

## Question 1

- (a) Matches won by team = 60%.  
Matches lost by team = 24 matches  
Total matches played =  $x = ?$

As team won 60% matches,  
it is ~~an~~ clear that it  
lost 40% of matches provided  
no match was drawn. Hence,

Percentage of lost matches = 40%.

In this case, we apply the  
formula of percentage

$$40\% \cdot x = 24 \Rightarrow x = 24 / 40\%$$

$$x = \frac{24 \times 100}{40}$$

$$x = \frac{240}{4} = 60$$

$$x = 60$$

$$\text{Total Matches Played} = x = 60$$



C Total amount = 370

First part = a

Second part = b

Third part = c

$$a + b + c = 370 \text{ --- (A)}$$

Now we can construct from the given ratios that

$$a : c = 3 : 5$$

$$\frac{a}{c} = \frac{3}{5}$$

$$5a = 3c$$

$$a = \frac{3}{5}c$$

And

$$b = \frac{1}{4}c$$

Now let's calculate individual share by putting these values in (A)

$$a + b + c = 370$$

$$\Rightarrow \frac{3}{5}c + \frac{1}{4}c + c = 370$$

$$\frac{12c + 5c + 20c}{20} = 370$$

$$37c = 370 \times 20$$

$$37c = 7400$$

$$c = \frac{7400}{37} = 200$$

$$c = 200$$

$$b = \frac{1}{4}c = \frac{1}{4} \times 200 = 50 \Rightarrow b = 50$$



$$a = \frac{3}{5}c = \frac{3}{5} \times 200$$

$$a = 120$$

So

a gets \$120  
 b gets \$50  
 c gets \$200

(d)

$$\text{Mean} = 20$$

$$\text{Total numbers} = 6$$

$$\text{Sum of numbers} = ?$$

Let's first calculate the sum

$$\text{Sum} = \Sigma = \text{Mean} \times \text{Total numbers}$$

$$\Sigma = 20 \times 6$$

$$\Sigma = 120$$

Now, the sum loses one number  $y$  which changes the conditions as:

$$\text{Mean}^* = 15$$

$$\text{Total numbers}^* = 5$$

$$\text{Sum}^* = 120 - y$$

So equation is built like

$$\text{Sum}^* = \text{Mean}^* \times \text{Total numbers}^*$$

$$120 - y = 15 \times 5$$

$$120 - y = 75$$

$$y = 120 - 75 \Rightarrow y = 45$$



Calculation imply The removed number is 45.

→ Question #2 :

### Computer Bus:

Computer Bus is a tool that allows the communication within a computer. There are several types of computer buses

#### (i) Control Bus

It is the master bus of the computers and carries command from the CPU to periphery-

#### (ii) Data Bus

It carries the data from CPU to other parts and also from one computer to the other-

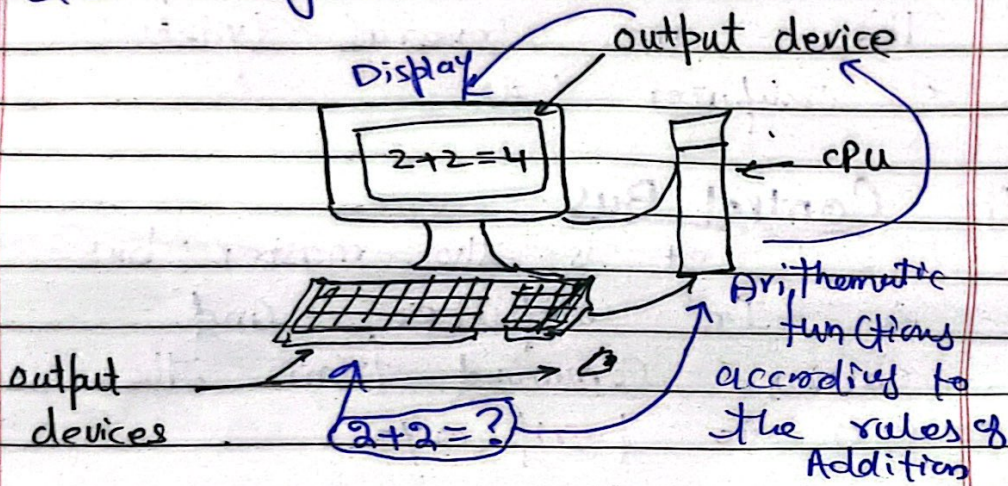
#### (iii) Address Bus

Address Bus gives information about the location of a particular data on computer memory -



# CPU as Brain of Computer

CPU is said to be the brain of computer and rightly so- It is the core component of a computer that performs the very function that is intended. The role of CPU can be understood from the diagram:



An output device displays the data ~~and~~ that an input device takes up. The data then goes to the CPU in which all the arithmetic functions are performed and data is manipulated according to specified set of rules. The processed data is then shown to user. This signifies that all of key functions of a computer are performed by CPU.



## (C) Mobile Phone

A mobile phone is a portable device that is used mostly for the purpose of communication although it is now a complete computer and performs various additional functions as well.

### Components of Mobile Phone:

- (i) **Battery:** It Powers on the mobile phone by supplying electrical energy.
- (ii) **I/O devices:** Mobile phone has various input <sup>and output</sup> devices of many types depending on type of the phone but most essential ones are <sup>Monitor</sup> Screen, <sup>for</sup> ~~is~~ <sup>output</sup> ~~is~~ Touchpad or Keypad for ~~input~~ <sup>input</sup>. It also has Speakers and microphone.
- (iii) **SIM:** Sim card is an identity that is assigned to a mobile by the network it connects to.

Working model of a mobile phone for calls and messages.

Chief function of mobile phone is to make calls and send or receive messages. The work diagram is as follows:



M T W T F S S

DATE: \_\_\_ / \_\_\_ / \_\_\_

one  
dials a  
Number from  
input device

request  
for call  
goes to Network  
hub

If other  
Number is  
available,  
Call is  
started.

For calls.

one writes  
Text message  
by keypad

goes to  
Network  
hub

Sent to  
assigned  
Number