

PART-II

SECTION-A

Q. No. 02 (Ans 2)

Features	Igneous rocks	Metamorphic Rocks
1. Definition	This type of rock is formed when molten lava or molten on the ground and cool down.	This type of rock is formed by weathering process occurring on igneous or sedimentary rocks.
2. Types	Two types: Upper and lower igneous rocks.	Two types: foliaceous and rudimentary.
3. Characteristics	Igneous rocks are relatively soft, contain few densely gases and escape with the help of holes.	Metamorphic rocks are hard, have no spaces between the layers and are compact.
4. Atmospheric effect	This type of rocks releases gases like NO_2 etc.	This type of rocks formed as a result

during its formation of weathering and has no any negative environment impact.

5. Agents of Formation
Igneous rocks are formed by the atmospheric pressure, temperature and escape of gases and from the holes weathering are the agents of a section explosion.

6. Examples
Silicate, mica, leucite and quartz are igneous rocks. feldspar are metamorphic rocks.



(Ans 6)

SMOG:

"It is an atmospheric effect formed during the winter when the hazardous oxides like NO_x , SO_x mixes and react with the fog."

This phenomenon usually occurs when the smoke comes out of the agricultural burning and reacts with the air droplets. This gets mixed into a foggy like environment.

AGENTS CONTRIBUTING TO SMOG:

1. Smoke emitting from the vehicles
2. Hazardous gases emitting from the brick kilns
3. Unrecycled industrial waste
4. Burning of stubbles

FORMATION:

Smog is formed when the particulate matter emitting from the emissions of smoke from different sources, increased in normal concentration. The increased concentration of PM is suspended in the air and contribute to smog formation.

TYPES of SMOG:

1. Concentrated Smog

The smog which contains the high quantity of SO_x in the air then the concentrated smog is formed.

2. Photochemical Smog

Photochemical smog contains the high concentration of NO_x as well as CO particles. It is more hazardous for health than concentrated smog.

PREVENTIVE MEASURES:

1. Remain indoors during early winters
2. Use face mask when to go out
3. Use recommended fuel quality in vehicles
4. Measure the air quality regularly
5. Avoid stubble burning

(Ans c)

DISASTER RISK MANAGEMENT:

"DRM is defined as the pre-emptive measures taken to avoid the maximum risk given by the any disaster."

DRM is an important management technique used to counter the risks posed by any disaster like floods, earthquakes.

TECHNIQUES in DRM:

1. Pre-emptive measures
2. Risk assessment
3. Dealing with disaster
4. Rehabilitation

RISK ASSESSMENT:

It is the assessment of destruction which is likely to be posed by the disaster. It involves various techniques like analysis of risk.

Importance of Risk Assessment

Risk assessment is helpful in

1. Determining the amount of destruction posed by the disaster.
2. Assessing the rehabilitation efforts.
3. Providing the early relief to the affected.
4. Installing early warning systems.
5. Helping in policy making.



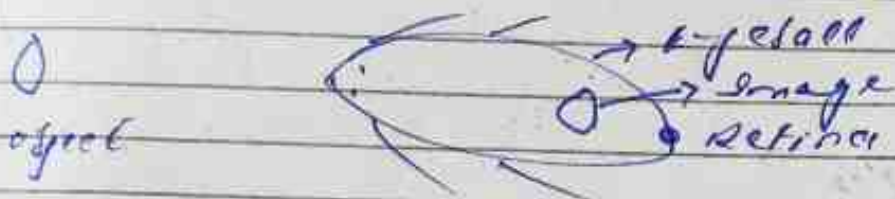
(Ans d)

SHORE SIGNIFICANCE.

"It is a condition when a person does not able to see the distant objects due to the elongation of eye ball."

It is also called myopia, in which the image does not form on the retina rather focused in the front of it.

IMAGE:



REINABILITATION:

Using convex lens which is used to expand the image and to form on the retina.

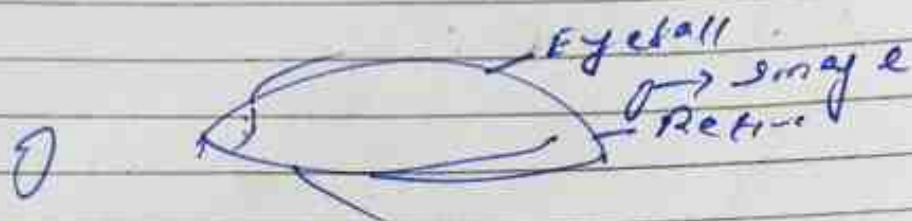
FARSIGHTEDNESS:

"It is a condition when a person does not capable to see the near object due to shortening of eyeball."

It is also called hypermetropia, in which the image

does not form on retina
rather than behind it.

DIAGRAM:



CURE:

Use concave lens in
which the image is formed
on the retina rather than
behind it.



Q. NO. 05

(Ans a)

SEA SURFACE TEMPERATURE RISE:

When the rays of sunlight having high temperature strike on the sea surface the temperature of sea rises and it happens due to prolong phenomenon of climate change.

FACTORS LEADING TO INCREASE IN SURFACE TEMPERATURE:

1. Increase in sunny days
2. Decrease in winter
3. climate change
4. Global warming

FORMATION OF TROPICAL CYCLONES:

When the sea surface temp

nature rises the air above rises and the surrounding air occupy the space. This phenomenon occurs at high speed thus a Tropice eye is formed.

EFFECTS of Cyclone.

1. Territorial building collapse
2. Loss of many lives
3. Infrastructure damage
4. Coastal destruction & upsurge.



ANS 6

OPTICAL FIBRE:

"It is a fibre made cable used for communication by the light particles under the phenomenon of reflection total internal reflection."

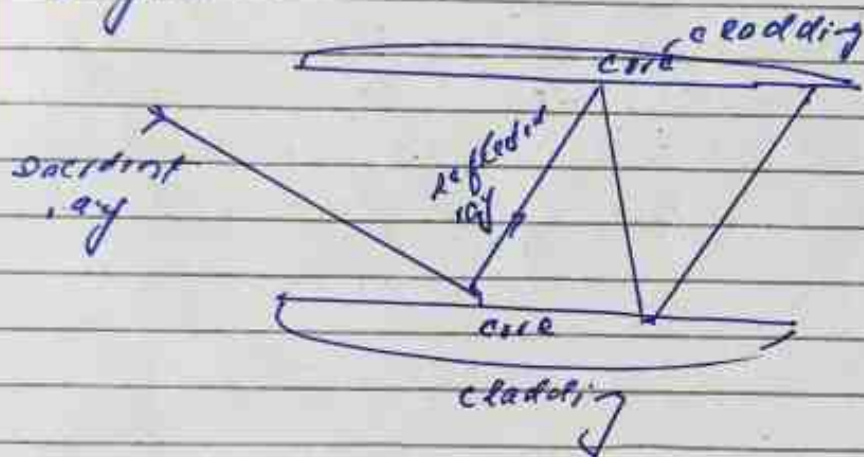
COMPONENTS:

1. Core
2. cladding

3. Upper cable

WORKING OF OPTICAL FIBER:

When an incident light strikes the core part at a specific angle it reflects into the core having an angle greater than the critical angle.



TOTAL INTERNAL REFLECTION:

When an incident ray strikes at an angle greater than critical angle then the incident ray is totally reflected.

(Case c)

Role of Micro-organisms in Meeting Fuel Shortage:

Microorganisms by the process of decaying dead bodies and the remains of plants convert these organic material into crude oil. However, the current fuel production is not coping the needs of the people.

Ways to Increase Crude Oil Production:

4. Use organic things

As micro-organisms decay the organic material like animals and plants so does the organic material.

1. Bury the organic material

Micro-organisms bury in

the soil, so it is advised to bury the material into soil.

3. Made plastics having bacteria

Use such plastics which are made of bacteria responsible for its degradation.

4. Ensure the Availability of oxygen into soil.

Bacteria and other microorganisms use oxygen to stay alive so apply them with oxygen.

5. Open local plants for crude oil

Where the decaying material is in high quantity then open a well out there.

6. Ensure maximum use of biodegradable plastics

Appreciate the maximum use of biodegradable plastics so that bacteria can degrade it.

(Ans 2)

FOOD ADDITIVES

"Food additives are those substances which are added to the processed food in order to increase its spicing or nutritious value."

Substances like pickles, salt, sugar etc are powdered on the processed thing so that their life expectancy can be increased.

FOOD PRESERVATIVES:

"Food preservatives are those substances which are added to the processed food in order to increase its life expectancy and to preserve it from harmful bacteria."

Substances like Nitrogen in spicy foods help the food to protect from harmful bacteria.