Difference Between Ram And ROM :

Insufficient length
Insufficient headings
Draw diagrams
Work on math portion
Write complete logic and steps

RAM :- (RANDOM ACCESS MEMORY)

It is the part of Internal Memmory. It received its name from the action. RAM have directly access to memory cell.
It has temporary storage means that data only remains when the machine is running. when the machine is turned off the data is lost The processor can easily read and write in RAM faster than any memory storage in computer. It has volatile memory and made up of small Chip.

ROM : (READ_ONLY_MEMORY)

ROM Contains hard wired instruction that computer follow when start up
The storage and data of ROM is permanent and non volatile memory.
ROM can be read by Computer but it can't be changed.

Byte :

It stores information and provide patterns to represent alphabets in lower and upper cases, numeric digit.
It can be interpreted by the pattern of number between 0 _ 250.

8 bits = 1 byles

Nibble :

Nibble originate from its representing 'half a byte' or a four_bit aggregation Bits is very important in mini computers called microprocessors.

4 bits = 1 Nibble

Date:

ii) a GPS (Global Positioning System)

It is a navigation system to determine exact location (2D+3D) anywhere in the world.
This system provide capabilities to military, civil user around the world.
It is the US-based system of satellite.
It consist of Three segments
space segment
Control segment
User segment.

GIS (Geographic Information System)

It is a Computer system for capturing, analyzing, storing geographically referenced information which is data identification according to the location.
It plays an important role in an integrating technology.

Date:

Natural Satellite and Artificial:

Satellite :

A satellite is any object revolves around earth (planet) in a circular path.

Diagram?
Formula?

Natural Satellite :

Which revolves naturally around the earth.

e.g. moon.

Artificial Satellite :

These are the man-made satellites

e.g: Geostationary, polar satellite.

Optical Fiber

Optics :- Study of property of light and its propogation

Optical Fiber

These are the strands of glass which are used to transmit light signals from one point to another in telecommunication

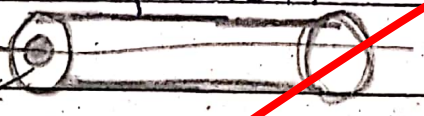
Structure:

Optical fibre has two main parts

1. **Core :-**

It is the central part having high density. It is generally made up of glass light propogates mainly along the core of the fibre. Core has high refractive index.

Cladding :-



The Core is surrounded by a layer of material called cladding.

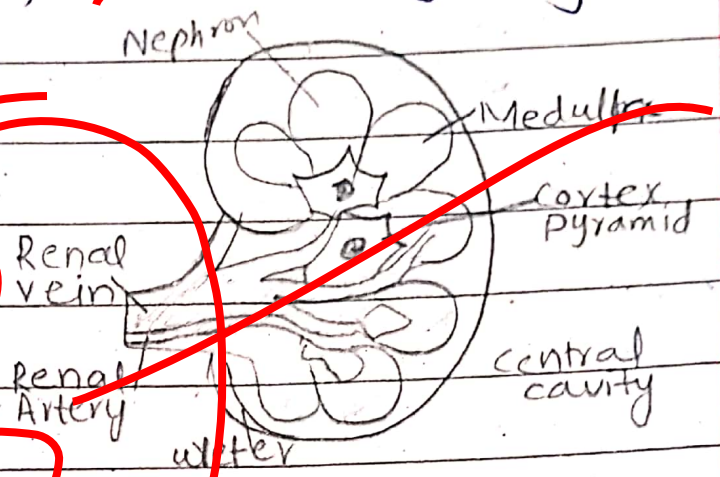
It is made of glass or plastic. It has low density and low refractive index.

→ Working of Kidney /Role ...

Kidney :-

Kidneys are dark-red bear shaped organ about 10cm long, each weighing about 270 gram.

Diagrame :



Components :-

Kidney is divided into two regions renal cortex (outer region) renal medulla (inner region)
Each kidney is composed of numerous microscopic coiled tubules called nephrons or renal tubules.

Function :-

The kidney and urinary tract fiter can eliminate waste substances from blood.
- Kidney regulate blood pressure, maintain balance of water and help to regulate acid-base balance

Date:

Q: Solid Waste Management:

Def:- The disposal of domestic refuse, commercial and industrial Solid waste material is called Solid waste Management. It consist of garbage, waste treatment plants, construction debris and other material.

Issues of Solid Waste Management:

- No proper waste collection system.
- Waste is dumped on Streets.
- Different types of waste are not collected separately.
- Open burning is very common

Solid waste Management system:

1. Waste Generation
2. waste handling, processing
3. Waste Collection
4. Waste Sorting
5. waste Transfer
6. waste Disposal

Earth Quake :-

Intense shaking ~~are~~ trembling of the Earth's surface caused by the sudden forces or movements in its outermost layer are known as an earthquake, a natural disaster.

Formation of Earthquake :

When stress in the crust, the outermost layer of Earth exceeds the strength of rock, it breaks along the lines of weakness either a pre existing or new fault plane.

1. The starting point of earthquake is hypocenter or focus.
2. The point at earth's surface directly about the focus is called the epicenter of earthquake.

Causes :-

1. Fault Zones
2. Plate tectonics
3. Volcanic activity
4. Human activities

Date:

Measurement of Earthquake :-

Since earthquake is exhibited in the form of seismic waves, experts use seismometers to record the seismic waves produced by earthquake.

Shallow focus Earthquake :-

1- Earthquake occur anywhere less than 70 km from the Earth's surface are called Shallow focus earthquake.

2. They are called crustal earthquakes.

3- They occur quite frequently and at random.

4- majority of earthquakes are of smaller magnitude. They are often not felt.

5. It poses greater threat at the surface as all energy is directed towards a small area.

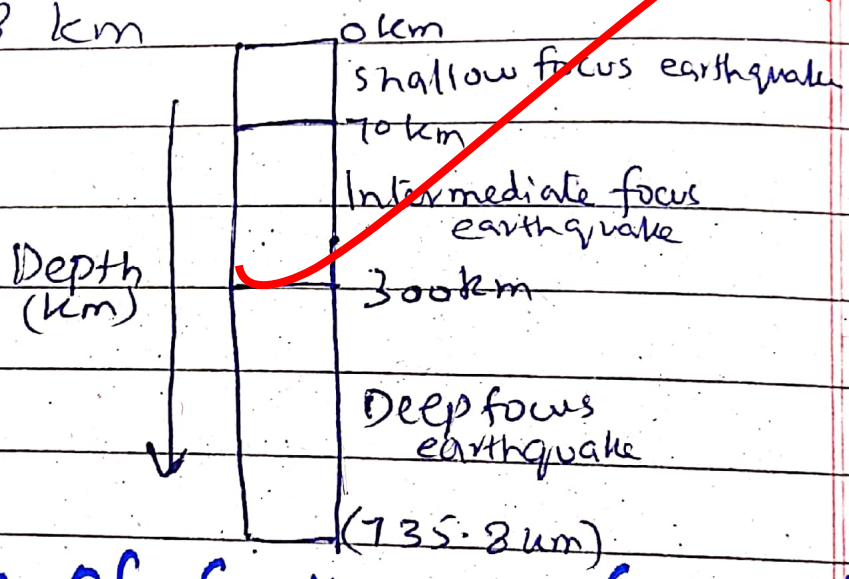
Deep focus Earthquake

Earth quake deeper than 70 km from earth's surface are caled deep-focus earth quake

Date:

2. They are triggered by the collision between plates.
3. They have high magnitude.
4. It donot cause much damage as focus of earth lies at great depths.

The Strongest deep-focus earthquake ever recorded is of magnitude 8.3, where as the deepest earthquake is 735.8 km



Magnitude of Earthquake (Morrocco)

→ The magnitude of earthquake in morrocco is 6.8 recently occured on 8 september 2023 which shattered millions of lives and massive devastation occured.

Date: M T W T F S

(Q 6 # b)

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

$$\text{mean} = \frac{10+30+y+50}{4} = 50$$

$$\text{mean} = \frac{90+y}{4} = 50$$

$$= 90+y = 50 \times 4$$

$$= 90+y = 200$$

$$y = \frac{200}{90}$$

$$y = \frac{2}{2\frac{2}{9}}$$

2
9|20
18
2

Q6(c)

3125, 256, 27, 4, 1

2, 6, 18, 54, 162

Q#7a

Price of 2 scooties : Rs. 96000

profit on 1st scootie = $\frac{20}{100} \times 48000$

= Rs. 9,600

960
× 20
0000
+ 1920
19200

Price of 2nd scootie = $\frac{20}{100} \times 48000$

loss on 2nd scooties: 9600

No profit no loss.

Q7c: $U = \{a \ldots z\}$

$A = \{a, e, i, o, u\}$

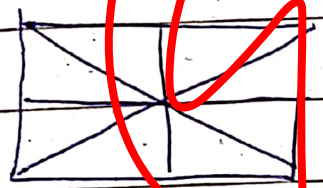
$A' = ?$

$U - A = \{a \ldots z\} - \{a, e, i, o, u\}$

$A' = \{b, c, d, f, g, h, j, k, l, m, n, p, q, r, s, t, v, w, x, y, z\}$

Q8c:-

There are 16 Triangles in the figure.



Q8 b:- 3/8