

Mock - 2026 [FINAL]

Subject : General Science & ability

Question No. 03

Part (a) : How global warming can be reversed?

Answer:-

Global warming is the process of greenhouse gases [GHG] like CO_2 (carbon dioxide) and CH_4 (methane) - The emissions of pollutants and industrial waste highlight the consequences of global warming. It would affect not only human beings but also atmosphere and damage the ecosystem as well.

→ Causes of global warming

Global warming can be caused by many factors:

1. Anthropogenic factors - Humans

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are responsible for global warming.

2. Harmful gases - destroy the environment.

3. Industrialized system - caused by the wastage and fossil fuels burning.

→ How global warming can be reversed?

1. Cutting down the emissions - Through this process global warming can be reversed - Cutting down the emission means safe and healthy environment.

2. Reduce the wastage - Proper disposal of waste because harmful chemicals destroys everything and increased the rate of global warming.

3. Efforts : International agreements - Unlike climate change agreements, Efforts were made to improve the condition. International agreements if binding lead to make atmosphere

clean.

4. Humans and their sources - Government and humans both used their sources to cut the environment. That would reflect how global warming can be reversed.
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Part (b): Define ceramics. Give properties and applications of ceramics?

Answer:-

Ceramics are organic-based material that are used in cookery (spoons, plates, glasses) and other related equipments. The cookery that made from ceramics is highly used in Pakistan specifically in rural areas. Ceramics have different properties on the basis of their function and manufacturing.

1. Applications of ceramics

Traditional ceramics

→ are those that are done by traditional methods - By digging the ground and mix water with clay is an important step to make the particular crockery.

Modern ceramics

→ Modern ceramics are those that uses modern techniques to make it efficient - Many machineries were introduced to analyze their functions and made it on timely-cooperatively basis.

Rural areas of Pakistan and ceramics

→ Pakistan is a developing country but their hospitality, ways, and traditional styles are most common - Many shopkeepers sales different types of crockery that are made by rural womens with the process of clay.

2. Properties of ceramics

Crystalline in nature

↳ ceramics are crystalline in nature and is very beneficial for those who used it.

Hard, brittle

↳ They are very hard and takes many steps in their manufacturing - Their shining surfaces makes it more elegant.

Usage of ceramics

↳ are used in homes - specially for presenting food - It is also used for another purposes like displaying as art.

Part (c) : Explain the working of optic fibres and mobile phone?

Answer:-

Mobile phones : Mobile

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Phone is a system that connects via cellular networks. It is very useful for communication purposes and Educational benefits.

Connection



- **BTS**: Connected through base transceiver station.
- **Towers**: Connected through nearest tower

Different forms



- **1G** - Networking system
- **2G** - For SMS
- **3G** - For mobile internet
- **4G** - video calls, fast process
- **5G** - ultrafast connection

Usage of Mobile phones

- Used for communication purposes
- Used for entertainment
- Used for defence system
- Used for education.
- Used in offices, homes, at business areas and any level.

Optic Fibers: Optical fibers are the systems that connect through satellites to perform its functions.

Connection



- sends signals through satellites.
- optical waves, infrared waves play a crucial part.

Different forms



- Carry signal and send it to receiver.
- Through their function, a receiver may collect information about particular phenomenon.

Usage of optic fibers

used for specific purposes, in defence, management and performs distinctive functions.

Part (d): Define the following?

Answer:-

Food Additives

Food additives are the processes that add particular properties to prevent spoilage in the food and add flavouring agents.

Examples:

Food stabilizers:
Food stabilizes under cooling processes

and heating processes

Flavouring agents:
Adds flavour to the food can enhance food ability

Oxidizing agents:
prevent microbial activities and maintain food quality

Food Preservation

Food preservation is a process in which food should be preserved after ~~post~~ harvesting.

Examples:

{Reduce Spoilage}

Worms, insects can damage food. Through preserving spoilage causes can slow down by worms.

{Easy to use}

usage of canning and pasteurization can help it for easy to use.

Food Adulteration

Food Adulteration is

the process that contemplates to the reduction of harmful food.

Example: Street food

→ Demand high and low supply

street food is

→ Manufacturers

covered by dust

→ gain profit by

and this creates

→ using harmful

a barrier in good

contents. Demand

quality food

is high for

food and low

supply creates

a barrier.

That's why food is adulterated to achieve quality.

Food Contamination

is a process where

food is used to contaminate

under cooling, or heating and

to prevent bacterial growth.

Example: salt brine

→ Fruit/sugar

Meat under

injection

salt brine can

to maintain

enhance the

the efficiency

longer availability.

of fruits.

Question No. 05

Part (a) : What is DRM? Give the importance of risk assessment in DRM.

Answer:-

DRM (Disaster Risk management) is the strategy to decrease the rate of disasters. Management is crucial for every work. Developing countries are at the ~~risk~~ ^{condition} of disasters that would impact on their economy and human lives. In this case management of disaster is necessary.

Importance of Risk assessment in DRM

- Volcanic eruptions and melting of glaciers is very common in world. DRM provides clear strategies about how to

overcome changes in this situation.

- By the assessment of risks, countries would reflect on the concerns of disasters and make clear strategies about it.
- Pakistan is a country where disasters are not new - risk assessment it takes part in this country so it can achieve their goals.
- **NDMA** - National disaster management authority provides objectives to control the disasters.

Part (b):

Define biofuels - Explain the production of biodiesel and biogas?

Answer:-

Biofuels and **biomass** are used interchangeably. Biofuels are produced from

Biomass and can be replenished on timescale- ~~entire~~^{while} fossil fuels, that are replenished on natural scale.

Production of biodiesel and biogas

Biogas/biomethane: Biogas is the process in biofuels that are done by aerobic respiration.

Biodiesel: are commonly used in foreign countries. The reaction between synthetic organisms and gases produce biodiesel.

These are the two types of biomass. Biomass is the process which is produced by agricultural residues, wastage of industries and crop yields.

(c) What is digestive system? Explain the role of Stomach and Small intestine?

Answer:- Digestive system refers to the proper functioning of digestion in human body. The digestion is very important for human body otherwise it can create serious problems.

Food

↓ Mouth - Food enters through mouth.

↓
oesophagus - goes to oesophagus

(food)
if it can — Small intestine of human body
goes to another tube then there are serious

Concerns about it

↓ Stomach -

Food moves from small intestine to stomach- The role of small intestine is crucial to understand the digestion of food- The role of stomach carries out the proper digestion system of a human.

Part (d) : Define Plastics?

Answer

Plastics is a material that causes by the land pollution, air pollution and other harmful practices -

Properties

- Plastics if not disposed properly can put risk at environment.
- Plastics are usually carried out for reuse.
- Recycle plastics can prevent harmful diseases.

Applications

- Plastics are common in Pakistan and disposed properly
- They are essential for benefits because renew things could be beneficial.

Environmental Risks

- Land pollution - Plastics can produce chemicals that degrades the land

and main issue for soil erosion.

- Air Pollution - There unchecked disposal causes Air pollution and increased ^{the} diseases.

- Water Pollution - Plastics can be thrown into water causes water pollution - Water in rivers are totally unsafe in this area.

Question No. 06

Part (A)

Answer:-

- 1- The woman's granddaughter is the daughter of Ahsan's brother
- 2- Woman associated with Ahsan's brother as: Mother-in-law
- 3- So, the woman related to Ahsan as: Mother-in-law of his brother.

Part (D)

Solution: 1- L.C.M of 2 numbers is 48

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2- The numbers
are in the
ratio of 2:3

2	48
2	24
2	12
2	6
3	3
	1

3- Sum of the numbers are:

$$2 + 2 + 2 + 2 + 3 = \boxed{11}$$

Question No. 01

Part (c)

Solution:-

$$\text{Let son} = x$$

$$\text{Man} = x + 24$$

In 2 years

$$x + 2 = 2(x + 24)$$

$$x + 2 = 2x + 48$$

$$x - 2x = 48 - 2$$

$$-x = 36$$

$$x = -36$$