



Biodiversity

RESPECT THE DIFFERENCES

Siddalingamurthy.G.S

BIODIVERSITY

- **WCU**-world conservation union
- **CCC**-convention on climate change
- **WCP**- world climate programme
- **UNEP**-United nations environment programme
- **TRIPS**-Trade related intellectual property rights

BIODIVERSITY

- **IUCN**-International union on conservation of nature and natural resources
- **RDB**-Red data book (1963)
- **MAB**- Man and biosphere (1971)
- **WCMC**-World conservation monitoring centre

BIODIVERSITY

- **CITES**-Convention on international trade in endangered species of wild fauna and flora
- **FRI**- Forest research institute (Dehradun)
- **NCA**-National commission on agriculture
- **IBWL**-Indian board of wild life (1952)

BIODIVERSITY

- **World animal day-3rd October**
- **Biological diversity day-29th December**
- **World food day-16th October**
- **World forest day-21st March**
- **Earth day-April 22**
- **World habitat day- 4th October**

BIODIVERSITY

- **World environment day-5th June**
- **Biodiversity protection Act- 2002**
- **Montreal protocol-16th September 1987- To limit the production of CFCs**
- **Helnski protocol-May 1989- Montreal protocol ratified by 80 countries**

BIODIVERSITY

- **Kyoto protocol-Japan - December- To reduce green house gases**
- **Acid rain- Term coined by Robert August**

BIODIVERSITY

National symbols

- **National animal** - **Tiger**
- **National bird** - **peacock**
- **National flower** - **Lotus**
- **National tree** - **Peepal**

BIODIVERSITY

Karnataka state symbols

- **State animal** - **Slender Loris**
- **State bird** - **Hornbill**
- **State flower** - **Nandivardhan**
- **State tree** - **Sandal tree**

BIODIVERSITY

karnataka state symbols



BIODIVERSITY



The term biodiversity was coined by

- 1. Norman Meyers**
- 2. Robert August**
- 3. Walter & Rosen**
- 4. E.O.Wilson**

A large, semi-transparent, light gray DNA double helix structure is visible in the background, winding across the slide from the top left towards the bottom right.

Varieties of different species of living organisms in a given area is called-

- 1. Species biodiversity**
- 2. Ecosystem biodiversity**
- 3. Genetic biodiversity**
- 4. Habitat biodiversity**

Species diversity Genetic diversity



Mangos from the Big Island of Hawaii



Biodiversity may be defined as “the number, variety and variability of living organisms”, the area with the highest Biodiversity are called.

- 1. Red spots**
- 2. Hot spots**
- 3. Cold spots**
- 4. Black spots**

The basis of genetic biodiversity is

1. Cloning

2. Fragmentation

3. Asexual reproduction

4. Sexual reproduction

Species diversity is at its peak in-

1. Desert

2. Ponds

3. Grass land and estuaries

4. Tropical forests and coral reefs

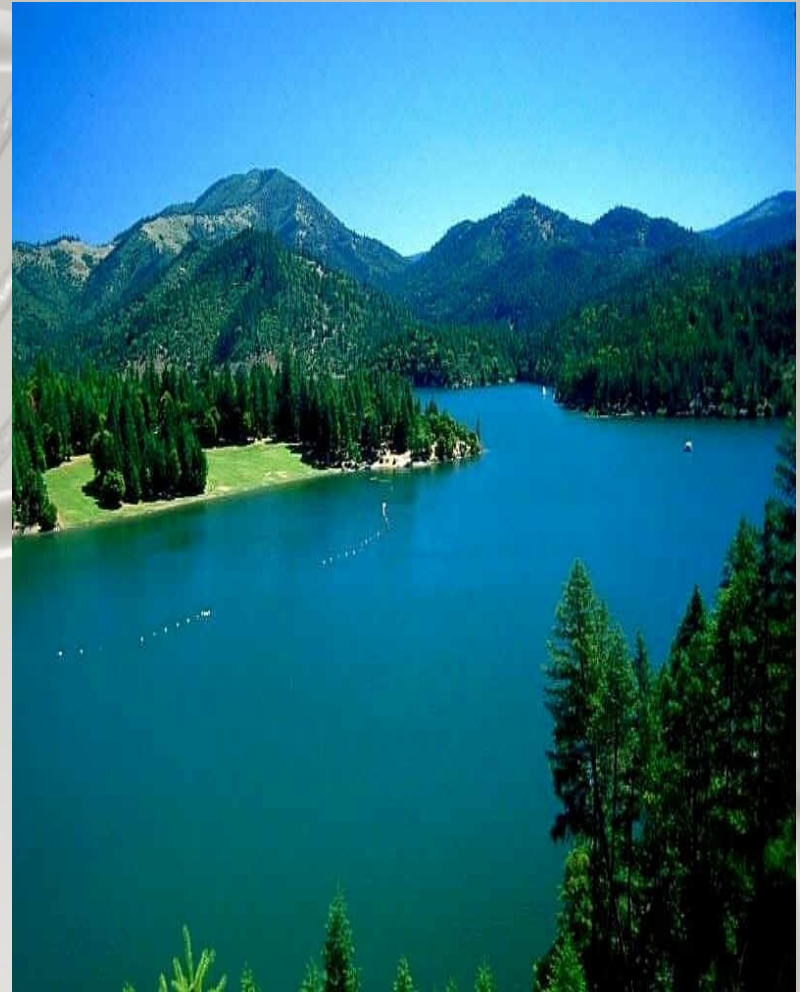
India is considered as one of the 12 mega diversity centers of the world. Which among the following is the mega diversity centre/centers of India.

- 1. Western Ghats**
- 2. Eastern Himalayas**
- 3. River Godavari**
- 4. Both Western Ghats & Eastern Himalayas**

Western Ghats



Eastern Himalaya



Choose the odd set-

- 1. King cobra-*Naja naja***
- 2. Great horned owl-*Bubo bubo***
- 3. Indian antelope-*Antelope cervicapra***
- 4. Lion tailed macaque-*Macaca silenus***

Ophiophagus hanna



Naja tripudiens





Species whose population numbers are decreasing and likely to decrease more in the near future are called.

- 1. Vulnerable species**
- 2. Rare species**
- 3. Endangered species**
- 4. Threatened species.**



- 1. Vulnerable species:** A species which is considered to be facing a very high risk of extinction
- 2. Rare species:** A species which is thinly populated localized only to certain geographic regions.
- 3. Endangered species:** The species whose number drastically reduced and are in danger of extinction



Which among the following is the true definition of Extinct species?

- 1. A species not definitely located in the wild**
- 2. Disappearance of a species from the earth**
- 3. A species which is likely to move into the endangered category in the near future.**
- 4. A species which is thinly populated localized only to certain geographic regions.**

Which among the following is not the threatened mammal as indicated by wild life act?

- 1. Acinonyx jubatus***
- 2. Panthera leo persica***
- 3. Tetraceros quadricornis***
- 4. Bos indicus***



© Brent Huffman
www.ultimateungulate.com



Choose the wrong set-

- 1. Hydrogeology-study of ground of water**
- 2. Shifting Agriculture – Jhum**
- 3. *Vinca rosea*-Atropin**
- 4. *Withania somnifera*-Ashwagandha**

Vinca rosea



Atropa belladonna



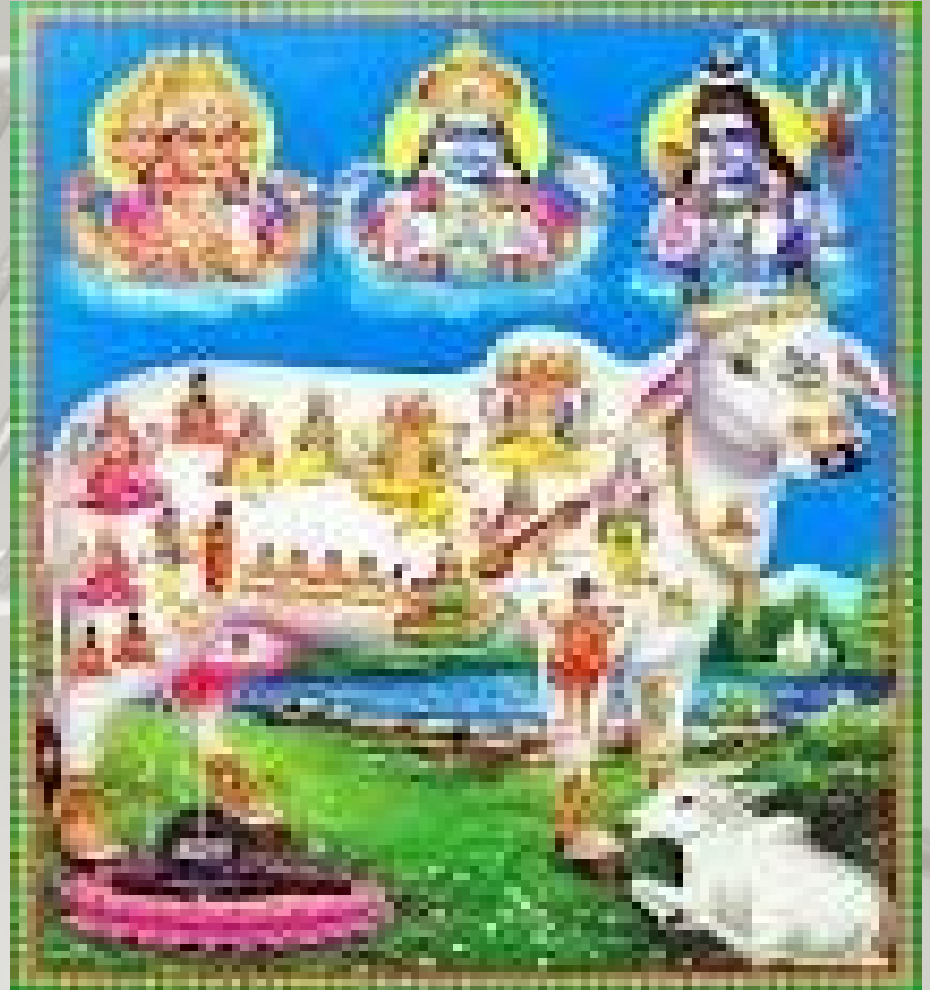
Traditionally conserved species of plant and animal which are of religious importance are called-

- 1. Sacred species**
- 2. sacred grooves**
- 3. sacred landscape**
- 4. Keystone species**

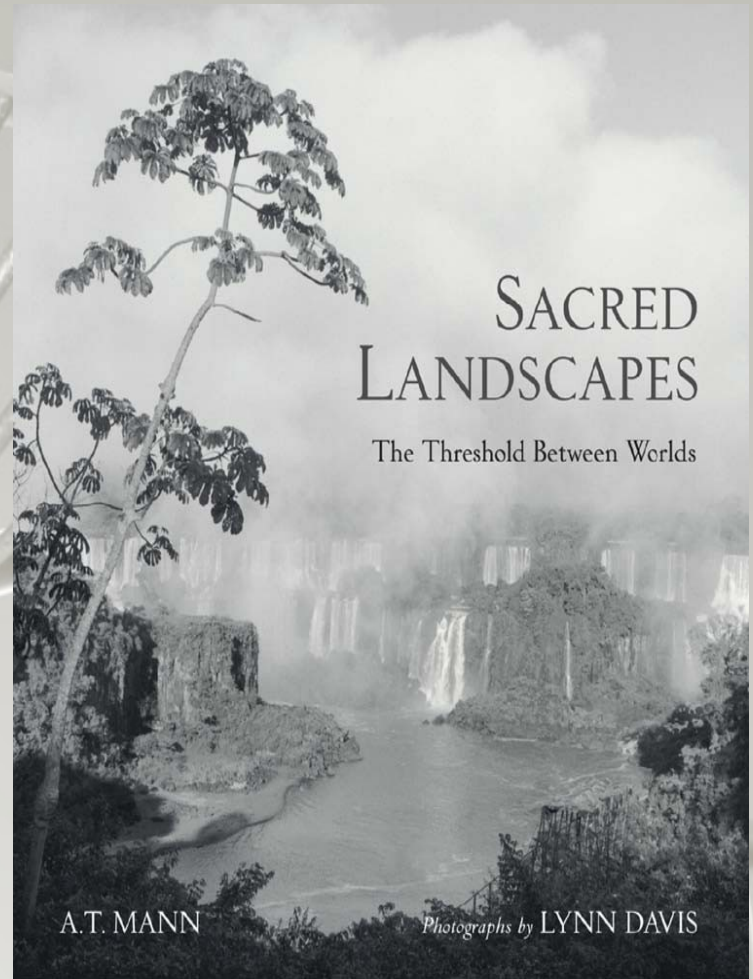
Sacred plant- Tulasi



Sacred animal-cow



Sacred groove and sacred landscape



Select the odd set-

- 1. Kutachadri Hill-sacred landscape**
- 2. Kavus-sacred groove of Karnataka**
- 3. Urbanization-increased concentration of human population in large cities**
- 4. Green revolution- M.S. Swaminathan**

Iringole kavu in kerala



Which among the following is not a pollutant?

- 1. Oxides of nitrogen**
- 2. O₂**
- 3. Oxides of sulphur**
- 4. Hydrocarbons**

If the pollutants come from a single identifiable source it is known as

- 1. Point source**
- 2. Non point source**
- 3. Both point source and non point source**
- 4. Neither point source and nor non point source**

A large, semi-transparent, light gray DNA double helix structure is shown in the background, winding across the slide from the top left towards the bottom right.

The mysterious Minamata disease is due to the pollution of river water in Japan by

- 1. Mercury**
- 2. Zink**
- 3. Lead**
- 4. Carbon monoxide**

In the mid 1950s the people of Minamata, Japan, on the coast of the Shiranui Sea



Symptoms minamata

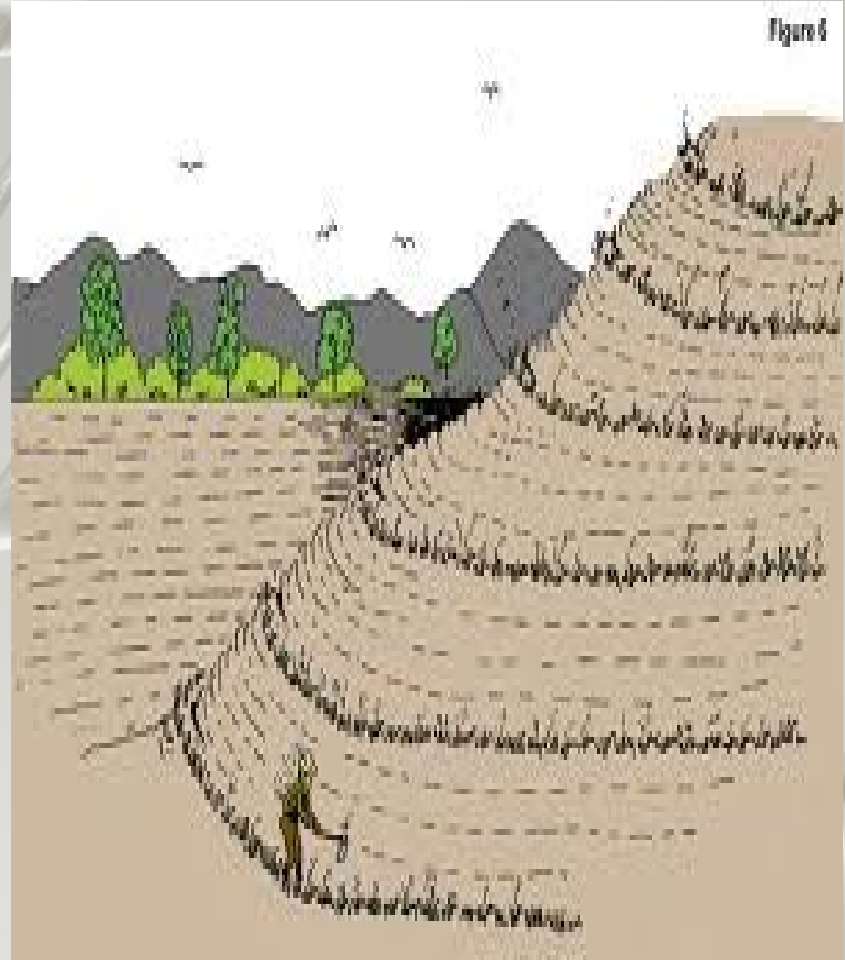
- **Individuals began to have numbness in their limbs and lips.**
- **Some had difficulty hearing or seeing.**
- **Others developed shaking (tremors) in their arms and legs, difficulty walking, even brain damage.**
- **Others seemed to be going crazy, shouting uncontrollably.**

The given diagram illustrates

- 1. Terracing**
- 2. Contour farming**
- 3. Strip cropping**
- 4. Gully control**



Strip cropping and contour farming



Match the items given under Column I with those items given under the Column II. Choose the answer that gives the correct combination of alphabets of 2 columns.

Column I

- A) Rill erosion**
- B) Gully erosion**
- C) Sheet erosion**
- D) Ravines**

Column II

- p) large water channels**
- q) loss of thin surface layer of soil**
- r) tiny water channels**
- s) loss of soil by wind**
- t) Widening of gullies**



Answers

A) Rill erosion-tiny water channels

B) Gully erosion-large water channels

C) Sheet erosion- loss of thin surface layer of soil

D) Ravines- widening of gullies

Answers

- 1. A=r: B=P: C=s: D=q:**
- 2. A=t: B=r: C=p: D=q:**
- 3. A=r: B=p: C=q: D=t**
- 4. A=p: B=r: C=t: D=q:**



Intellectual property rights given to life forms and products derived from them are called

- 1. Biopatents**
- 2. Copy rights**
- 3. Trademarks**
- 4. Trade secretes**



The practice of conservation of natural resources by the local community on the basis of practical experience and wisdom is known as

- 1. Ecological knowledge**
- 2. Traditional knowledge**
- 3. Traditional ecological knowledge**
- 4. Spiritual knowledge**

Mulching is helpful in

- A. Moisture conservation**
- B. increasing the soil fertility**
- C. Maintaining the soil temperature**
- D. Preventing soil erosion**

ANS: 1. Only D 2. Only A & D

3. Only A, B & D 4. A, B, C & D

Which one of the following is not useful in the maintenance of soil fertility ?

- 1. Animal wastes and green plants manuring**
- 2. Growing legumes**
- 3. Farming with diversity**
- 4. Deforestation**

Choose the odd pair

- 1. Deforestation-decreases rain fall and soil fertility**
- 2. Afforestation- development of forest in a denuded area**
- 3. Urban foresting-developing a green belt in urban areas**
- 4. Biosphere reserve-at the state level.**

Which one of the following is not the in situ conservation of wild life?

- 1. Species preservation**
- 2. Cryopreservation**
- 3. Assemblage protection**
- 4. Habitat preservation**

Choose the odd set

- 1. Jim Corbett national park-one of the best tiger reserves**
- 2. Animal which became extinct in this century- leopard**
- 3. Chipco movement-Sunderlal Bahuguna**
- 4. Great Indian Bustard-endangered**



Match the wildlife given under Column I with their habitat under the Column II. Choose the answer that gives the correct combination

Column-I

A) Asiatic lion

B) Rhinoceros

C) Hangul

D) Lion tailed macaque

Column-II

p) Western Ghats

q) Dachigam sanctuary

r) Gir national park

s) Kaziranga national park

t) Ranganathittu Bird sanctuary

Answers

1. A=s: B=r: C=q: D =t

2. A=r: B=q: C=p: D =s

3. A=r: B=s: C=q: D =p

4. A=s: B=r: C=t: D =q

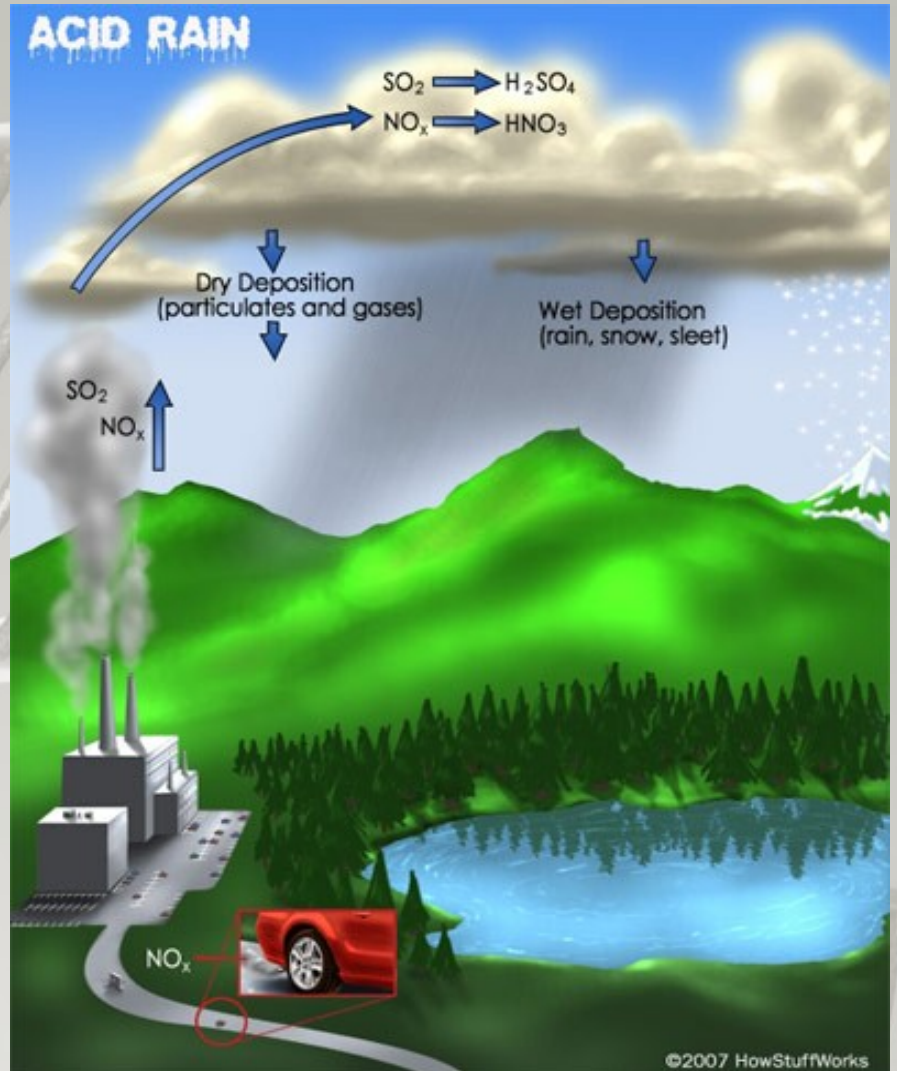


Increase in the skin cancer, cataract and mutations are generally the consequences of

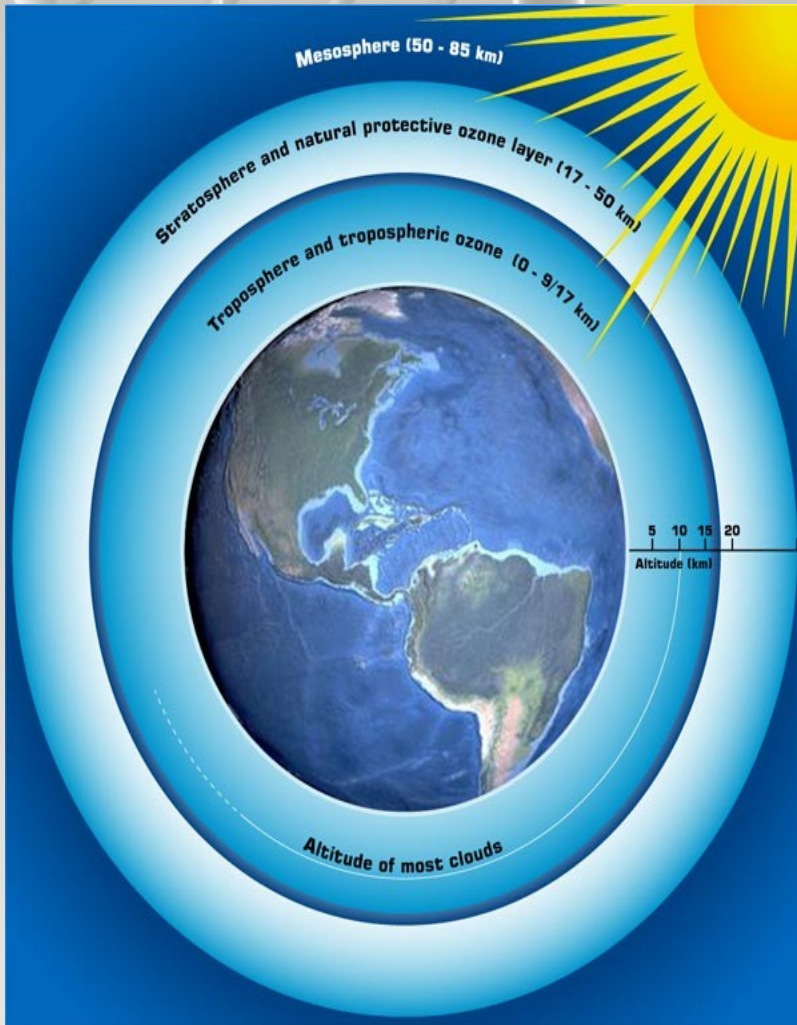
- 1. Global warming**
- 2. Acid rain**
- 3. Ozone depletion**
- 4. Nuclear winter**

Global warming and Acid rain

Global warming



Ozone layer and nuclear bomb explosion



A large, light gray, semi-transparent DNA double helix structure is positioned diagonally across the background of the slide, starting from the top left and extending towards the bottom right. The helix is composed of two intertwined strands connected by horizontal rungs representing base pairs.

Which of the following gases contribute to the global warming?

- 1. NO_2**
- 2. SO_2**
- 3. CO_2**
- 4. CO**

Choose the odd set

- 1. CFCs- worst enemy of ozone**
- 2. Radioactive elements-green house gases**
- 3. Ozone hole- UV radiation reach the earth**
- 4. Smog-combination of smoke and fog**

Nuclear winter hypothesis predicts a -

- 1. Increase in temperature due to nuclear cloud formation**
- 2. Decrease in temperature due to nuclear cloud formation**
- 3. Decrease in temperature all over the earth**
- 4. Submergence of northern hemisphere**

Nuclear winter

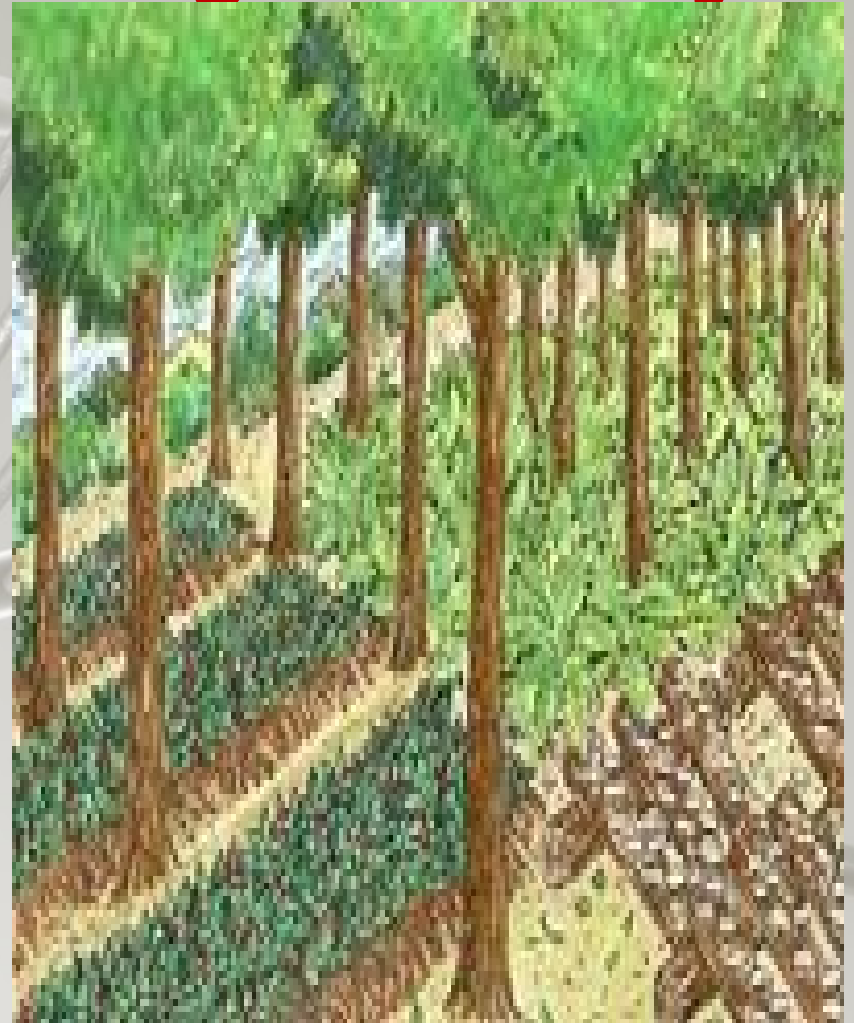




Planting of flower and fruit bearing plants along road sides is included under

- 1. Social forestry**
- 2. Agroforestry**
- 3. Urban forestry**
- 4. Reforestation**

Social forestry and agro forestry



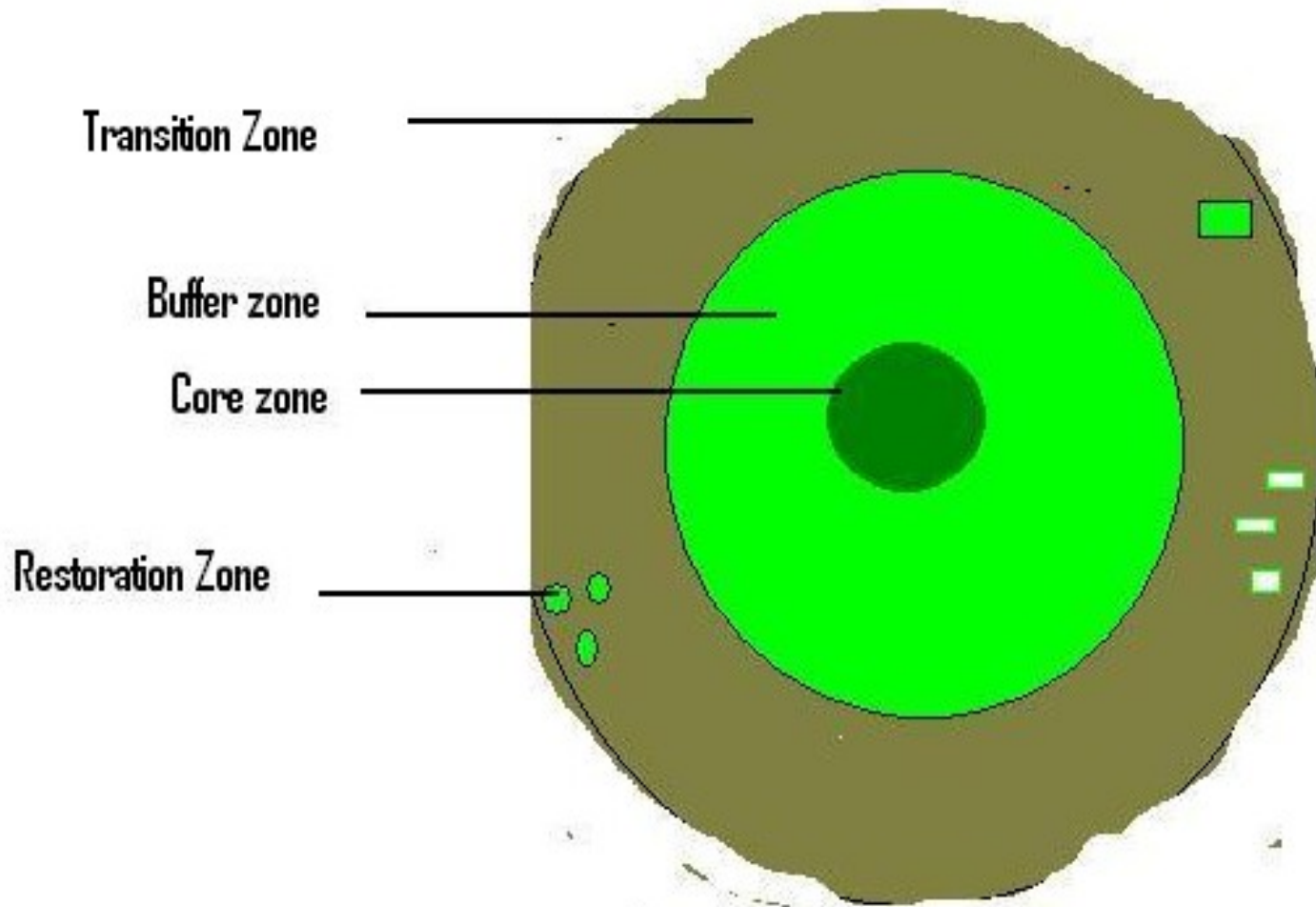
Urban forestry



Afforestation



The given diagram represents



- 
- A large, light gray, semi-transparent DNA double helix structure is positioned diagonally across the background of the slide, starting from the top left and extending towards the bottom right. It consists of two intertwined strands connected by horizontal rungs representing base pairs.
- - 1. TEK**
 - 2. Social forestry**
 - 3. Urban forestry**
 - 4. Biosphere reserve**

Save forest

Conserve biodiversity



BIODIVERSITY



