

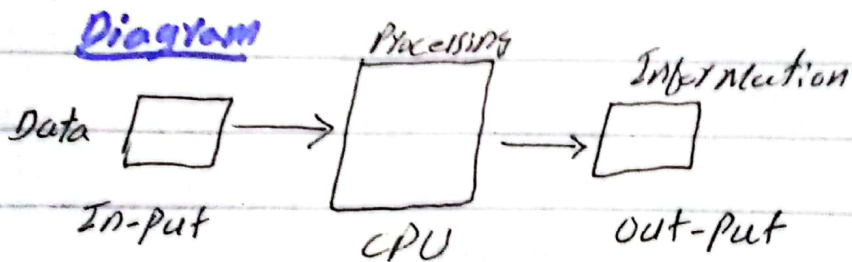
Q NO-2

a) computer buses and CPU as brain of computer

Answer:

Computer buses

It is a communication system within a computer that transmits data between different components of computer.



The above diagram shows that transmission of data from in-put till out-put devices within a computer is carried out by computer buses.

CPU as brain of computer

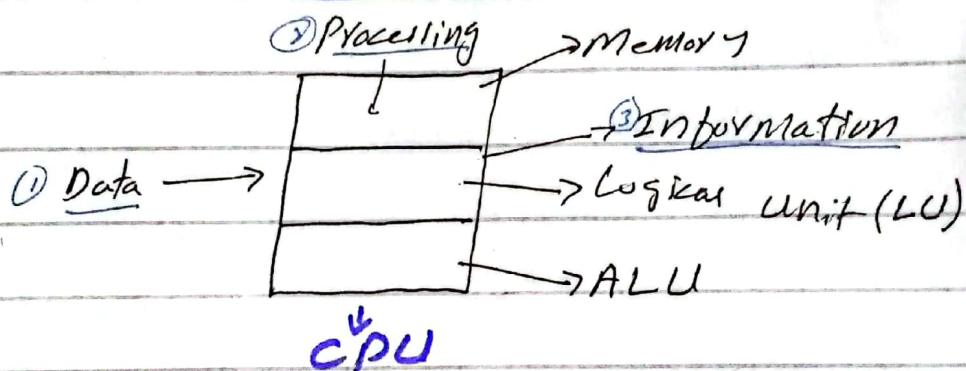
Undoubtedly, CPU is a brain of computer as it acts as supervisor

and processes data.

How CPU acts as brain of computer

- ① It is responsible for all actions in computer.
- ② It converts raw data into a meaningful information.
- ③ Mathematical computations are also done by its ALU part.

Diagram



b) Types of computers

Answer:

There are mainly four types of computer. They have different size, power, and speed. These are discussed in heads.

(i) Micro-computers

- ① → These are smallest in size
- ② → These are less powerful
- ③ → They are used generally.

Example:

Personal computers (PCs)

(ii) Mini-computer

① → These computers are larger in size than micro computers but are smaller than mainframe computers.

② → These are more powerful than micro-computers.

Example:

Computers used in Laboratories

(iii) Mainframe computers

① → These are big in size

② → These are powerful but less powerful than super-computers.

Example:

Computers used in ATM for depositing and withdrawing cash.

(iv) Super-computers

- ① → These are fastest computers.
- ② → These are very expensive.
- ③ → Their size is medium.

Example:

computers used for weather predictions and research are super-computers.

c) Working of mobile phone

Answer:

Working

(i) Satellite

The first thing that is involved in working of mobile phone is satellite. The satellite sends radio signals to networking tower.

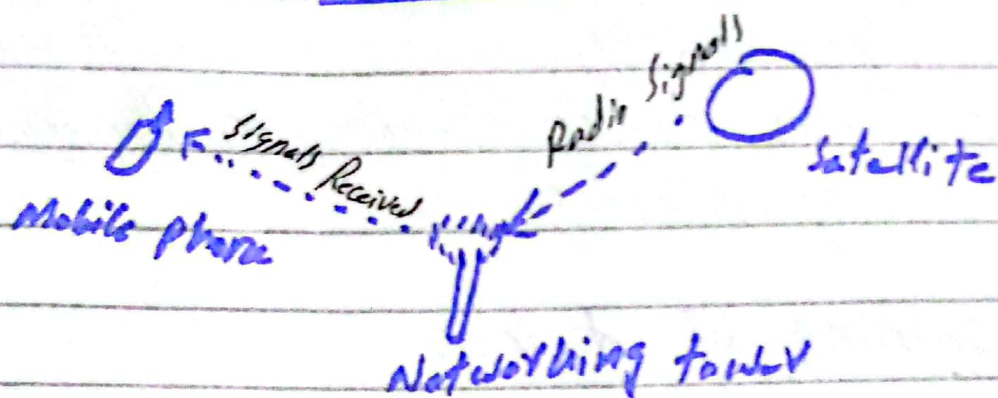
(ii) Networking tower

The signals sent by satellite are received by networking tower. This networking tower acts as bridge between mobile phone and satellite.

(iii) Receiver in mobile phone

Mobile phone has receiver that receives signals sent from networking tower.

Diagram



d) Artificial intelligence outsmarting human beings

Answer:

Artificial intelligence

(i) Definition:

It means that machines that are made so intelligent that they can perform tasks which humans have been performing. They can perform those tasks

with quite accuracy and repeatedly.

Features

- ① Tasks performed by machines.
- ② Machines are made intelligent.
- ③ Tasks are performed with accuracy.
- ④ These tasks can be performed repeatedly.

(ii) Coining of term

Artificial Intelligence (AI) term was coined by John McCarthy

Can Artificial intelligence outsmart humans?

Although it is debated, AI can outsmart humans. Despite the debate, AI can not outsmart human for variety of reasons.

- ① AI is created by humans so humans can have control on it.
- ② AI can not be as accurate as humans thereby being replaced.

Q no-1

(a)

Answer:

Given data

Matches won during the year = 60%

Total matches ~~lost~~ during the year = 24

To find

Total matches played during the year = ?

According to given data

Total matches played during the year in percentage = (i)

Lost matches in percent = $100\% - 60\%$

= 40%

As we know that

Matches lost during the year = 24

It means

$$40\% = 24$$

Divide by 2 both sides

$$\frac{40\%}{2} = \frac{24}{2}$$

$$20\% = 12$$

Multiply both sides by 5

$$5 \times 20\% = 12 \times 5$$

$$100\% = 60$$

By putting value in (i)

Total matches played during the year = 100%

" = 60 Ans.