

48/80

• GENERAL SCIENCE  
AND

ABILITY Gk-I

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16/01/26

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• NOA- Online Test  
Series

(25)

(1)

Q:3

Ans

A)

## Causes of Global Warming

DEF: - Global Warming is the rapid raise in the global temperature due to the human activities, the main causes are:-

### Causes of Global Warming

The major causes of the global warming are:-

#### ① Deforestation

Yes, due to the deforestation, the normal temperature rises and climate changes. People cut trees for the temporary comfort and face this trouble in future.

- Ex: Jacobabad (52-54°C) 21/24  
• The hottest city with 54°C temp

(2)

→ • ② Burning of fossil fuel (oil)

Besides this, the another major cause of the global warming is the burning of fossil fuel, mismanagement in this (oil) sector, this factor increases the average temperature bit by bit.

→ • ③ Pollution in atmosphere

The report of UNFCCC United Nation Framework on the Convention Climate Change, the world is worried about the environmental crisis and rapid population growth. This population growth pollutes the global atmosphere that result in global warming.

→ • ④ Rapid Population Growth. - The

whole world faces the global warming because of the rapid population growth, taking an example of china that is highly populated and also faces pollution, and global warming, In 2007, the population of Pakistan was 15.5 (16 cr) Avg, but currently it is near about 25 cr. This thing raises the average temperature.

→ • ⑤ Use of Non-Renewable Resources

Undoubtedly, the world uses the non-renewable resources of the energy (fossil fuel, Nuclear Energy etc) that causes the

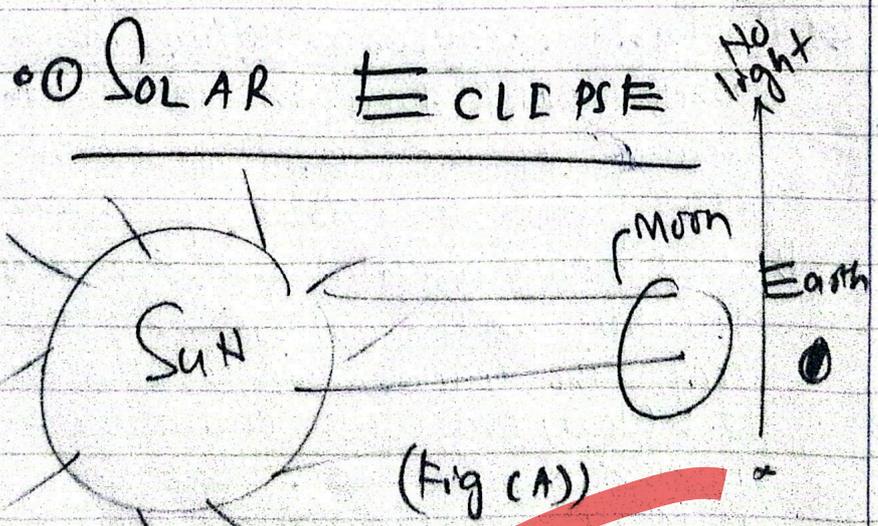
(3)

So, these are the main causes of the global warming that need immediate steps.

Q:3  
Anu. B) part ———?

• Eclipse — It takes place when any heavenly body ~~is~~ comes in between the another body and blocks the light (Sunlight)

• Types



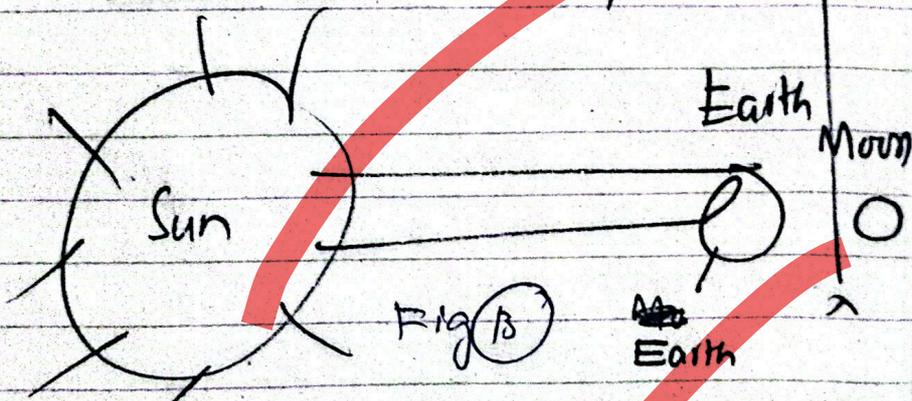
Solar Eclipse happen when moon comes in between the Sun and Earth and blocks the Sunlight.

(4)

Explanation

Fig (A) denotes the Solar Eclipse as Moon is between the Sun and the Earth and it has just blocked the sunlight. This phenomenon is called as the SOLAR Eclipse

- ② LUNAR Eclipse



Def Lunar Eclipse is the phenomenon when Earth comes in between the Moon and the Sun, and blocks the sunlight of the Sun.

Explanation As described in Fig (B), this particular phenomenon is known as the Lunar Eclipse

4

(5)

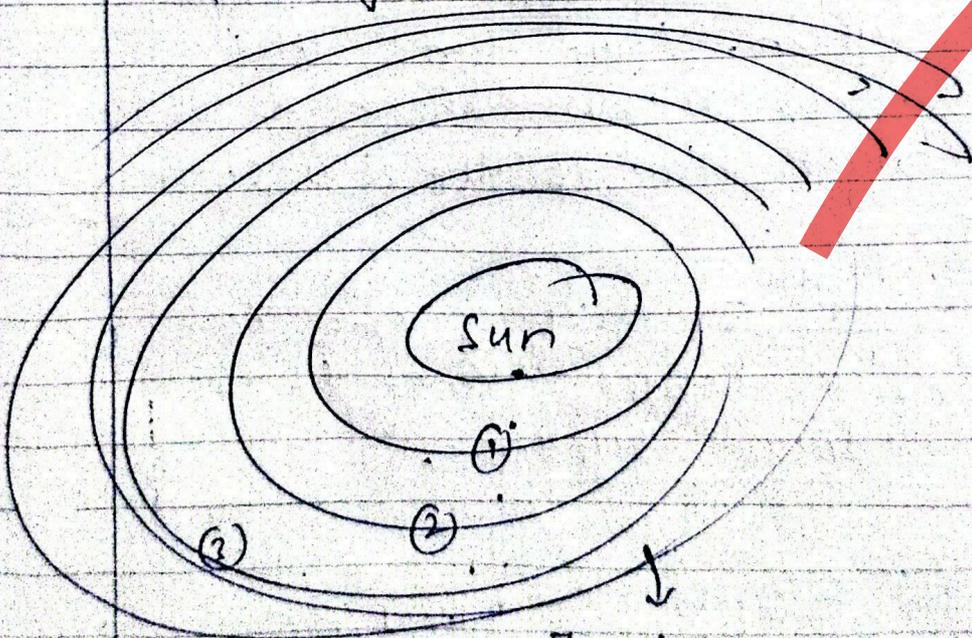
Q No 2  
Ans

B)

## SOLAR SYSTEM

DEF:-

Solar System is the topic of great debate in Astronomy. It is the combination of the celestial bodies, stars, planets and the galaxies. This whole system is known as the Solar System.



This type of system (Sun) and stars, planets is called as the Solar system.

PTU

⑤

The Major components  
of the solar system are,

① Mercury

It is one of  
the main planet that is  
closest to sun called as  
Mercury.

② Venus

It is the  
coldest, lightest brightest  
planet of the solar  
system. Apart from this  
Venus is also known as the  
bright star of the solar system.

③ Mars

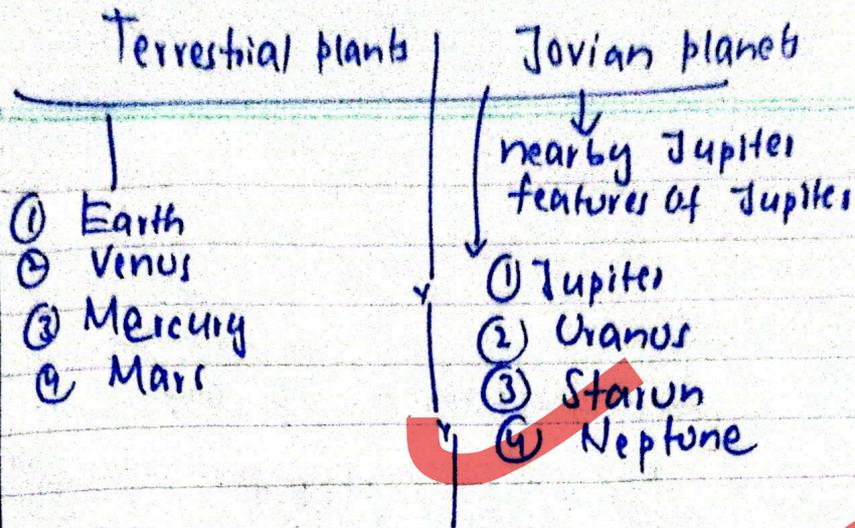
It is one of  
the lightest planet of the  
solar system,

④ Earth

It is an  
essential planet of the  
(Solar Eclipse) with one  
Moon (LUNA), here  
life is possible

PTU →

(7)



⑤ Jupiter It is one of the largest and the heaviest planet of the solar system, and also called as Jovian planet

⑥ Uranus Next is the Uranus planet nearer to the Jupiter.

⑦ Saturn Saturn is another planet of the Jovian section planets.

⑧ Neptune ↓ It is the coldest planet of the solar system.

So, this is the solar system with its basic components

(8)

Q:2  
Ans

## Importance of balanced diet for Healthy Life

The Medical Science has clearly mentioned that there is great importance of the "balanced diet" for the healthy life.

"Good Food Good Life"

This is one of the famous line in the medical science, it simply means that the Good food (balanced diet) is directly proportional with the health index of the Life.

(9)

## Balanced diet

This balanced diet comes from the vitamins, proteins and the carbohydrates that are used so far in the daily routine.

Hence, in order to build the energy for the growth and the daily work there is an essential need of the balanced diet as per the basic medical recommendations.

The proper  
⇒ Food cycle → with the  
Sleep makes good diet

↓  
This diet is called as the balanced diet that is highly necessary for the healthy life.

(10)

Q: 2

Ans

b)

⊙ CELL

Cell is the basic unit of life, as it is also called as the building block of the life (living organisms)

⊙ It was first discovered by the famous biologist Robert Hooke.

∴ There is a notable difference in the animal plant and the micro organisms cells.

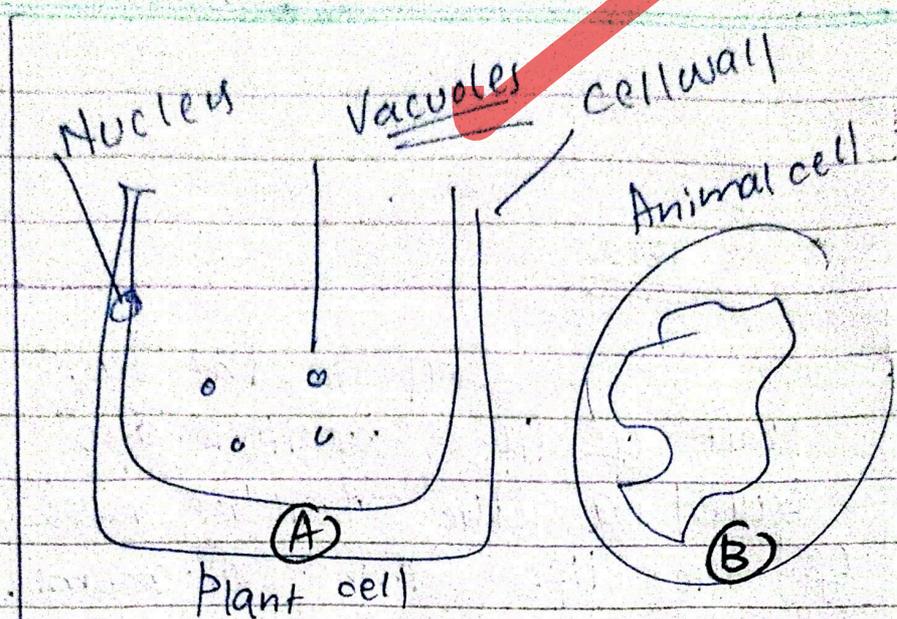
The difference lies in shape size

Structure and the basic

Function. The difference is illustrated below.

PTO →

(11)



Animal cells.

- (1) plastids
- (2) Small vacuoles
- (3) Tonoplast is absent
- (4) Cell wall is absent
- (5) Shape is different from plant
- (6) Nucleus at center

Ex - Fig (B)

Plant cell

- (1) No plastids
- (2) No vacuole
- (3) Tonoplast is present
- (4) cell wall is present
- (5) Shape is rectangle like
- (6) Nucleus is at side

Ex - Fig (A)

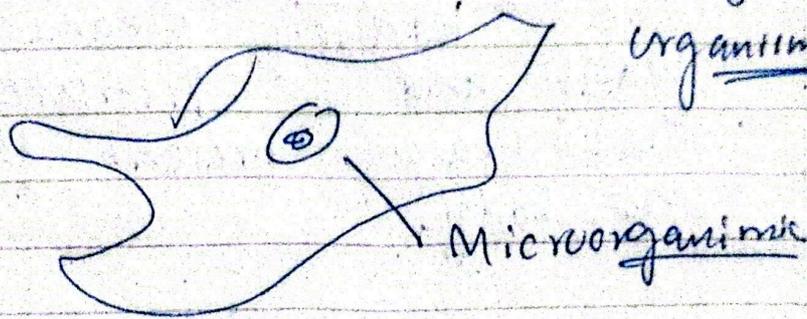
(12)

While the microorganisms have different types of cells, unicellular protista, amoeba, etc.

Ex.

micro living organism

3



Q2

Q

— ?

A

Working of human kidney

Ans:

Kidney

Kidney is

one of the essential part of the human body that works as the filtration part.

It works as the filtration point in the human

(13)

body, When water enters in the body it bit by bit enters in the throat and oesophagus and then in the kidney, and the kidney cleans the water and filtrates the water present in the body.

The basic unit of the kidney is known as the Nephron. In simple words it is the basic filtering point in the body.

2

Q.3

Ans

## d) Food preservation

The Food preservation methods are best known by the pasteurization. There are important food methods for daily food and diet.

### Examples

① Cooking

② Dairy products

③ Heating / canning

④ Fermentation

⑤ Curing

⑥ Salting / Sugaring

⑦ Vacuum Sealing  
etc

Q.3  
Ans

c)

Cyclones

Sudden hydro water hazards are known as the cyclones. These are the essential debate in the geography and seismology.

Tsunami

The rapid and immediate flow of the sea is known as the Tsunami.

Ex:

→ Sri Lankan Tsunami 2004, 2010

→ Japan Tsunami

(10)

## Ability part

Q. 6  
Ans

A)

Given data.

$$\text{Zahid} : \text{Basit} = 3:2$$

$$\text{Charity} = 5\%$$

$$\text{Zahid's share} = 8550$$

$$\text{Total Profit} = ?$$

Solution

$$\text{let } x = 100\% \text{ (total)}$$

$$\text{Now } \therefore 5\% \text{ of charity}$$

$$100 - 5\% \text{ (charity)}$$

$$\text{Remaining } 95\%$$

$$\text{Remaining} = 95\%$$

So Now

Zahid's share (ratio) from 95%

$$\Rightarrow 3:2 = 3+2 = 3/5$$

$$\text{for Zahid} = \frac{3}{5} \times 95 = 57\%$$

Now

$$57\% \text{ of } T = 0.57$$

$$0.57 \times T = 8550$$

$$\text{Total} = \frac{8550 \times 100}{57}$$

$$\text{(Total} = 15000 \text{) Ans}$$

(17)

## General ability

Q:6

B) part ?

Ans

Given data

20% of a = b, b% of 20 is  
What percent of a?

Solution

$$20\% \text{ of } a = b \rightarrow (1)$$

$$\frac{20}{100} (a) = b$$

$$20a = 100b$$

$$a = \frac{100b}{20}$$

$a = 5b$

Now

$$b\% \text{ of } 20 = x\% \text{ of } a$$

$$\frac{b}{100} (20) = \frac{ax}{100}$$

$$\frac{20b}{100} = \frac{ax}{100} \rightarrow (2)$$

Putting  $a = 5b$  in eq (2)

$$\Rightarrow \text{Now } \frac{20b}{100} = \frac{5b \cdot x}{100}$$

$$x = \frac{20b}{5b} \Rightarrow x = 4$$

$\cancel{55}$   $\boxed{x = 4}$   
So Ans is 4%.

(18)

Q.6

Ans

c) part  
Given data

two numbers are?

Ratio 2:3

Product of L.C.M, HCF = 294

Sol

$$(2x)(3x) = 294$$

$$6x^2 = 294$$

$$x^2 = \frac{294}{6} = 49$$

$$x^2 = 49$$

$$\sqrt{x^2} = \sqrt{49}$$

$$x = 7$$

Now

$$2(x)(3)(x) = 294$$

$$2(7) : 3(7)$$

$$14 : 21$$

Ratio

$$\frac{14}{21} = \frac{2}{3}$$

So the numbers  
are

$$\boxed{14, 21}$$

Ans

(19)

Q. 7  
Ans

(A)

Sol

Women : Men

$X : 2X$  (half)

Now in Rawalpindi Women  
five, Men (-10),

$$X + 5 = 2X - 10 \rightarrow \textcircled{1}$$

Now  $X + 5 = 2X - 10$

$$X = 2X - 10 - 5$$

$$X = 2X - 15$$

$$X - 2X = -15$$

$$-X = -15$$

Ans  $X = 15$  → passengers  
at the start  
who entered

Conversely

in Rawalpindi number is equal

$$X + 5 = 2X - 10$$

$$X = 15$$

$$15 + 5 = 20 = 2 \times 15 - 10$$

$$20 = 20$$

(20)

Q.7

(c) \_\_\_\_\_?

Ans

$$40\% \text{ of } x = \frac{2}{3} \text{ of } y$$

Ratio of  $x$  and  $y$

Solution

$$40\% \text{ of } x = \frac{40}{100} (x)$$

$$\frac{2}{3} \text{ of } y = \frac{2}{3} y$$

Now

$$\frac{40x}{100} = \frac{2}{3}$$

$$40x = \frac{2}{3} \times 100$$

$$40x = \frac{200}{3}$$

$$x = \frac{200}{120} = \frac{10}{6} = \frac{5}{3}$$

Ans

So the numbers are 5:3

Conversely

$$40\% \text{ of } 5 = \frac{2}{3} \text{ of } (3)$$

Yes

$$\frac{40}{100} \times 5 = \frac{2}{3} \times 3$$

$$2 = 2 \text{ Proved}$$

(21)

Q.7

Ans

D)

$$Td = 4$$

Distance of tree: building = 6m  
length  $B_h$  building given = 50

$$\underline{\text{total height}} = (6+4)\text{m} \\ = 10\text{m}$$

Sol

By comparing!

$$\frac{T_h}{Td} = \frac{B_h}{B_d}$$

$$\frac{T_h}{4} = \frac{50}{10}$$

$$\frac{T_h}{4} = 5$$

$$T_h = 20\text{m} \quad \underline{\text{Answer}}$$