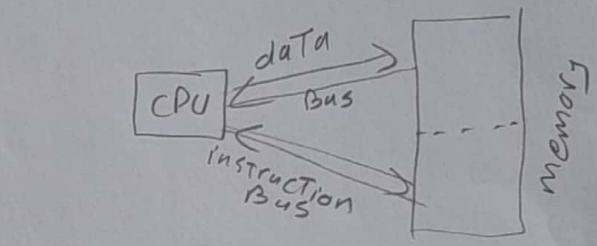
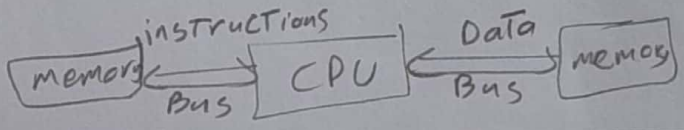
Q1

Definition	
microProcessor	It is an IC which can Perform Logical and arithmetic operations. It is consisted of ALU, CU and some internal registers.
micro controller	It is a microProcessor attached To a bus connecting it To memor(RAM, Ro and other peripherals. It can be one IC chip or many IC chips one for each element such as microProcessor, memory, clock and other Peripherals
embedded system	It is a system which has computer inside. And this computs is doing one special function with time, size and Power constrains.
mechatronic system	It is a hybrid system (not fully mechanical and not fully electrical and not fully electronic system) and it is usually a mechanical system controlled by electronic circuit or a mounted computer.
n-bit Processor	a Processor which can handle only n-bit of data in one Time.

Q2

Micro Processor	micro controller
It is an IC which can Perform Logical and arithmetic operation. It's consisted of ALU, CU and some registers 	It is an IC which consists of micro-processor attached To interrupt controler and a bus connecting it to memory and other Peripherals. 
all component mounted on one chip	can be one or more than one chip
can't be operated without adding external components	can be operated without adding external components.

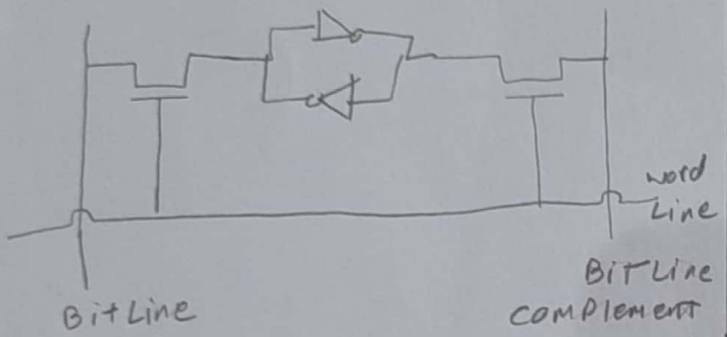
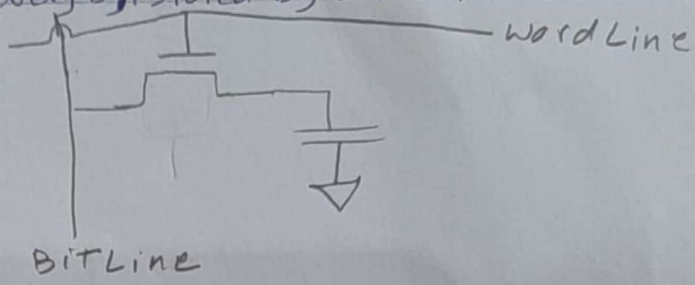
Q3

Harvard	Von-Neuman
-The system has one bus for both data and instructions. -system has one memory stores data and instructions 	-The system has Two buses one for data and the other for instructions -system may have Two memories one for data and the other To store instructions OR one memory with Two separated areas.  

Q4

Type	
masked ROM	Read only memory Programed once by its manufacturer and can't be re-Programmed by user.
PROM	Read only memory Programmed once by User and can't be erased or re-Progra
EPROM	Read only memory which can be Programmed more than one Time. It can be Erased by U.V radiation.

Q5

SRAM	DRAM
-Volatile memory based on flipflops	-Volatile memory based on capacitors
every bit is stored by six transistors	every bit stored by one capicitor and a transistor
	
-need to refresh data	-There is no need to refresh data
- Faster than DRAM	-slower than SRAM
- Lower Power consumption	-Higher Power consumption
- more expensive than DRAM	cheaper than SRAM

Q6

I think because it needs special circuit to write on it.

Type	Volatile	writable	Erase size	max erase cycles	cost/Byte	speed
SRAM	Yes	Yes	Byte	—	expensive	Fast
DRAM	Yes	Yes	Byte	—	cheaper than SRAM	slower than SRAM
MaskedROM	No	No	Can't be erased	0	Very cheap	slow
PROM	No	one time	can't be erased	0	cheaper than EPROM	slow
EPROM	No	Yes	Entire chip	Limited	Cheaper than Flash	slow
Flash	No	Yes	section	Limited	Cheaper than EEPROM	slower than DRAM
NVRAM	No	Yes	Byte	—	Very expensive	Fast
EEPROM	No	Yes	Byte	Limited	Expensive	slower than DRAM