___/___/___ ُور

Part II
Sec I

Q # 5

(a)

Food Preservation:-

Food preservation means a method which will prove beneficial for healty the mantainance of the freshness of food these methods will preserve the food from various bectarias etc.

Methods of the preservation of food.

There are various methods which will prove beneficial for the preservation of food.

Drying:

It is a method of food preservation in which we dry the food in moderate temperature. The water removes from the food in this way. Then there is

is no space for the existence of bacteria. Then the food preserve from any kind of bacterial activities.

Freezing:

The food preserve from various activities through immidiate freezing. When the food freeze at a low temperature then it will save for longer time. The freshness of the food will remain but some food like meet will change its color if it will freeze for longer time.

Boiling:

Some food preserve through the method of bialing. Milk boils at least 15 minute at high temperature then the bacteria will kill but this millk should use within days we cannot store it for monthe in this way.

Acidic method:

In this method some food preserve through aciduc method.

Acid kills the germs and does not allow bacteria to raise their growth. It kill the bacteria and preserve food from any kind of bacterial + activities.

Pick **Example**.

Pickle.

Through liquid:

Liquid is a preserving method which is the combination of water and suger or water and salt. This liquid is think and preserve food from any kind of bacterial activities.

Industrial method:

Some Industries use manufacturing method for preserving food. This method preserve food from any through various processes which will save the freshness and quality of food.

Q (b)

What is milky way:

Milky is a type of glaxy. It is an elliptical type

type of galaxy. It consists of stars planet, dawrf planet, black hole, matter and other celestial objects like asteroids and meteorides. Our Sun is our star and earth is our planet, are also a part of this galaxy.

How dark matter is related to galaxies?

Dark matter has very great strength of energy. Nothing can be escaped from it. It consists of the real bodies of many stars. No one can predict its formation. When the star of galaxy has turned to its last stage it will convert into nebula or if it has larger size then it will turn into black hole. The Dark matter is the exist in center of galaxy.

Different parts of galaxy

The center of galaxy consists of dark matter or black hole. When the star reaches its last

last stage it will turn into dark matter surround of the galaxies are consisted of the various types of stars. these stars have their own planets and dwarf planets.

(c)

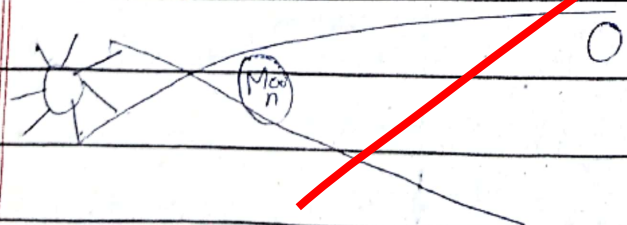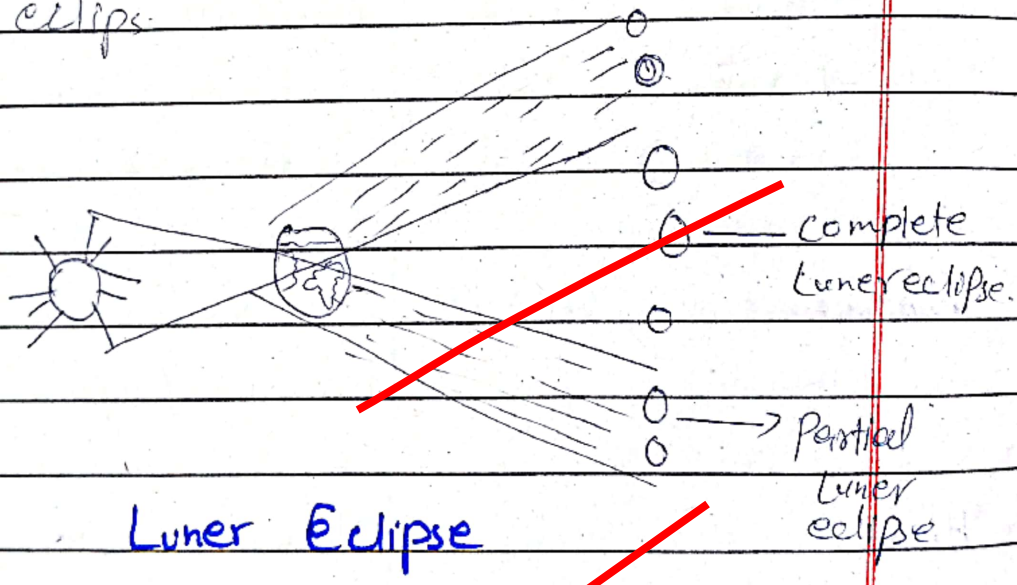| Solar Eclipse	Luner Eclipse.
Introduction It occurs when the moon comes between the sun and the earth then the sunlight cannot reaches in the earth.	This phenomena occur when the earth moves and comes between the moon and sun and it blocks sunlight.
duration It occurs for few minutes. → It does not safe	It may occurs for many hours
Humans impact For Human eye cannot see it directly without wearing of glasses.	Human can see this phenomena without wearing glasses.
Occurance period It occur twice time in a year. Complete solar eclipse	It occur For more than twice time Complete luner

| Types | partial solar eclipse occur.Complete solar eclipse will occur during April in USA after many years according to NASA. | luner eclipse, partlar luner eclips can be observed |
| Phenome-na. | Belly beads, diamond ring effects are the phenomenaswhich occur during sodar eclips. | Red blood moon are phenomona which can be obser. |

○
◎
○
○ — complete luner eclipse.
○
○ → Partial
○ luner eclipse

Luner Eclipse

○

(b)
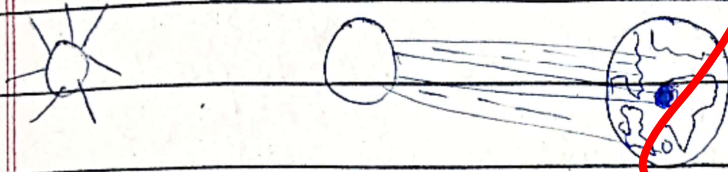
Introduction:

Solar eclipse

Q#3

(a)

Introduction

According to UN report 3rd july ofe 2023 was considered the hotest day. The temperature has raised 1.5°C from the previous recorded temperature.

Major hurdles in developing countries to tackle the impact of global warming.

Problems or impacts of Global warming:

The rising temperature impacts on the developing although the emit less than 1pc of CO_2. While they are facing floods, droughts, and food scarcity. COP28 discusses the

hurdles which developing countries are facing due to the impact of global warming.

Economic problems:

The economy of developing country is not too strong as the developed countries have. They have not too much money to spend on the rehabilitation of the effectees of global warming.

Absance of modern technologies:

The developed countries use modern technologies and invent various methods for combating the challenge of Global warming. Whereas developing countries does not have modern technology which will prove helpful for combating the effect of global warming.

Energy crisis:

The developing countries is facing greater crises of energy rather than developed countries. They

have to use fossil fuels for completing their energy demands.

Turn out towards renewable energy source:

The developing countries are facing greater challenge in the form turning towards renewable energy sources. These countries does not have proper source of economy. There economy is too week. Therefore it is quite difficult for them to turn towards the renewable energy resources.

Solution for challenges

COP 28 tried to resolve the problems by establing establishing fund for those countries which are affected by climate change.

(b)

Introduction:

A balance diet means a diet which contains proper amount

carbohydrates, Vitamins, Iron, minerals, and lipids. It fulfills the requirement of body which we need.

Importance of balance diet:

A balance diet has great importance because it fulfils the needs of our body. H Various types of diseases will occur if our body do not take the proper amount of nutritions.

Diseases:

If we do not take proper amount of nutrition then we will may affect From the malenutrition but if we will take more then we will suffer From Obessity, and 1 arthrosclorosis types of diseases.

Requirement of diet:

Every person cannot take the equal amount of diet. It may varies according to age, gender and type of work which a person is doing.

Age/Gender	Requirement of Energy
Children	2000
Women who do not work	3000
Women who work.	3500
Men who do not work	4000
Men who does work.	4500

(c)

Introduction:-

Machine learning is the subset of artificial intellegence. It can do work like men and performs well than men. The quality and quatity of work is much more better than human beings

Revolution in the -Present world.

(a) Industrial level.

Machines are doing good work than men. They take the place of human labour on Through machines industrialists take more qualitative and quantitative

$\{0, 2, 6, 12, 20, 30, 42\}$

production:

Agricultural field:

Through the help of machine the farmer produce more foods and earn more profits

In Medical field:

In the field of medicine it ~~revolutionize~~ the brings great revolution. As the patient now can check their cholestrol level at home. The automization in the field of medicine has brought great revolution.

Defense:

Through the use of AI's subset machine the countries are now defends their country in a better way than previous era. Through the help of Gps the country can detect the activities of their enemy.

Transportation and domestic level

AI has brought great revolution in the field of transportation. With the help of Gps a person can detect his vehicles if he lost, at if we look out domestic level then we observe that many works are doing at machine.

SECTION-II

Q # 8

(c)

(v) Holiday   (iv) London

(ii) GARDEN   (i) RIHTS

(iii) MOSTACH

(b)

(iii) $\{1, 7, 15, 25, \_\_\_ 51\}$

$\{1, 7, 15, 25, 37, 51\}$

(iv) $\{0, 2, 6, 12, 20, 30, ?\}$
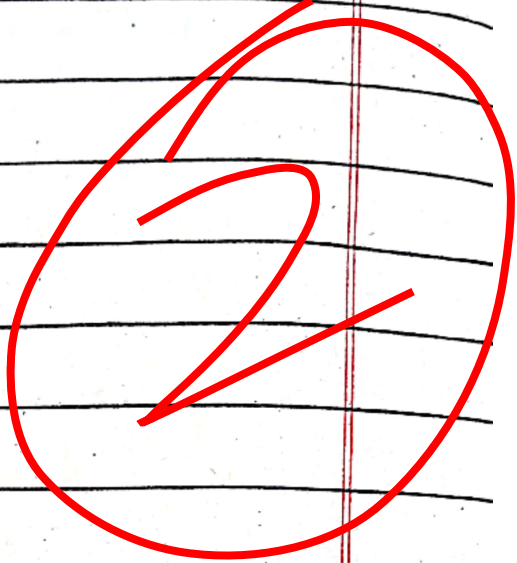
$\{0, 2, 6, 12, 20, 30, 42\}$
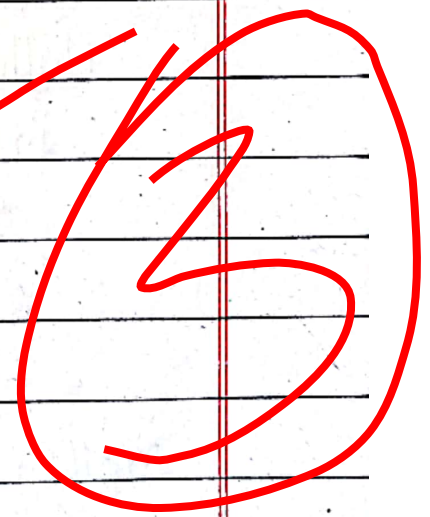
{48, 24, 72, 35, 108 — 2}

{48, 24, 72 35, 188, 143}

{30, 29, 27, ?, 20, 25}

{30, 29, 27, 25, 20 15}

{4, 16, 36, 64, ? 144}

{4, 16, 36, 64, 74, 144}

(a)

Solution.

$$89 + 91 + 93 = 273$$

How?

(d)

Mother's age = $6x$ older.

Brother's age = $2x$ older

Sum of ages = 72

Let Sara age = x.

$= 6x + 2x + x = 9x$

Mother age $= \dfrac{6x}{9x} \times 72^{8} = 48$

Brother's age $= \dfrac{2x}{9x} \times 72^{8} = 16$

Sara's age. $= \dfrac{x}{9x} \times 72 = 8x$ (with 8 written above 72)

sum of all ages. $8x + 16x + 48x = 72x$