UNIT – 1 – NATURAL RESOURCES

1. What is deforestation? Explain the causes and consequences of deforestation?

DEFORESTATION:

It is the process of removal or elimination of forest resources due to natural or man-made activities

CAUSES OF DEFORESTATION:

1. developmental projects –Dam, road construction, etc
2. Mining operations
3. raw materials for industrial use
4. fuel requirement
5. Shifting of Cultivation
6. growing food needs
7. forest fire

CONSEQUENCES OF DEFORESTATION

1. Global warming
2. biodiversity is lost along with that genetic diversity
3. soil erosion and loss of soil fertility
4. hydrological cycle is affected
   (loss of rainfall, flood, drought etc)

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2. What is mining? Discuss classification & the environmental effects of extracting and using mineral resources?

Mining:

Mining is a process of removing ores from area which is very much below the ground level. Mining is done for the extraction of several minerals of metals like Fe, Mn, Au, Ag, etc. The minerals are especially found in thick forests.

Mining can be carried out in two ways

1. Surface mining
2. underground mining or sub-surface mining

Classification of minerals

Minerals are classified into two ways based on their composition and usage.

I Based on composition

1. Metalic minerals – various metals can be extracted for example : Fe, Al, Cu, Zn
2. Non – Metalic minerals – various non-metalic compound can be extracted. For example : quartz, dolomite, calcite,etc

II Based on usage

1. critical minerals

these are essential of the economic power of a country. For eg: Fe, Al, Cu etc

2. strategic minerals.

These are required for the defence of a country. For example : Mn, Co, Pt, etc

Environmental effects of extracting and using mineral resources:

- Devegetation an defacing of landscape
- Ground water contamination
- Surface water pollution
- Air pollution
- Subsidence of land

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3. What is agriculture? Explain its types and adverse environmental impacts of modern agriculture?

Agriculture

It is an art, science and industry of managing the growth of plants and animals for human use.

Types of Agriculture

There are two types

1. Traditional agriculture
2. modern agriculture

1. TRADITIONAL AGRICULTURE- It involves a small plot, simple tools, surface water, organic fertilizers and a mix of crops.

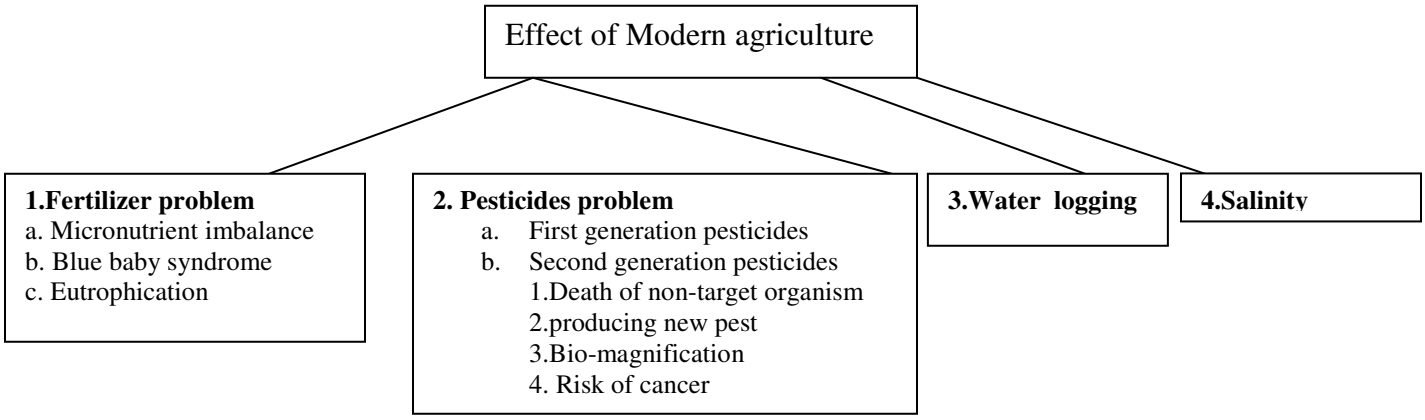
Effect of Traditional agriculture

a. Deforestation- Removal of trees for cultivation purpose.
b. Soil erosion- Top soil removed by wind and rainfall, resulting in loss of soil fertility.

c. loss of nutrients- During cutting and burning the trees, the organic matter in the soil gets destroyed. So the soil becomes poor in nutrient, which makes the farmers shift to another area.

2. MODERN AGRICULTURE

This involves the use of hybrid seeds of single crop variety, high-tech equipment, lot of fertilizer, pesticides and water to produce large amount of single crops.



1.Fertilizer problem

It is used to improve the soil fertility, fertilizer are used in agriculture.

a. **<u>Micronutrient imbalance</u>**

Excessive use of fertilizer (N,P,K etc) causes the deficiency of the micronutrient (Zn, Mn, etc) in the soil which affect the productivity of the soil.

b. **<u>Blue baby syndrome</u>**

When the nitrogenous fertilizers used in the crop fields is washed off by the runoff water contaminate the ground water. When the nitrate concentration exceeds 25mg/lit, they cause serious health problem called blue by syndrome. This disease affects infants and leads even to death.

c. **<u>Eutrophication</u>**

When the large proportion of N and P fertilizers used in the crop fields is washed off by the runoff water and reaches the water bodies causing over nourishment of the lakes. This process is known as eutrophication.

2. Pesticides problem

It is used to improve the crop yield, pesticides are used in agriculture

a. First generation pesticides

These are used to kill the pest. For example : sulphur, arsenic, lead, etc

b. Second generation pesticides

Although these pesticides protect the crops from pests, they produce number of side effects.

1. Death of non-target organism

Many pesticides not only kill the target species, but also kill the several non-target species, which are useful to us.

2. Producing new pest

Some pest species survive even after the pesticide spray. They are immune to all type of pesticides and are called superpest.

3.**Bio-magnification**

Many of the pesticides are non-biodegradable and keep on concentrating in the food chain. These process is called bio-magnification

c. Risk of cancer

it directly acts as carcinogens and indirectly suppress the immune system

3. Water logging

It is the land where water stand for most of the year.

Causes

1. Heavy rain
2. Poor drainage
3. Excessive use of water in agriculture field

Remedy or control

1. Preventing excessive irrigation
2. Sub surface drainage technology
3. Bio drainage like Eucalyptus tree plantation

4. Salinity

The process of accumulation of salts in the top soil is called salinity.

Causes

1. Irrigation from canal or ground water contains dissolved salts.

2. Evaporation of water, leaving the salts on the top soil

Remedy or control

1. Salinity of the soil removed by flushing the good quality water
2. Using sub surface drainage technology

UNIT -2 ECOSYSTEM AND BIODIVERSITY

1. Define the ecosystem. Give an account of the structure and function of an ecosystem?

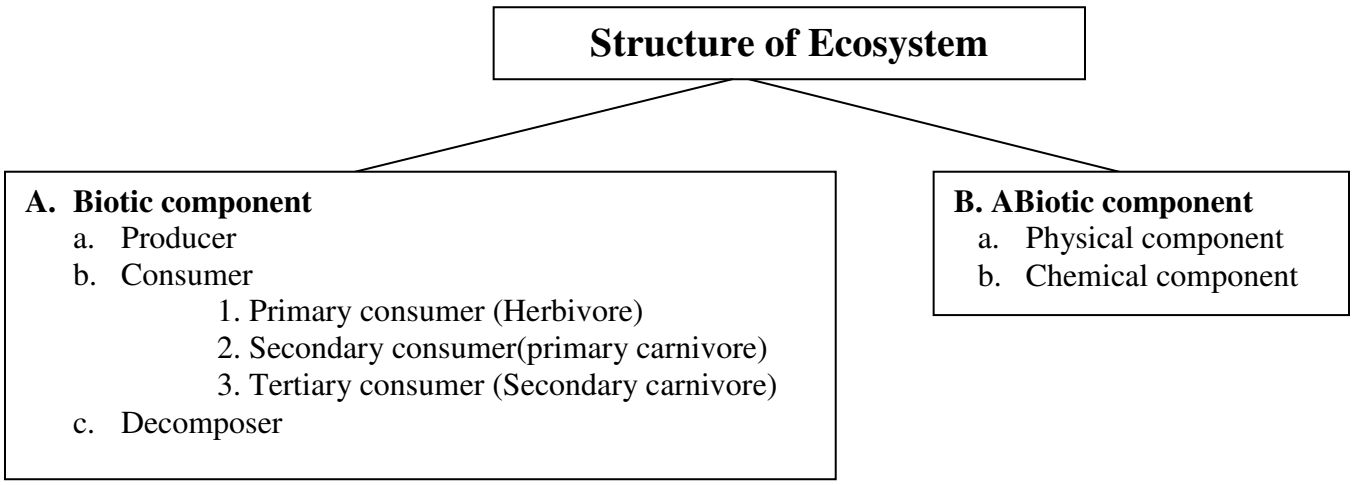
A group of organisms interacting among themselves and with environment is known as ecosystem.

For example : Pond, lake, desert, grassland, forest, etc.

The structure of an ecosystem has two major components

A. Biotic component (living)

B. Abiotic Component(Non-living)



A. BIOTIC COMPONENT (LIVING)

The living organisms or members in an ecosystem collectively form its community called biotic components.

Member of Biotic components

a. Producer (plants)

b. Consumer (animals)

c. Decomposer (Micro-organisms)

a. Producer

They prepare own food through photosynthesis.

For examples : Plants, trees etc

b. consumer

They directly or indirectly depend on the producer for their food.

They are three types.

1. Primary consumer (Herbivore – plant eater)

   They directly depend on the producer for their food.

   For example : Insects, rat, goat, cow, horse, etc

2. Secondary consumer (primary carnivore – meat eaters)

   They directly depend upon the primary consumer for their food.

   consumers. For example : Cat, Snakes, Foxes, Frog, etc

3. Tertiary consumer (Secondary carnivore – meat eaters)

   They directly depend upon the primary carnivores for their food.

   For example : Tigers, lions, etc.

c. Decomposer

They attack the dead bodies of producers and consumers and decompose them into simpler compounds (Inorganic and organic matters).

For example : Bacteria and Fungi

B. ABIOTIC COMPONENT(NON-LIVING)

The Non-living organisms or members in an ecosystem collectively form its community called abiotic components.

Member of Abiotic components

There are two

a. Physical components

   They are useful for the growth and maintenance of its member.

   For example : Air water, soil sunlight, etc.

b. Chemical components

   They are the sources of essential nutrients.

   For example : Inorganic substance (Al, Co, Zn, Cu, C, H,O, etc) and Organic substance

   (Proteins, Carbohydrates, etc)

Function of ecosystem

1. Primary function

   Preparation of food through photosynthesis.
2. Secondary function

   Distributing energy in the form of food to all consumers.
3. Tertiary function

   Nutrient cycle is maintained.

2. Explain the in-situ and ex-situ conservation along with their merits and limitations.

Biodiversity is one of the important tool for sustainable development. they are two types

1. In-situ conservation (Within habitat)
2. Ex-situ conservation(Outside habitat)

1. IN-SITU CONSERVATION:

It involves protection of plants and animals within its natural habitat is called in-situ conservation.

For example: Biosphere reserves, National parks, wildlife sanctuaries, Gene sanctuary, etc

Methods of in-situ conservation.

a. Biosphere

It covers large area, more than 5000 sq. km.

For example

1. Nanda devi-U.P.
2. Manas – Assam
3. Gulf of mannar – Tamil Nadu
4. Nilgiri – Karnataka, kerala, tamil nadu

b. National park

It covers small area about 500 sq. km

For example

1. Gir national park - Gujarat
2. Bandipur – Karnataka

3. Corbett – U.P.
4. Kanha – M.P.
5. Periyar - kerala

c. Wild life sanctuaries

It is a reserved area for the conservation of animals only. There are 492 wildlife sanctuary in India.

For example

1. Ghana Bird sanctuary – Rajasthan
2. Vedanthangal Bird sanctuary – Tamil Nadu
3. Muthumalai wildlife sanctuary – Tamil Nadu
4. Wild ass sanctuary - Gujarat

d. Gene Sanctuary

It is an area for the conservation of plants only.

For example

1. Gene sanctuary for citrus – North India
2. Gene sanctuary for pitcher plant – North India

Advantages of In-situ

It is very cheap and convenient method.

The species gets adjusted to the natural disasters.

Disadvantages of in-situ

- Large surface area is needed to conserve biodiversity.
- Maintenance of the habitat is not proper, due to shortage of staff and pollution.

2. EX-SITU CONSERVATION

It involves protection of plants and animals outside the natural habitat is called in-situ conservation.

For example : Botanical gardens, Zoological gardens, seed bank, tissue & cell cultures etc

Methods of ex-situ conservation

1. National Bureau of plant Genetic resources (NBPGR)

It is located in new delhi.

It uses cryo preservation techniques to preserve agricultural and horticultural crops

Cryo preservation techniques.

The variety of agricultural and horticultural crops have been preserved by using liquid nitrogen at -196^{o} C .

2. National Bureau of animal Genetic resources (NBAGR)

It is located at karnal, Haryana

It is used to preserve the semen of domesticated bovine animals.

3. National facility for plant tissue culture repository (NFPTCR)

It is used to conserve the variety of plants or trees by tissue culture. It is created within the NBPGR.

Advantages of Ex-situ

- Survival of endangered species
- Longer the life span

Disadvantages of ex-situ

- It is expensive method
- The freedom of wildlife is lost
- The animals cannot survive in natural environment.

UNIT - 3 POLLUTION AND ITS CONTROL

1. Explain the source, effect and control measures of noise pollution?

Sound is mechanical energy from a vibrating source. Unpleasant and unwanted sound is called noise. It has a dimensionless unit decibel (dB).

For example

1. Rocket engine – 180 dB
2. Motor cycle – 90 dB
3. Normal living room – 50 dB
4. Library or soft whisper – 30 dB

5. threshold of hearing – 0 dB

Sources of noise pollution:

1. Industrial units
2. Transportation modes
3. Construction activities
4. Celebrations
5. Electric home appliances

Effects of noise pollution:

- It damage ear drum
- cause the blood pressure, mental disorder, heart attacks, birth defects and abortion.
- Affect digestive and respiratory
- Causes psychological and pathological disorders.

Control of noise pollution:

1. Source control

   This include source modification such as acoustic treatment to machine surface, design changes, limiting the operational timings.

2. Transmission path intervention

   Noise making machines should be kept in containers with sound absorbing media

3. Receptor control

   This includes protection of the receiver by altering the work schedule or provision devices such as ear plugs for operating noisy machinery

4. Oiling

   Proper oiling will reduce noise from machinery

5. Planting trees

6. Legislation can prevent excess sound production, unnecessary horn blowing etc.

2. Discuss the causes, effect and control measure of air pollution and water pollution?

I. AIR POLLUTION:

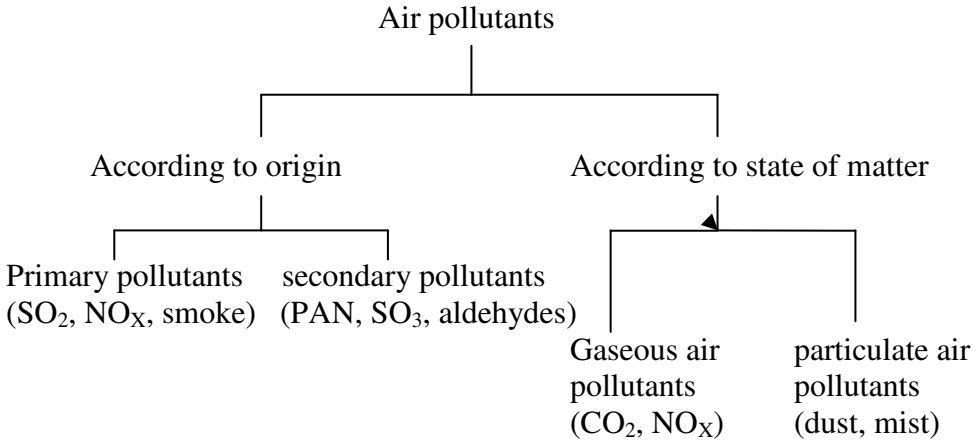
It is defined as the presence of one or more contaminants like dust, smoke, mist and odour in the atmosphere which are injurious to man and his environment.

Ex. Gases, particulate matter, radioactive substances etc.

Sources of air pollution

Natural sources	Man Made Sources(anthropogenic)
1. Volcanic eruption	thermal power plants (fly ash, SO_2)
2. Forest fires	industrial units
3. Biological decay	vehicle emission
	Petrol vehicles
	Sea salt spray
	fossil fuel burning
4. Pollen grains of flowers	Agricultural activities
	Metallurgical plants (SO_2, CO_2)
	Fertilizer plants
	Textile mills
	Refineries
	Paper and pulp mills

Classification of air pollutants:



Effect of air pollution

1. Effect on human beings
2. Effect on plants
3. Effect on Materials
4. Effect on aquatic life

For example

1. **Carbon monoxide (CO)** – this react with heamoglobin and reduce the carrying capacity of O_2 which cause headaches, anemia, coma mental disorder and death.
2. **Nitrogen dioxide (NO_2)** – lung irrigation and damage
3. **Sulphur dioxide (SO_2)** – Breathing problems
4. **Suspended particulate matter (SPM)** – Nose and throat irritation, lung damage, bronchitis, asthma, reproductive problems and cancer.
5. **Ozone (O_3)** – chemical reaction with organic compounds and moderates the climate.
6. **Photochemical smog** – the brownish smoke due to chemical reactions among nitrogen oxides and hydrocarbon by sunlight.
7. **Hydrocarbons** – it cause carcinogenic activity.

Control of air pollution:

1. Using non conventional energy
2. Using bio filters
3. Planting more trees
4. Reducing vehicle exhausts
5. Using less polluting fuels
6. Removal of particulate matter using electrostatic precipitator, cyclone filter etc.
7. Removal of NO_X from vehicle exhaust

II. WATER POLLUTION:

It is defined as the alteration of physical, chemical and biological characteristics of water which may cause harmful effects on humans and aquatic life.

For example : sewage, industrial effluents, etc

Causes:

1. Point source – they are discharged pollutants at specific locations

   For example: sewage, industrial effluent etc.

2. Non-point source- they cannot be traced to any single site of discharge.

For Ex: agricultural land (pesticides, fertilizers, mining, construction sites), urban street, etc

Classification of water pollutants:

1. pathogens (bacteria, fungi, protozoa fungi)
2. oxygen demanding wastes
3. inorganic chemicals
4. organic chemicals
5. plant nutrients
6. sediment
7. radioactive waste
8. exess heat

Effects of water pollution

1. Objectionable colour and odour is unacceptable and unsuitable for drinking and other purposes.
2. highly turbid and very hard water is unpleasant to drink, food processing
3. acid and alkaline water cause serious health problem
4. water borne infectious enteric disease like typhoid, cholera, dysentery, are the predominant health hazard arising from drinking contaminated water
5. radioactive pollution enter human body through food and get accumulated in thyroid gland, liver, bones and muscles
6. biodegradable waster deplete dissolved oxygen in the receiving stream, affect the flora cause creates anaerobic conditions
7. non biodegradable waste and pesticides travel the food chain and ultimately reach human where they accumulate in fatty tissues
8. thermal discharge in stream depletes dissolved oxygen
9. phosphate, nitrate, promote the growth of algae and encourage eutrophication
10. Industrial effluents result in addition of poisonous chemicals such as arsenic, mercury, lead may reach human body through contaminated food.

Control measure of water pollution

1. Afforestation
2. Public awareness
3. Strictly implement the water act against offenders
4. treatment
   b. domestic treatment

- screening
- Aeration
- sedimentation
- filtration
- disinfection

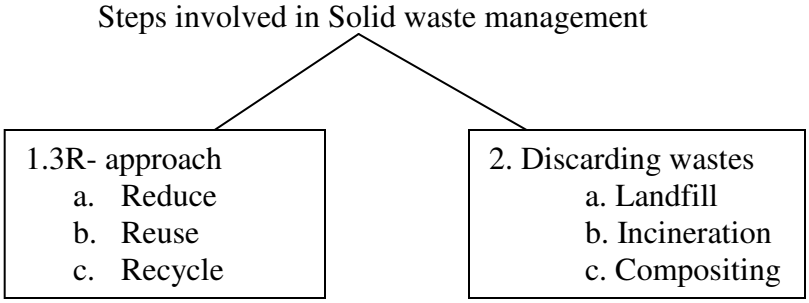
c. waste water treatment

- preliminary treatment
- primary treatment
- secondary treatment
- advanced treatment

UNIT -4 SOCIAL ISSUES AND ENVIRONMENT

1. Explain the methods of disposal of municipal solid waste.
Solid waste management

This includes the waste generation, mode of collection, transportation, separation of wastes and disposal techniques.



1. **<u>3-R approach</u>**

   Reduce, reuse and recycle, before destruction and safe storage of wastes.

   a. <u>Reduce</u>- If the usage of raw materials are reduced, the generation of waste also gets reduced.

   b. <u>Reuse</u>- Refillable container and rubber rings after use can be reused.

   c. <u>Recycle</u>- It is reprocessing of the discarded materials in to new useful products.

2. Discarding wastes

It is a technique to dispose the municipal solid waste

a. Landfill

This method involves spreading the solid waste with 80cm thickness on the ground, compacting it and then covering it with soil with 20 cm thickness. After two or three years solid waste shrinks by 25-30% and land is used for parks, roads and small buildings.

Advantages

1. It is simple and economical.
2. separation is not required
3. It converts low lying, waste land into useful areas.

Disadvantages

1. Large area is required
2. Transportation cost is heavy because of distance of land
3. bad odours
4. causes fire hazard due to the formation of methane in wet weather.

b. Incineration

Incineration is a process to burn the municipal solid waste in a furnace. The combustible waste are separated form non-combustible waste. The combustible waste(100-150 tones per hour) are feeding to incinerator and heated about 700^{o} C. The left out ashes an clinkers in the incinerator. These are disposed by sanitary landfill method.

Advantages

1. It require the little space
2. It is a hygienic way of disposing the solid waste

Disadvantages

1. It is capital and operating cost is high.
2. Formation of smoke, dust and ashes makes air pollution

c. Compositing

The bulk organic waste is converted into a natural fertilizer by biological action is known as composting.

This method involves the separated compostable waste is dumped in underground earth trenches in layers of 1.5 m and finally covered the earth soil with 20cm thickness and left over for decomposition. Certain microorganisms such as actinomycetes are introduced for active decomposition. After one or two month, the brown colored, odourless mass known as humus(natural fertilizer) which can be used for agricultural field

Advantages

1. When the manure is added to soil, it increases the water retention and ion-exchange capacity of soil.
2. No of industrial solid waste treated by this method
3. Recycling occurs

Disadvantages

1. The non-consumables have to dispose separately.
2. The compost has no assured market value.

2. Explain the causes, effect, mechanism and control measures of ozone layer depletion?

The concentrated Ozone gas (O_3) in the stratosphere between 10 to 50 km is known as ozone layer. It is used to filter the ultra violet radiation (UV-B) from sun by forming ozone umbrella.

Formation of Ozone

Ozone is formed in the stratosphere by photochemical reaction.

$$O_2 + hv \rightarrow O^* + O^*$$

The atomic oxygen(O) rapidly reacts with molecular oxygen(O_2) to form ozone (O_3) .

$$O^* + O_2 + M \rightarrow O_3 + M$$

Where M = Third body like Nitrogen

Causes of ozone layer depletion

Chlorine and bromine compounds breaks ozone into oxygen.

$$Cl + O_3 \rightarrow ClO + O_2$$

$$ClO + O^* \rightarrow Cl + O_2$$

Each chlorine atom is capable of attacking several ozone molecules which makes the holes on the ozone umbrella.

Ozone depleting chemicals

The compound containing Chlorine and bromine atom breaks ozone.

For example

1. Chloro Fluoro Carbon (CFC) – Refrigerators, blowing agent, propellant, etc
2. Hydro Chloro Fluoro Carbon (HCFC) – Refrigerators, blowing agent
3. Bromo Fluoro Carbon (BFC) – Fire extinguishers
4. Halogen compounds

Effect of ozone layer depletion

1. Effect on Human health
2. Effect on aquatic life
3. Effect on materials
4. Effect on climate

Control measures

1. Replacing CFCs by other materials.
2. Using of less damaging materials
3. Manufacturing and using of ozone depleting chemicals should be stopped

3. Explain the following

a. **Green house effect**
b. **Global warming**
c. **Acid rain**

A. GREEN HOUSE EFFECT

The green house effect may be defined as the progressive warming up of the earths's surface due to blanketing effect of man made CO_2 in the atmosphere.

Green House gases

1. CO_2
2. CH_4
3. Nitrous oxide (N_2O)
4. Chloro fluoro carbons (CFCs)

B. GLOBAL WARMING

The increased input of CO_2 and other green house gases into the atmosphere from human activities will enhance the global temperature of earth's surface. This enhanced green house effect is called global warming.

Effect of global warming

1. Effect of sea level
2. Effect on agriculture and forestry
3. Effect on water resources
4. Effect on terrestrial ecosystems
5. Effect on human health

Control measures

1. CO_2 emission can be controlled by reducing use of fossil fuels.
2. Implement energy conservation measures.
3. Using renewable energy such as wind, solar, tidal etc
4. Plant more trees
5. Stabilize population growth
6. Remove atmospheric CO_2 by utilizing photosynthetic algae.

C. ACID RAIN

The presence of SO_2 and NO_2 gases in the atmosphere, decreases the of the water during the rainfall. This type of precipitation of water is called acid deposition.

It is otherwise called acid fog, acid snow and acid precipitation.

Formation of Acid rain

The thermal power plants, industries and vehicles release SO_2 and NO_2 gases in the atmosphere due to burning of coal and oil. When these gases react with water vapor in atmosphere, they form acids and descend on to earth's acid rain through rain water.

$$SO_x + H_2O \rightarrow H_2SO_4$$

$$NO_x + H_2O \rightarrow HNO_3$$

Effect of acid rain

1. Effect on Human health
2. Effect on aquatic life and terrestrial
3. Effect on materials

Control measures

1. Using clean combustion technology
2. Emission of SO_2 and NO_2 gases can be reduced by using pollution control equipments.
3. Using low sulphur and nitrogen content fuels

UNIT –5 – HUMAN POPULATION AND ENVIRONMENT

1. Explain the role of information technology in environment and human health?

Information technology means collection, processing storage and distribution of information.

Role of IT

I. Role of information technology in Environment

II. Role of information technology in human health

<u>I Role of information technology in Environment</u>

It plays a vital role in the field of environmental education.- They are

1. Remote sensing
2. Database
3. Geographical information system (GIS)
4. Satellite data
5. world wide web

1. Remote sensing

Remote sensing used to gather information about an object without coming in contact with it. Remote sensing is used to denote identification of earth feature

by detecting the characteristics electromagnetic radiation that is reflected or emitted by the earth

Application

a. It is used to find resources like vegetative cover, water bodies, land use, soil, geological features, etc.
b. It is used give the information about agriculture, forestry, land cover, water resources, etc.

2. Database

Database is the collection of inter-related data on various subjects.

Application

a. The ministry of environment and forest
b. National management information system
c. Environmental information system

3. Geographical information system (GIS)

It is a technique of superimposing various thematic maps using digital data on a large number of inter-related aspects.

Application

a. Different thematic maps like water resources, soil type, forest land, grass land are superimposed on a layered form in computer using softwares.
b. Interpretations of polluted zones, degraded lands can be done.
c. It is used to check unplanned growth and environmental related problems.

4. Satellite data

a. It provides information of monsoon, cyclone, ozone layer depletion, smog, etc.

b. It give data like oil reservoir, mineral reservoir etc

5. World web wide

a) This provides current data, relevant information, principles, problems, queries, application of environmental science.

b) It has digital files of photos, power-point lecture presentations, animations, etc

II Role of information technology in Human health

It plays a key role in human health. This involves system like finance, accounting, pathology and clinical system.

Application

a. The IT provide the data like birth and death rates, immunization and sanitation programmed are maintained accurately,
b. It helps the doctor to monitor the health of the people effectively.
c. Epidemic diseases can be conveyed easily.
d. On-line help of expert doctors can be consulted to provide better treatment and services to the patient.
e. Drugs and its replacement can be administered efficiently.

2. Briefly describe the various schemes launched for women and child welfare in India.

OBJECTIVE OF WOMEN WELFARE

The main aims of women welfare

a. To improve the status of the women by providing opportunities in education, employment and economic independence.
b. To get awareness about environment and population
c. To restore the dignity, status, equality and respect for women.

Women welfare organization

1. **The National Network for Women And Mining (NNWM)**
   It is fighting for a "Gender Audit" of India's mining companies.
2. **United Nations Decade for women**
   It witnessed inclusion of several women welfare related issues on international agenda.
3. **International Convention on the Elimination of All Forms of Discrimination Against women (CEDAW)**

It has created an international standard for the protection and promotion of women's human and socio economic upliftment.

4. **Non-Government Organizations (NGO's)**

   It creates awareness among women of remote villages to empower them, train them, educate them and help them to become economically self-dependent.

5. **Ministry for Women And Child Development**

   It aims to work for the upliftment of women by family planning, health care, education and awareness.

OBJECTIVE OF CHILD WELFARE

The main aims of child welfare is to provide education, childhood care, nutrition, sanitation, healthy environment, recreation etc.

Reason for child welfare

a. poverty
b. need of money

Child welfare organization

a. **UN conventions on rights of child**

   It formulated a set of international standards and measures to promote an protect the well being of children in our society.

   The international law defines the child to survival participation, development and protection.

b. **World Summit on child**

   It focused agenda for the well being of he children targeted to be achieved in the beginning of the new millennium.

c. **Ministry of Human Resource Development (MHRD)**

   It concentrates on child's health, education, nutrition, clan an safe drinking water, sanitation and environment.

3. What is AIDS? What are the functions & modes of Transmission of HIV and how it can be prevented?

AIDS is the abbreviated form for Acquired Immune Deficiency Syndrome caused by a virus called HIV (Human Immune Deficiency virus).

Origin of AIDS

It was discovered in 1983.

The following theories have been suggested.

a. Through African Monkey

AIDS has spread from Africa. The HIV has transferred to humans from African monkey.

b. Through vaccine programme

a) HIV has spread in Africa through HIV contaminated polio vaccine, prepared from monkey's kidney.
b) HIV has spread in Africa through small pox vaccine programme in Africa.
c) It has spread through Hepatitis-B viral vaccine in New York.

Function of HIV

The HIV enter into the human body and destroys the T-cells(White blood Cell) which collapse the immune system, as a result of which various types of infection diseases occur.

Mode of transmission of HIV

a. Unprotected sex with infected person
b. Using contaminated needles or syringes of HIV positive person
c. HIV infected mother to babies
d. Blood transfusion from infected person to normal person

Symptoms for HIV/AIDS

Minor symptoms

b. Persistent cough for more than one month.
c. General skin disease
d. Viral infection
e. Frequent fever, headache, fatigue

Major symptoms

a. Fever more than one month

b. Diarrhea for more than one month
c. Cough and TB for more than 6 month
d. Fall of hairs from head
e. 10% of body weight get reduced within a short period

Control and preventive measures AIDS

The basic approaches to control AIDS are

a. Education
b. Prevention of Blood borne HIV transmission
c. Primary health care
d. Counseling services
e. Drug treatment

Some important diagrams:

1. Air Pollution diagram (4 types of filters: airbag, electrostatic precipitator, cyclone separator, wet scrubbers)

2. Global warming

3. Wind energy

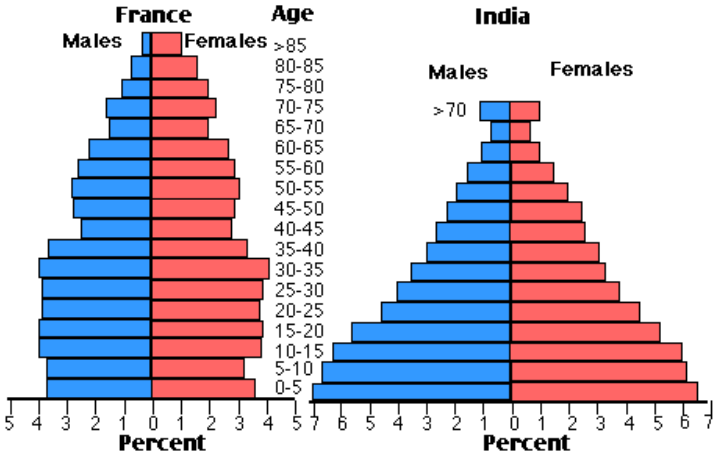
4. Deforestation

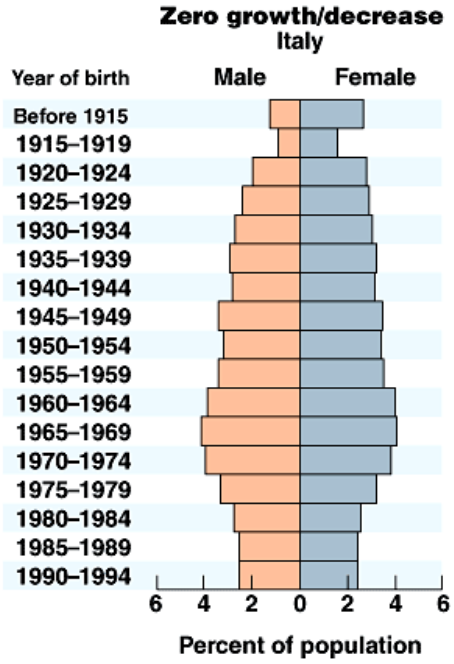
5. Nitrogen cycle

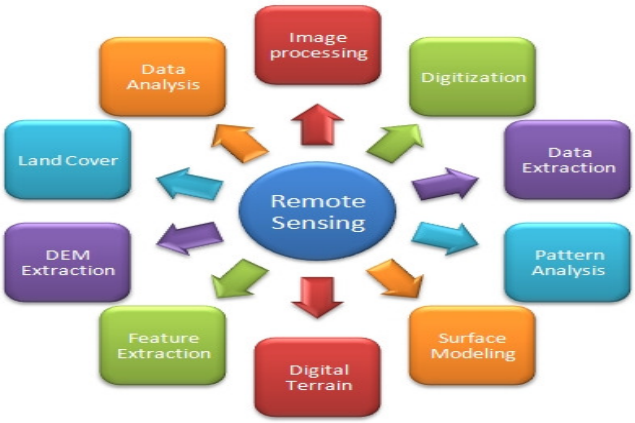
6. Incinerators and Landfills in waste management

And wherever diagrams are required, give…

Human population and environment:







- **Role of IT: Functions of remote sensing**

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