

General Science and Ability

Test-3

Q#1

(a)

Given Data:

%age of Matches won by team = 60%

lost matches = 24

no. of matches drawn = 0

To be found:

Total no. of matches

Solution

let the total no. of matches = x

matches won = 60% of total

$$= \frac{60}{100} \times x$$

matches lost = 24

$$\Rightarrow \frac{60}{100} \cdot x - 24 = 0$$

$$\Rightarrow \frac{60x}{100} = 24$$

$$60x = 24 \times 100$$

$$60x = 2400 \Rightarrow \frac{60x}{60} = \frac{2400}{60}$$

$$x = 40$$

Total no. of matches = 40

(b)

Solution

let the days be = x

Persons : Sugar : days

30 ↓ : 40 ↑ : 10 ↑
80 ↓ : 320 : x ↑

$$\frac{x}{10} = \frac{320}{40} \times \frac{30}{80}$$

$$\frac{x}{10} = \frac{9600}{3200}$$

$$x = \frac{9600 \times 10}{3200} = \frac{96000}{3200} = 30$$

$$x = 30$$

The days will be 30.

(d)

let the sum of original number = S

The arithmetic mean of 6 number = 20

$$\text{Mean} = \frac{\text{no. of observation}}{\text{Total no. of observation}}$$

$$20 = \frac{S}{6} \quad \text{--- (1)}$$

let the removed number = x

$$15 = \frac{S-x}{5}$$

$$75 = S-x \quad \text{--- (i)}$$

From equation (i) the value of 'S' is put in equation (ii)

$$75 = S-x$$

$$75 = 120 - x$$

$$x = 120 - 75$$

$$x = 45$$

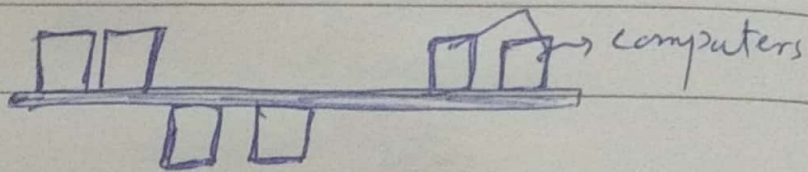
So the removed value is 45.

$$\begin{array}{r} 120 \\ - 75 \\ \hline 45 \end{array}$$

Q #2

(a) Computer buses

Computer buses are network or computer arrangement topology. In this the computer systems or networks are arranged in a linear way with both sides.



Advantages

- 1- The advantages include less wire usage.
- 2- It is cost effective.
- 3- Easy two way communication.

CPU as brain of computer

CPU is called Central Processing Unit. It process the

information in a computer like the brain in a human body.

It receive the stored information after execution of command and give the output. It has chip of silicon which has stored programmes and information.

The information is retrieved from that part which is called Control Unit (CU).

(b)

Classification of computers

Computers are broadly classified on the basis of size, memory capacity and speed into the following types. These types include

1. Super computer
2. Mainframe computer
3. Mini computers
- Micro computers

1- Super-computer

Used for the highly efficient calculations and information processing. It is used for weather forecasting, satellites monitoring and nuclear research.

2- Mainframe computers

These are used in a particular department. It can connect other computers with it.

3- ~~Mini~~ ^{Mini} Computers

These computers are larger than micro computers and used in hospitals and other commercial level.

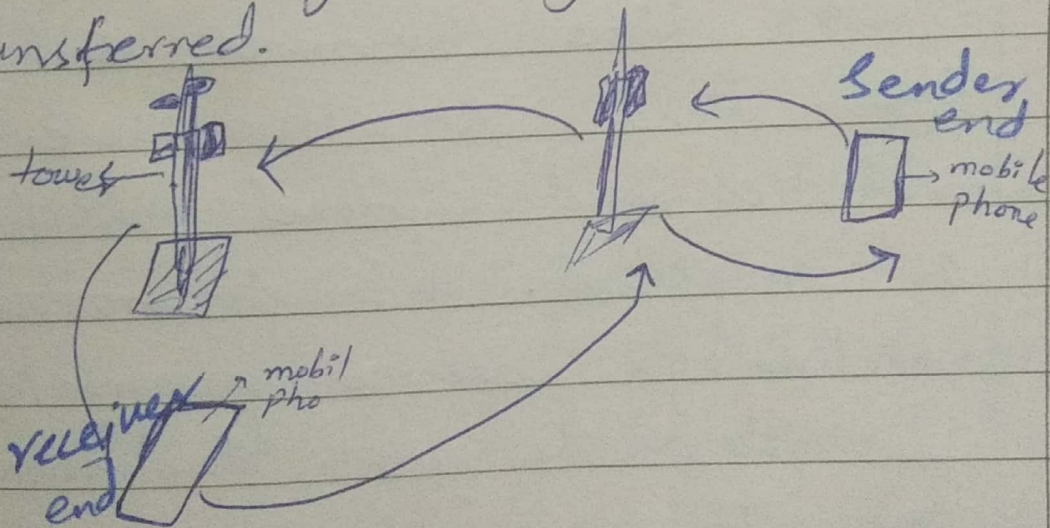
Micro-computers

It includes the computers which are used on a domestic level in houses. For example laptop, mobile phone etc.

(C) How does mobil phone work?

Mobile phone works on the presence of radio waves. The information from the mobile phone is received by a ^{nearby} receiver in a tower. The booster receive the information and amplify it. Then transmit into the atmosphere which is received by other receiver at the reception site.

In this way the signals are transferred.



After receiving information is transmitted again toward sender which is amplify through nearby tower. Then send

to the sender end. In this way the communication became possible through mobil phone.

(d)
Artificial Intelligence and reservations about it.

Artificial Intelligence can be defined as the empowering of machines in order to work like humans. In this field cognitive sciences, robotics and natural interface is involved. Through modern technology become empowered in order to work like human. They being capable to analyze the situation and respond like a human being.

Artificial intelligence made the life of human easier and now the working is possible efficiently. It helps in communication, disease diagnosis, scientific research and industrial manufacturing. In short, the AI is now using in all fields of life.

Can AI outsmart humans?

In modern era, the use of AI was increasing. It has the capacity to perform the operations related to complex tasks like humans. Now the enhanced use of AI emerge a concern among the expert that whether it can diminish the human intelligence. The over use and dependence on AI can lead to less use

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of cognitive abilities by human beings. The useful qualities and overage culminate the risk for outsmart of human.
