

## Part II Section A

Q. No. 2.

a. Distinguish the following terms

i) RAM and ROM

### RAM:

Random Access Memory (RAM) is a volatile memory. In RAM we can read, write and edit the data easily. It is a permanent memory unit.

### ROM:

Read Only Memory (ROM), is a non-volatile memory. In ROM we can only read but cannot write anything. It is non-permanent memory unit.

ii) Network and Internet.

### Network:

The combination of multiple devices or connections is known as the network. It includes different linkage among the systems.

### Internet:

International Network (Internet) is

the formation of many networks in International Community. It links the individuals globally.

### iii) GPS and GIS

#### GPS:

Global Positioning System (GPS) is used to detect the position of anything in the world through space as satellites.

#### GIS:

Global Information System (GIS) it informs about the keen details required of anything in this world through sensors.

### iv) Byte and Nibble.

#### Byte:

Combination of two bits is called a byte. It holds 8 bits in it in binary language.

#### Nibble:

16-bits when combined so it makes 1-nibble, in the binary language. ~~AND~~ It contains only two digits 0s and 1s.

## V. Natural satellite and Artificial Satellite

### Natural Satellite:

Moon is said to be the natural satellite in the space. It shows the <sup>positions</sup> ~~positions~~ and changes occurring in the space.

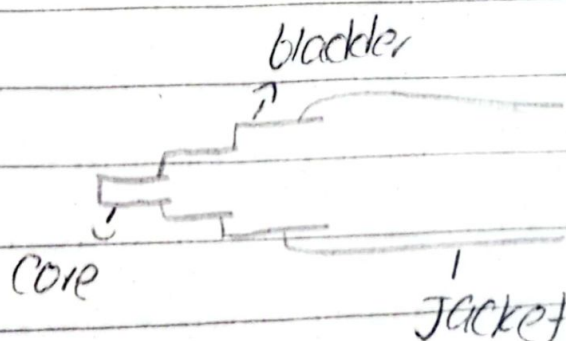
### Artificial satellite:

Man-made or Artificial satellite are sent in space for the detection and information of world to the specific area.

b. Write a note on optical Fibers.

### Answer:

Optical Fibers are the mechanisms used to transfer data or information over longer distances within a short period of time. These fibers are the latest technologies used for transmission of data.



c. Distinguish water soluble and Fat soluble vitamins by giving brief account of all the vitamins

ANSWER:-

VITAMINS:

~~Enzymes~~ Enzymes which are used for ~~the~~ speeding up the metabolic process in the human body are vitamins.

Fat Soluble vitamins:

Fat soluble vitamins are long termed vitamins and stays up to 6 months in the human body.

Vitamin A = comes from green vegetables.

Vitamin D = very good source of sun light.

Vitamin E = Green vegetables and meat.

Vitamin K = comes from intake of vegetables and beans.

WATER SOLUBLE Vitamins:

These ~~to~~ vitamins does not stays in the human body for any longer term. These enter into the blood stream.

Vitamin B = source are green vegetables beans and meat.

Vitamin C = Citrus Fruits increases more vitamin C in body.

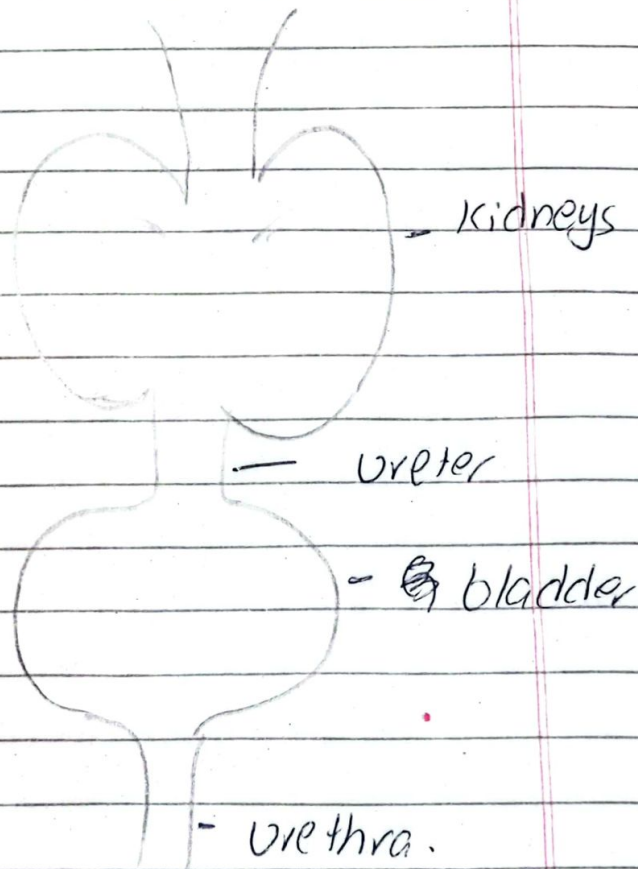
d. Explain working of kidney in human physiology.

Answer:

Excretory system performs the job of working of kidneys in human body.

This system removes the excess of anything which is not required by the body through uterous. especially of urea and carbon dioxide.

Nephrons play the vital role in removal of waste



Excretory system

Q. NO. 5.

a. Write uses of electromagnetic Radiations.

ANSWER: -

Electromagnetic Radiations:

The Radiations which do not require any medium for the transmission.

Uses of Electromagnetic Radiations.

a) To use the radiations in X-rays and ultrasounds - X-rays

b) The radiations used in ozone depletion and Green house Gases are known as Ultra-violet rays.

c) <sup>In</sup> Radios and televisions the waves are used from Radiowaves

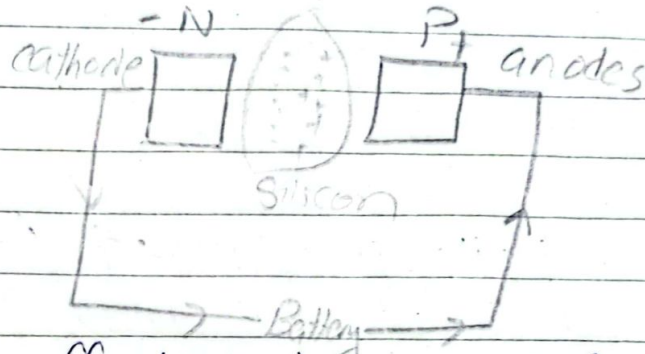
d) Microwaves are used in Communications through satellites and cooking food in microwaves

e) Infrared rays are used in the remotes which is visible to human eye.

b. Explain LED.

Answer:-**LED**

Light ~~Emmitting~~ Emitting Diode (LED) is a process through which light passes with a connection of a battery.



It is much effective ~~thru~~ comparatively to other lights

c. Describe in short Ceramics and semi-conductors.

ANSWER:-**Semi-conductors:**

The semi-conductors lies in between the insulators and conductors. These have the properties to conduct energy under circumstances. As, if heat would be provided to it to get it worked.

d. Write a note on Polio.

ANSWER :-

Polio:

Polio is a worst kind of disease which causes threats to human life. It disables the human's ~~body~~ lower body and stops the functioning of lower body.

Polio is caused by a virus. It affects the human spinal cord and ~~enables~~ stops the functioning of body parts. There are different types of polio viruses.

The cure to this virus is either the drops or medication or injection (but in worst conditions).

It transfers by unhygienic conditions and surroundings.

(SECTION-B)

Q. No. 7.

Average of 7-consecutive numbers is 20. Find the largest of these numbers?

Solution:



Date: \_\_\_\_\_

M T W T F S

let  $x$  be the smallest number.

Average of 7 consecutive

$$\text{numbers} = 20.$$

$$\text{largest number} = ?$$

So,

$$20 = \frac{x + x+1 + x+2 + x+3 + x+4 + x+5 + x+6}{7}$$

$$20 = \frac{7x + 21}{7}$$

$$20 = 7x + 3$$

$$7x = 23.$$

largest number is 23.

b. A told B that C is his father's nephew. D is A's cousin but not the brother of C. What is the relationship between D & C?

Answer:-

A is C's father's nephew which means that A and C are cousins.

Also D is A's cousin

and D is not the brother of C, which means D and C are siblings and D is sister of C.

c. Find the next number in the sequence

7, 12, 19, 28, 39 \_\_\_\_\_

SOLUTION:

The series

7, 12, 19, 28, 39 52.

It takes the addition series as 7 adds 5 is equal to 12 and it is addition of odd numbers.

So, the next number in the series after 39 is 52.

d. Sum of money is to be distributed among A, B, C and D in the ratio of 5:2:4:3. If C gets Rs. 1000 more than D, what is B's share.

SOLUTION:

The distribution of money among A, B, C, D = 5:2:4:3

So,

Let money =  $x$ .

So,

A's share =  $5x$ .

B's share =  $2x$ .

C's share =  $4x$ .

D's share =  $3x$ .

C gets Rs 1000 more than D means,

$$4x - 3x = 1000$$

$$x = 1000$$

B's share =  $2x$ .

So,

$$2(1000)$$

$$\boxed{B's \text{ share} = 2000}$$

Q. No. 8

b. Find out the correct words from jumbled words

LUNGEF = ENGULF

CKANS = SNACK

CIREFE = FIRECE

EER AANMOPTP:

MNIKPPU = PUMPKIN.

a. Ali is standing 10 meters away from a tree.....

SOLUTION:

