

Sajid Malik Sher

B-076

Day: \_\_\_\_\_

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

Part - II

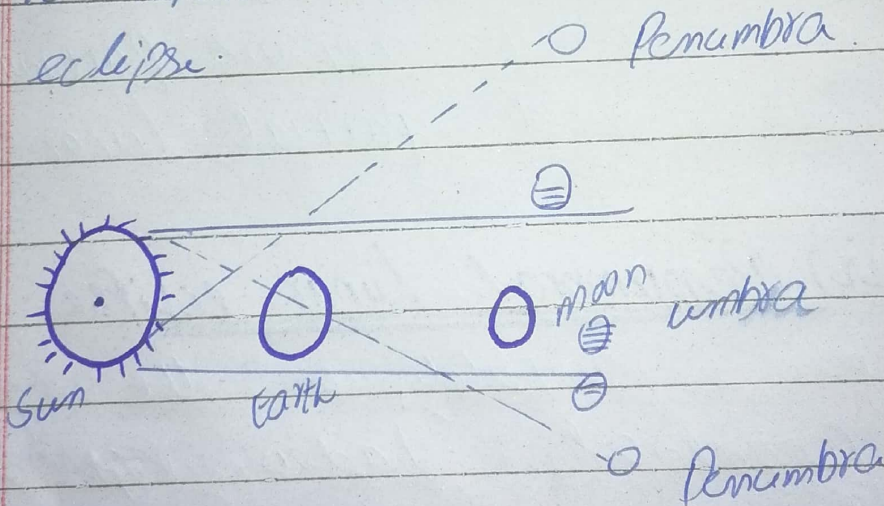
Section - I

Question No. 3

(A)

Lunar eclipse :-

When an earth came between the moon and sun, then the light of sun can't reach on moon, it appears dark called lunar eclipse.



Phases :-

There are mostly three phases of lunar

eclipse that are the following.

i) Total lunar eclipse

moon is completely in umbra shadow region. So, the moon appears dark this is called the total lunar eclipse.

ii) Partial lunar eclipse

moon is between the umbra shadow region and penumbra shadow region so, it appears partially dark called partial lunar eclipse.

iii) Penumbral lunar eclipse

moon is completely in the penumbral shadow region. It may or may not appear dark but mostly clear appear.

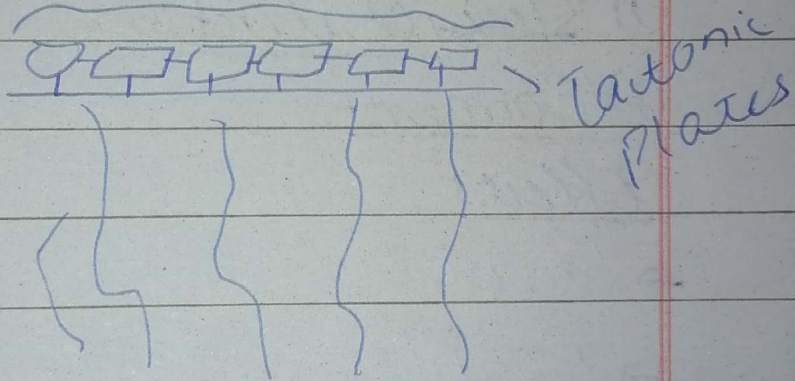
## Q3 (D)

### Earthquake and volcanic eruption interconnected

Because of heat a magma under the earth burst and the tectonic plates diagonally or another way vibrate a huge earthquake.

Tectonic  
Plate:-

7 ranges.



### Natural Cause:-

- Heat waves, Convection
- Magma burst.

### Anthropogenic cause

- Heavy drilling
- Bombing experiment.

## Effects

- Landloss
- Infrastructure damage

## Solutions

Public awareness

Early warning system

Collaboration

Volcanos :- There are the mainly two ways of volcanic eruption.

- i) Slowly Stilactive
- ii) Dorment

## Effects

- Landslide
- Pollution
- Health problem.

Yes the earthquake and volcanic eruptions are interconnected because in volcanic eruption the same way of lava and magma burst that vibrate the 7 ranges of places.

## Q3(c)

### Electromagnetic Radiation

Those which travel and having ranges from nanometer to micrometer and having high length and frequency called electromagnetic radiations.

There are many types of electromagnetic radiations.

### Types

#### X-rays:-

Having high frequency and shorter wavelength from 0.01mm to nanometer. These are also known as  $\alpha$ -rays.

$\beta$ -rays: These also having high resolving power and also penetration power.

#### Gamma rays:

These are also

frequency and also high resolving and penetration than all others.

## EMR Spectrum

Visible spectrum.  
Electromagnetic rays having visible spectrum including infrared, microwaves and all other rays.

760nm

\_\_\_\_\_

## Q3 (b)

### Enzyme:

Enzyme are those chemical that help in metabolic and also used as energy resources. It catalyze the reaction in our body.

## Functions of Enzyme

There are many functions of enzyme. ✓

- It helps in the metabolism
- It catalyses the chemical reactions
- It helps in the reactions to increase the rate of reactions.

### Example:-

The best example of enzymatic reaction is the Fermentation of yeast. In which they contain lactic acid and to convert in Yogurt.

Yeast Fermentation  
Yogurt.

Penicillin was also produced by the enzyme.

## Question No. 4

(A)

### Noise Pollution

A type of pollution that damage the environmental clear listening ability and that harmful for creature and adverse impacts on all. The frequency of noise increased from level that is suitable for human and create disturbance called noise pollution.

### Causes of Production

Noise Pollution is mostly produced from:

- Daily routine machinery in agriculture such as Tractor, turbines etc.
- Produced from Transport of routine.



- Electricity generation Project.
- Storms.

Harmful effects: There are many harmful effects of noise pollution

- Headache
- Insomnia
- Bone Pain
- Blur vision
- Listening capacity affected.

### ways to curb

- Public awareness
- minimum use of transport
- minimum use of electric appliance and switch off when there is no, used.
- Prefer to use the Electric vehicles.

## Q3(c)

### Water Quality

The quality of water that is suitable to drink for all and specially for human beings.

### Water cycle:

The water cycle is the evaporation that evaporate the water and condensed into droplet or gaseous form into circulation and precipitation.

Sludge Process:- In the sludge press water filtered by the sludge that contain rous and stones that hurdle and capture dirty things contained water.

Filtration:- In filtration different perspective used

Chlorine used:- In water  
Chlorine is used to  
kill the bacteria.

## Water Quality and Standards

- i- It must be in Pure form.
- ii- Do not directly filtered but filtered by procedure.
- iii- It must be saltless.
- iv- without bacterial infection which means biologically good.
- v. must be Chemically good Chlorinated.
- vi- Physically good, do not odour contain.

—————

## Q4(b)

### Importance of fibre in diet :-

The importance of fibre in diet is very excessively. In diet fibre contain milk, meat and egg with wheat. It helps in fat and fat soluble production. It provide the energy to body. It balanced food quantity in the body.

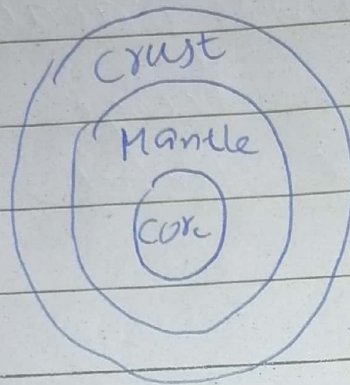
### Food Considered balanced

A platter of food considered as balanced because it balanced the diet and overcome chance of food malnutrition and malnourished chances. It import  $\text{Na}^+$ ,  $\text{K}^+$  and  $\text{Ca}$  in the body with food.

# Q4(D)

## Lithosphere :-

Lithosphere is a sphere that contains core, mantle and rocks with minerals.



## Crust

Soil, Horizon O, A, B.  
0-70km - 5-71cm

## Mantle :- Almost middle Part

Upper mantle zone - 721cm - 400

Lower mantle zone - 670 - 2000

## Core

Outer Core - Nickel - 110 relay

Inner core Solid Iron  
in spinning movement.

Rocks :- The hardest part of earth that can be brittle or not and solid at room temperature such as stones, sand etc.

Minerals :- underground resources and reserves available for human beings such as coal, oil and gas.

## Section-II

### Question No. 8

(c)

$$A = \{10, 11, 12, 13, 15\}$$

$$B = \{10, 12, 14\}$$

$$U = \{10, 11, 12, 13, 14, 15, 16, 18\}$$

$$(A \cup B)' = A' \cap B'$$

L.H.S

$$(A \cup B)$$

$$A \cup B = \{10, 11, 12, 13, 14, 15\}$$

$$(A \cup B)' = U - (A \cup B)$$

$$= \{10, 11, 12, 13, 14, 15, 16, 18\} - \{10, 11, 12, 13, 14, 15\}$$

$$= \{16, 18\}$$

— (1)

R.H.S

$$A' \cap B'$$

$$A' = U - A = \{10, 11, 12, 13, 14, 15, 16, 18\} - \{10, 11, 12, 13, 15\}$$

$$= \{14, 16, 18\}$$

Day: \_\_\_\_\_

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

$$B' - U - B = \{10, 11, 12, 13, 14, 15, 16, 18\} - \{10, 12, 14\}$$

$$= \{11, 13, 15, 16, 18\}$$

$$A' \cap B' = \{14, 16, 18\} \cap \{11, 13, 15, 16, 18\}$$

$$= \{16, 18\} \quad \underline{\hspace{2cm}} \quad (2)$$

Hence proved that L.H.S = R.H.S

$$(A \cup B)' = A' \cap B'$$

o ————— o

Q No. 8 (D)

No. of Triangle in Figure.

The no. of triangles in  
the given figure are  
Eight

$$= \boxed{8}$$



# Q8(A)

Charge = £20 + 4n  
formula

n = windows  
= 7 windows

Charge formula =  $20 + 4(7)$   
 $= 20 + 28$   
 $= \boxed{48}$

## Question No. 6

(D)

Series -10, -8, 6, 40, 102, ?

$$= \boxed{102 + 136 = 238}$$

o \_\_\_\_\_ o

## Q No. 6(c)

$$\begin{aligned} V &= \pi r^2 \\ &= 3.14 \times (12)^2 \\ &= 3.14 \times 144 \\ &= 452.16 \end{aligned}$$

Day: \_\_\_\_\_

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

Q 6 (A)

$$K = ?$$

$$9, 8, 10, K, 12 = 15$$

$$\frac{9+8+10+K+12}{5} = 15$$

$$39+K = 15 \times 5$$

$$39+K = 75$$

$$K = 75 - 39$$

$$\boxed{K = 36}$$

Q8 (c)

i) xalcieP  
placies

ii) tyhniaum  
Thyianum

iii) arsehcc  
Search

iv) moniteah  
Hedt moni

v) taxeph  
Ph xate

## Q6 (B)

$$\text{Sugar} = x$$

$$\text{Colored water} = y$$

$$4x : 3y$$

$$4x : 5y$$

$$4x + 3y = 0$$

$$4x + 5y = 10$$

$$-2y = -10$$

$$y = \frac{10}{2} = 5$$

$$4x + 5y = 10$$

$$4x + 5(5) = 10$$

$$4x + 25 = 10$$

$$4x = 10 - 25$$

$$4x = -15$$

$$x = \frac{-15}{4}$$