IMPORTANT PRACTICE QUESTION SERIES FOR NEET EXAM – 2

1. Which of the following is responsible for biodiversity loss?
   a) Habitat loss and fragmentation
   b) Alien species invasions
   c) Coextinctions
   d) All of the above
2. Which of the following hypothesis suggests, that the ecosystems are like aeroplane wings where the flight (ecosystem functional) may or may not be compromised depending upon which species are being lost

a) Gaia hypothesis b) Gause-exclusion hypothesis
c) Qudum's hypothesis d) Rivet popper hypothesis

3. The greatest problem of water conservation is to reduce the amount of
   a) Precipitation b) Run-off water c) Groundwater d) evaporation
4. Dudhwa national park is in
   a) Orissa b) Gujarat c) Uttar Pardesh d) Himachal Pradesh
5. Which of the following is an agrostologic method of soil conservation?
   a) Basin listing b) Terracing c) Dry farming d) Mulching
6. Spot out the zone of our country considered as the hot spot of biodiversity and regarded as the 'Cradle of Speciation'.
   a) Western ghats b) North East c) Himalayan base d) Deccan plateau
7. The name of Smt. Thimmakka is associated with the
   a) Planting and conservation of avenue trees
   b) Agitations against hydroelectric projects
   c) 'Appiko' movement
   d) Conservation of fauna and flora of the western ghats
8. The reflectivity percentage of incident light on earth is meteorologically called as
   a) Tornado b) Albedo c) Refraction d) Reradiation
9. About 1000 different varieties of ..... has been estimated in India
   a) Teak b) Mango c) Wheat d) Tea
10. A species area relation is used by ecologists to
    a) Examine how human population is growing
    b) Estimate the number of plant species only in a given area
    c) Estimate the number of species extinction resulting from the habitat destruction
    d) None of the above
11. The impacts of loss of biodiversity may lead to
    I. lowered resistance to environmental perturbation
    II. decrease in plant production
    III. increased variability in ecosystem processes like water use, pest/disease cycle, plants productivity
    IV. Increase in plant production
    Choose the correct option
    a) I and II b) I and IV c) I and III d) I, II and III
12. Endemic plants are those, which are
    a) Cosmopolitan in distribution b) Restricted to grow over certain areas
    c) Found in Arctic region d) Gregarious in habit
13. Amongst animals, insects comprise
    a) Less than 70% b) Equal to 70% c) More than 70% d) None of these
14. World summit on sustainable development was held in
    a) USA b) South Africa c) South Korea d) UK

15. The state of Gujarat has river, desert, forest and lake ecosystems, thus exihibiting a diversity of life. Which measure do you use to denote total diversity in such a case?
    a) α(Alpha) b) β(Beta) c) γ(Gamma) d) δ(Delta)
16. Eurythermal animals and plants are those which
    a) Can tolerate only a small variation in temperature
    b) Can tolerate large variation in temperature
    c) Can not tolerate any change in temperature
    d) Are affected by temperature
17. Biodiversity increases from

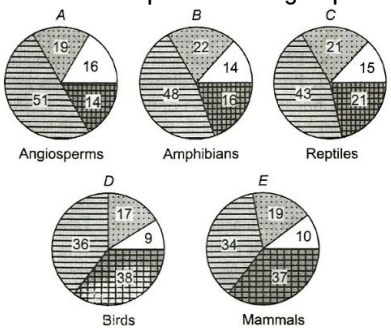
a) Poles to equator b) Equator to poles c) Both (a) and (b) d) None of these

18. Which of the following estimation is correct for the endemic biodiversity of India?
    a) Flowering plants 10%, mammals 60%, reptiles 33%, amphibians 36% and fresh water fish 53%
    b) Flowering plants 60%, mammals 53%, reptiles 10%, amphibians 33% and freshwater fish 36%
    c) Flowering plants 36%, mammals 15%, reptiles 53%, amphibian 10% and freshwater fish 33%
    d) Flowering plants 33%, mammals 10%, reptiles 36%, amphibians 60% and fresh water fish 53%
19. India has only ..... of world's land area
    a) 8.1% b) 2.4% c) 5.1% d) 22%
20. The factor which is responsible for the replacement of existing species with the better adapted species due to alternate evolution, change in environmental conditions, predators and diseases is/are
    a) Genetic factors b) Demographic factors
    c) Both (a) and (b) d) None of these
21. The term 'The Evil Quartet' is related with the major causes of
    a) Population explosion b) Forest loss c) Biodiversity loss d) Air pollution
22. The expanded form of IUCN is
    a) International Union of Conservation of Nature and Natural Resources
    b) International Union of Climate Conservation and Natural Resources
    c) International Union for Change in Climate and Natural Resources
    d) International Union of Conservation of Natural Resources
23. According to the species-area relation concept
    a) Most species within any given area are endemic
    b) The larger the area, the greater the extinction rate
    c) Larger species requires larger habitat area than do the smaller species
    d) The number of species in an area increases with the size of that area
24. What is the exact latitudinal range for tropical regions, which harbour more species than temperate or polar areas?
    a) 71°N to 71°S b) 23.5°S to 71°N c) 23.5°N to 23.5°S d) 71°N to 23.5°S
25. Gir sanctuary is mainly for
    a) Rhino b) Tiger c) Lion d) Elephant
26. The IUCN red list, 2004 documents the extinction of 784 species in the last 500 years including
    a) 359 vertebrates, 338 invertebrates and 87 plants
    b) 338 vertebrates, 359 invertebrates and 87 plants
    c) 338 vertebrates, 359 invertebrates and 78 plants
    d) 359 vertebrates, 338 invertebrates and 78 plants

27. I. Higher latitude (Poles) $\xrightarrow{\text{Biodiversity increases}}$ Lower latitude (Equator)
    II. Higher latitude (Poles) $\xrightarrow{\text{Biodiversity decreases}}$ Lower latitude (Equator)
    III. Higher latitude (Mountain top) $\xrightarrow{\text{Biodiversity increases}}$ Lower altitude (Sea level)
    IV. Higher latitude (Mountain top) $\xrightarrow{\text{Biodiversity decreases}}$ Lower altitude (Sea level)
    Which of the match above is/are correct?

a) I and III b) I and II c) II and III d) III and IV

28. Given below are pie diagram A, B, C, D and E related to the percentage of various categories of threatened species of angiosperms, amphibians reptiles, birds and mammals respectively



Critically study and identify the following regions

a) Vulnerable, Lower risk, Endangered, Critically endangered

b) Critically endangered, Endangered, Vulnerable, Lower risk

c) Lower risk, Vulnerable, Critically endangered, Endangered

d) Endangered, Critically endangered, Lower risk, Vulnerable

29. The species diversity of plants on earth will be
a) 2.4% b) 22% c) 8.1% d) 85%

30. The alien species introduced into lake Victoria that was responsible for the extinction of cichlid fishes is
a) African catfish b) Water hyacinth c) Carrot grass d) Nile perch

IMPORTANT PRACTICE QUESTION SERIES FOR NEET EXAM – 1 (ANSWERS)

1)	**c**	**2)**	**b**	**3)**	**c**	**4)**	**c**
5)	**a**	**6)**	**b**	**7)**	**a**	**8)**	**b**
9)	**b**	**10)**	**c**	**11)**	**b**	**12)**	**c**
13)	**b**	**14)**	**d**	**15)**	**c**	**16)**	**b**
17)	**a**	**18)**	**d**	**19)**	**b**	**20)**	**c**
21)	**c**	**22)**	**a**	**23)**	**b**	**24)**	**a**
25)	**d**	**26)**	**a**	**27)**	**d**	**28)**	**a**
29)	**b**	**30)**	**b**	**31)**	**a**	**32)**	**b**
33)	**b**	**34)**	**d**	**35)**	**b**	**36)**	**b**
37)	**b**	**38)**	**c**	**39)**	**b**	**40)**	**b**

41)	**b**	**42)**	**c**	**43)**	**a**	**44)**	**b**
45)	**a**	**46)**	**d**	**47)**	**d**	**48)**	**b**
49)	**b**	**50)**	**c**	**51)**	**a**	**52)**	**d**
53)	**b**	**54)**	**a**	**55)**	**c**	**56)**	**d**
57)	**b**	**58)**	**d**	**59)**	**d**	**60)**	**c**
61)	**b**	**62)**	**b**	**63)**	**b**	**64)**	**c**
65)	**c**	**66)**	**a**	**67)**	**c**	**68)**	**b**
69)	**d**	**70)**	**a**				

1 **(c)**

Threatened species in India include about 81 species of wild mammals, 30 wild birds, 15 reptiles and amphibians and many invertebrates.

2 **(b)**

Endangered species are those species, which are on the verge of extinction because of critically reduced number of individuals due to indiscriminate killing and due to drastic reduction in their habitats. Common endangered animals are Indian wild ass, Indian one – horned rhinoceros, etc.

3 **(c)**

A more conservative and scientifically sound estimate made by Robert May, places the global species diversity at about 7 million

4 **(c)**

On a logarithmic scale, the species area relationship is a straight line described by the equation

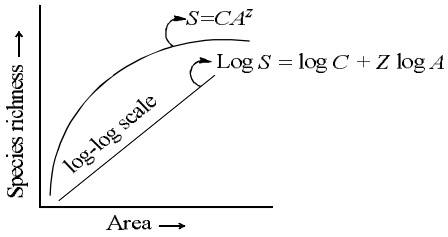
$\log S = \text{Log}C + Z \log A$

Where, S = species richness

A = area

Z = slope of the line

C = Y-intercept



5 **(a)**

Out of the 25 hotspots of the world, two are found in India. These are Western ghats and Eastern Himalayas and these extend to the neighbouring countries also. These areas show high degree of endemism and area inhibited by a wide variety of flowering plants, swallow-tailed butterflies, amphibians, reptiles and mammals.

6 **(b)**

The Kashmir stag ($Cervuselaphus\ hanglu$) also called**hangul**, is a subspecies of Red Deer native to northern Pakistan and India. This deer lives in riverine forests, high valleys and mountains of the Kashmir valley and northern Chamba in Himachal Pradesh. In Kashmir, it's found in Dachigam National Park.

7 **(a)**

Rivet popper hypothesis explains the importance of biodiversity for the survival of species.

It was proposed by Paul Ehrlich

8 **(b)**

Alpha diversity refers to the diversity of organisms showing the same community for habitat. A combination of richness and equitability/evenness is used to represent diversity within a community or habitat.

9 **(b)**

Chiru is the source of Shahtoosh.

10 **(c)**

*Nepenthes*is an endangered species of plant. *Rauwolfia*, *Rhododendron, Psilotum*, *Ophioglossum*are some other endangered species of plants.

11 **(b)**

In the beginning of 20th century, about 30% of land mass in India was covered with forests and at the end of 20thcentury, it is reached by 19.4%.

12 **(c)**

Genetic diversity is the diversity in the number and types of genes as well as chromosomes present in different species and the variations in the genes and their alleles in the same species. Introduction of high yielding varieties is the greatest threat to genetic diversity in agricultural crops.

13 **(b)**

Endemic speciesare species which are restricted geographically in a particular area in a given time.

14 **(d)**

Humans derives countless direct economic benefits from the nature like food, firewood, fibre, construction material, industrial products and products of medicinal importance. More than 25% of the drugs currently sold in the market worldwide are derived from the plants and 25000 species of the plants contributes to the traditional medicines used by native peoples around the world

15 **(c)**

Ex situ strategy is the conservation of selected threatened plants and animal species.
Ex situ strategy is the conservation of selected threatened plant and animal species in places outside their natural habitat, where the population is conserved under stimulated conditions that closely resemble their natural habitats. It includes, botanical gardens, zoological parks, wildlife safari, gene banks, etc.

16 **(b)**

Afforestation or **reforestation**, *i.e.*, growing of forest trees is most effective in controlling soil erosion. The Government of India has introduced the festival of 'Van Mahotsav'. In this festival, planting of tress is done on open waste land.

17 **(a)**

Excessive exploitation of a species, whether a plant or animal reduces the size of its population, so that it becomes vulnerable to extinction. Many marine fishes like whales population is declining around the world because of over harvesting. Some commercially important species are likely to become endangered

18 **(d)**

The number of species facing the threat of extinction worldwide is 15,500

19 **(b)**

Biosphere reserve is an *in situ* conservation method. Hence, it is the most effective way among the four for preserving genetic diversity by protecting wild population, traditional life style and domesticated plant genetic resource.

20 **(c)**

Loss of biodiversity occurs due to habitat loss, fragmentation over exploitation, alien species invasion and co-extinction.

21 **(c)**

Variation in the genes of a species increases with the increase in size and environmental parameters of the habitat

In results in the formation of polymorphs-ecotypes, races, varieties and sub-species. Genetic diversity is useful in adaptation to the change in environmental conditions.

Medicinal plant, *Rauwolfia vomitoria* shows variation due to the genetic diversity

22 **(a)**

$Insitu$consevation is the conservation of living resources through their maintenance within the natural ecosystems, in which they occur. $Insitu$ conservation includes a comprehensive system of protected areas such as the national parks, sanctuaries, natural reserves, biosphere reserves, etc.

23 **(b)**

The cheetah ($Acinonyxjubatus$) is a member of cat family. Cheetah have been know to exist in India for a very long time. But due to hunting and other purposes, cheetah in India became extinct before the twentieth century.

24 **(a)**

For frugivorous birds and mammals in the tropical forests of different continents, the slope is found to have a value of 1.15

25 **(d)**

Given, $\log A = 4, Z = 0.3$ and $\log C = 0.8$

Putting these values in equation, *i.e.,* species area relationship equation, we will get the value of log *S*

$\log S = \log C + Z \log A$

$= 0.8 + 0.3 \times 4$

$= 0.8 + 1.2$

$= 2.0$

26 **(a)**

Siberian cranes are regular visitors of Bharatpur sanctuary, Rajasthan.

27 **(d)**

Ex situ strategy is the conservation of selected threatened plant and animal species in places outside their natural habitat, where the population is conserved under stimulated conditions that closely resemble their natural habitats. It includes, botanical gardens, zoological parks, wildlife safari, gene banks, etc.

28 **(a)**

Periyar sanctuary is located inKerala.

29 **(b)**

Manas Wildlife Sanctuary is situated at Kamrup (Asom). It covers 80 sq km area. It's key vertebrate species are tiger, wild boar, sambhar, golden langoor, one-horned rhino, swamp

deer, wild dog and wild buffalo.

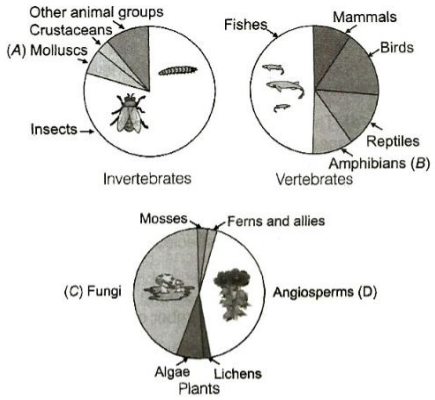
30 **(b)**

Eutrophication means nutrient enrichment. Rich growth of microorganisms consumes most of the dissolved oxygen, so as to deprive other organisms.

31 **(a)**

Deforestation is the depletion of forest resources. Its main cause is the explosion of human and livestock population with the increased demand of the basic needs. Ideally, one third (33%) of land of a country must be covered by forest. In India, forest cover is only 19.43% out of which only 13% are thick forests. India is losing about 1.5 million hectare of forest covers each year. The major effect of deforestation is the loss of precious wild life, rare species of flora and fauna. Directly or indirectly, deforestation caused intensified soil erosion, accentuated flood, drought and the worst pollution.

32 **(b)**



On earth, more than 70% of all the species recorded are animals, while plants (including algae, fungi, bryophytes gymnsoperms and angiosperms) comprises no more than 22% of the total. Among animals, insects are the most species-rich taxonomic group, making up more than 70% of the total. Number of fungi species in the world is more than the combined total of the species of fishes, amphibians, reptiles and mammals

33 **(b)**

Soil transportion by wind is common in dry regions where soil is chiefly sandy and the vegetation is very poor. Transported soils are those where the weathered material is taken away at other places. Depending on the nature of these transporting agents, the transported soil may be

(i)**Glacial**, transported by glaciers (large mass of snow ice)

(ii)**Eolian,** transported by wind

(iii)**Aluvial**, transported by running water

(iv) **Colluvial**, transportation by gravity.

34 **(d)**

Ranthambor national park is situated inRajasthan.

35 **(b)**

A plant *Bentinckia condapanna/nicoarica*(member of family –Arecaceae) and the animal,

red panda, both are declared as endangered in India.

36 **(b)**

Earth Summit at Rio de Janerio (1992), Brazil, promoted Convention on Biological Diversity (CBD) which was signed by 152 nations

37 **(b)**

The narrowly utilitarian arguments for conserving biodiversity are

Human derives countless direct economic benefits from nature-food (pulses, cereals, fruits), firewood, fibre, construction, dyes, resins, perfumes) and the products of medicinal importance

38 **(c)**

Species diversity.

The diversity at the species level is measured as species diversity. It is the variety in the number and richness of the species of a region. For example, the Western Ghats have a greater amphibian species diversity than the Eastern Ghats

39 **(b)**

In 1973, the Chipko movement (Chipko means to hug or stick to) was launched by **Chandi Prasad Bhatt** and **Sunder Lal bahuguna** against large scale felling of trees by timber contractors in the Uttarakhand hills. The starting point was **Chamoli** district of **Garhwal** region in Uttarakhand.

40 **(b)**

In 1973 the Chipko movement was launched by Chandi Prasad Bhatt and Sundar Lal Bahuguna against large scale falling of tress by timber contractors in Uttaranchal hills.

41 **(b)**

Agroforestry is a system of land use where woody perennials are deliberately used on the same land management units as annual agricultural crops for animals simultaneously or sequentially to obtain greater outputs. Two special methods of agroforestry are **Taungya system** in which crops are grown between trees and **Jhum system** or shifting cultivation or slash and burn agriculture.

42 **(c)**

Exhaustible resources are natural resources with finite supply, which if used indiscriminately are likely to diminish and then get exhausted. Fossil fuel is a non-renewable (limited) exhaustible source of energy.

43 **(a)**

Sanjay Gandhi Biological Park is situated in Patna (Bihar).

44 **(b)**

Tropical rain forests to **Amazon** in South America possess the greatest biodiversity on earth with more than 40000 species of plants, 3000 of fishes, 1300 birds, 427 of mammals, 427 of amphibians, 378 of reptiles and more than 125000 invertebrates

45 **(a)**

Species diversity is the variety in number and richness of the species of a region.

The number of species per unit area is called species richness

46 **(d)**

(i) Alpha diversity is the species diversity in a given community and habitat

(ii) Genetic diversity is the diversity in number and types of genes as well as chromosomes present in different species and the variations in the genes and their alleles in the same

species
(iii) Beta diversity is the biodiversity which appears in a range of communities due to replacement of species with the change in community/habitat
(iv) Species diversity is the variety in the number and richness of the species of a region. It is a product of species richness and evenness

47 **(d)**

Red Panda is an endangered species according to IUCN.

48 **(b)**

Habitat loss and fragmentation is the most important cause driving animals and plants to extinction. Due to various human activities when large habitats are destructed, various animals are badly affected leading to population declines.

49 **(b)**

Biosphere is the part of earth in which life exists.

50 **(c)**

According to the IUCN (2004), the total number of plants and animals species described, so far is slightly more than 1.5 million but there is no clear idea of how many species are yet to be discovered and described

51 **(a)**

***In situ* (on-site) conservation** refers to the protection and maintenance of biological diversity through a network of protected areas. Here, the selected flora/fauna are naturally conserved in their natural homes. It includes, national parks, sanctuaries, biosphere reserves, etc.

52 **(d)**

Biosphere Reserve	Animal
Gir forest	Asiatic lion, panther, striped hyena
Kaziranga	Rhinoceros , wild buffalo, gaur
Corbett National Park	Elephant , tiger, panther, sloth bear, etc
Rann of Kutch	Wild ass

53 **(b)**

Biosphere reserves are multipurpose protected areas, which are meant for preserving genetic diversity in representative ecosystems of various natural biomes and unique biological communities by protecting wild populations, traditional life style of tribals and domesticated plant and animal genetic resources. Humans are integral part of biosphere reserves but not of the National Parks.

54 **(a)**

Biosphere Reserve Programme was launched by UNESCO in 1971 under its “Man and Biosphere Programme” (MAB). But in India, it was launched in 1986.

55 **(c)**

The term ‘deforestation’ means cutting of trees. Due to cutting of trees, the erosion of soil

may occur.

56 **(d)**

Lime is used as a chemical fertilizer. It is quite alkaline hence, can be added to the soil which is too acidic.

57 **(b)**

Rivet popper hypothesis assumes the ecosystem to be an aeroplane and the species to be the rivets, joining as parts together

58 **(d)**

Initially 25 biodiversity hotspots were identified but subsequently (nine) more have been added to the list, bringing the total number of biodiversity hot spots in the world to 34. They are the areas of high endemism and high level of species richness

59 **(d)**

All statements are true about Amazon rainforest. Amazon rainforest (it is so, huge that it is called the 'lungs of the planet') harbouring probably millions of the species are being cut and cleared for cultivating soyabeans or for the conversion to grasslands for raising beef cattle

60 **(c)**

Mass extinction occurred between cretaceous and tertiary over 60 million years ago when dionosaurs and a number of other organisms disappeared. It is also called K-T boundary

61 **(b)**

Nehru Zoological Park is situated inHyderabad.

62 **(b)**

In accordance with wild life (protection) Act, 1972, passed by Indian government, national parks and sanctuaries could be created for the protection, preservation and propagation of wild animals. In wildlife sanctuaries, protection is given to animal life, while in national parks both flora and fauna are conserved.

63 **(b)**

A keystone species is the one that exerts a strong influence on an ecosystem

64 **(c)**

There are many reasons, some are obvious and others are not so obvious, but all are equally important behind conserving biodiversity.

They can be grouped into three categories narrowly utilitarian, broadly utilitarian and ethical utilitarian

65 **(c)**

Fossil fuel, coal, petroleum, natural gas, etc, are non-renewable energy sources. These are available only in a limited quantity and are not able to reproduce or replace themselves or to increase. Once, the non-renewable resources are consumed, they are forever. Hence, it is believed that these will be exhausted in near future.

66 **(a)**

Hoolock gibbon, rhinoceros, $Python$, etc, are protected in the Kaziranga National Park, Sibsagar (Asom).

67 **(c)**

Joint Forest Management (JFM) was introduced so as to work closely with the local communities for protecting and managing forests.

68 **(b)**

Forests are very important to us, they cover about 23.68% of our earth and help in population control. They also help us by providing useful food and thus play an important role in ecological balance.

69 **(d)**

Sacred grooves are the forest patches around the places of worship, which are held in high esteem by tribal communities. They are found in several parts of India, $e.g.$, Karnataka, Maharashtra, Rajasthan (Aravalli), Madhya Pradesh (Sarguja, Chanda and Bastan), Kerala, Meghalaya. In Meghalaya, sacred groves are found in Jaintia and Khasi hills

70 **(a)**

The number of species in a community really matters to the functioning of the ecosystem. Ecologists believe that communities with more species, generally, tend to be more stable than those with less species

IMPORTANT PRACTICE QUESTION SERIES FOR NEET EXAM – 2 (ANSWERS)

1)	**d**	**2)**	**d**	**3)**	**b**	**4)**	**c**
5)	**c**	**6)**	**b**	**7)**	**a**	**8)**	**b**
9)	**b**	**10)**	**c**	**11)**	**d**	**12)**	**b**
13)	**c**	**14)**	**b**	**15)**	**c**	**16)**	**b**
17)	**a**	**18)**	**d**	**19)**	**b**	**20)**	**c**
21)	**c**	**22)**	**a**	**23)**	**d**	**24)**	**c**
25)	**d**	**26)**	**b**	**27)**	**a**	**28)**	**b**
29)	**a**	**30)**	**d**				

1 **(d)**

The causes of biodiversity losses are alien species invasions, habitat loss, fragmentation and coextinctions etc.

The world is facing accelerated rate of biodiversity losses due to human interference. The causes are over population, urbanization, industrialization, coextinctions, alien species invasions, habitat loss and fragmentation, etc.

2 **(d)**

Rivet popper hypothesis suggests the ecosystem are like aeroplane wings where the flight ecosystem functioning may or may not be compromised

This hypothesis assumes the ecosystem to be an aeroplane and the species to be the rivets joining all parts together

If every passenger pops a rivet to take home (resulting in species extinction), it may not affect the flight safety initially (proper ecosystem functioning) but with time as more rivets are removed, the plane will become dangerously weak

3 **(b)**

Run-off water refers to the water falls during rainfall (precipitation) and goes back to the source, $e.g.$, sea, ocean, etc. In this way, a large amount of fresh water gets wasted. So, the

greater problem of water conservation is to reduce the amount of run-off water.

4 **(c)**

Dudhwa National Park is in Uttar Pradesh. It was originally meant for protecting swamp deer. Later, tiger and leopard have been re-introduced. The rhino has been recently introduced.

5 **(c)**

In agrostological methods of soil conservation, grasses such as *Cynodon dactylon* are utilizing as erosion resisting plants. The grasses are grown in strips between the crops. This method practised in dry arid regions; is called dry farming and helps to maintain moisture content in the soil.

6 **(b)**

The Eastern Himalaya's hotspot of our country extends to the North Eastern India and Bhutan. The Indo-Burma region covering the Eastern Himalayas is also known as cradle of speciation.

7 **(a)**

The name of Smt. Thimmakka is associated with the planting and conservation of avenue trees.

8 **(b)**

The reflectivity percentage of incident light on earth is meteorologically called albedo.

9 **(b)**

Mango has the maximum genetic diversity in India. India has approximately 1000 varieties of mango

10 **(c)**

Species area relation is used by ecologists to estimate the number of species extinction resulting from the habitat destruction

11 **(d)**

All are true except IV

12 **(b)**

Endemic plants are restricted to grow in limited or confined areas, *i.e.,* these grow in geographically limited areas. These are adapted to grow in particular regions only.

13 **(c)**

On earth, 70% of all the species recorded are animals, while plants comprises no more than 22% of the total

Among animals, insects are the most species rich taxonomic group, making up more than 70% of the total. That means, out of every 10 animals on this planet, atleast 7 are insects

14 **(b)**

The world Summit on sustainable Development was held in South Africa.

The World Summit on Sustainable Development was held in Johannesburg, South Africa in 2002 in which 190 countries pledged to reduce the current rate of biodiversity loss at global, regional and local levels by 2010. Regarding the same the Biodiversity ACt was passed in India in the year 2002

15 **(c)**

Gamma diversity represents the total richness of species in all the habitats found within a

region, geographical area or landscape.

16 **(b)**

Eurythermal are those animals, which can tolerate large variations of temperatures, *e.g.,* man. Stenothermal are animals, which can tolerate only small variations in temperature, *e.g.,* frog and all other cold-blooded animals.

17 **(a)**

Biodiversity increases from poles to equator, *i.e.,* from high to low altitude

18 **(d)**

33% of flowering plants, 10% of mammals, 36% reptiles, 60% amphibians and 53% freshwater fishes are endemic (restricted to a particular area or region)

19 **(b)**

India has only 2.4% of world's land area

20 **(c)**

Natural or background extinction is a slow process of replacement of existing species with the better adapted species due to alternate evolution, change in environmental conditions, predators and diseases

21 **(c)**

The world is facing accelerated rates of species extinctions, largely due to human interference. There are four major causes of biodiversity loss called the evil quartet, *i.e.,* habitat loss, over exploitation, Alien species invasion and coextinetion

22 **(a)**

The expanded form of IUCN of IUCNNR is international Union for Conservation of Nature and Natural Resources

23 **(d)**

According to the species area relations concept, the number of species in an area increases with the size of that area

24 **(c)**

In general species diversity decreases as we move away from the equator towards the poles. With very few exceptions, tropics harbour more species than temperate or polar areas. Latitudinal range for tropics is 23.5°N to 23.5°S

25 **(d)**

Column I	Column II
Rhinoceros	Kaziranga
Tiger project in Karnataka	Bandipur
Assemblage protection	Bharatpur
Silent valley	Tropical evergreen forest

26 **(b)**

The IUCN red list (2004) documents the extinction of 784 species (including 338 vertebrates 359 invertebrates and 87 plants) in the last 500 years

27 **(a)**

Biodiversity in not uniform throughout the world because it is affected by many factors Barring arid/semiarid and aquatic habitats, biodiversity shows latitudinal and altitudinal gradients. Biodiversity is low at the poles. It increases in temperate areas but reaches the maximum in tropics. Biodiversity increases from poles to equator, *i.e.,* from high to low

latitude and *vice-versa*

Biodiversity increases from higher altitude to lower altitude that is from mountain top to sea level and *vice-versa*

A decrease in species diversity occurs as we ascend a high mountain due to drop in temperature (lapse temperature being 6.5°C for 1 km or 1000 m) and greater seasonal variability

28 **(b)**

The 2000 Red List contains assessments of more than 18,000 species, 11,000 of which are threatened

The Red List also provides information to international agreements such as the convention on Biological diversity and the convention on International Trade in Endangered Species of Wild Fauna and Flora

According to the Red List, in India

44 plant species – critically endangered

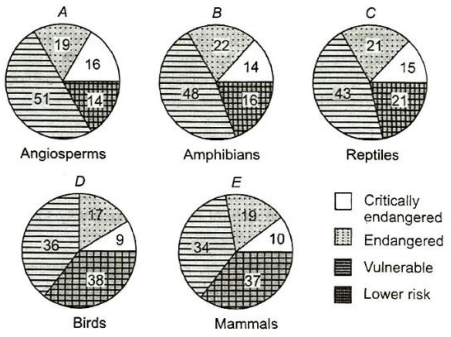
113 plant species – endangered

87 plant species – vulnerable

18 animal species – critically endangered

54 animal species – endangered

143 animal species – vulnerable



According to Red List

10% mammals, 9%, 15% reptiles, 16% amphibians and 16% angiosperms are facing very high list of extinction in the wild and can become extinct any moment in the immediate future.

The percentage number of endangered species in the list of threatened species is 19% mammals, 17% birds, 21% reptiles, 22% amphibians and 19%angiosperms.

Percentage of depleted (vulnerable) species out of the total threatened species is 34% mammals, 36% birds, 43% reptiles, 48% amphibians and 51% angiosperms.

The given data shows the maximum percentage of endangered species belongs to the group of angiosperms

29 **(a)**

The species diversity of plant on earth will be about 22%.

30 **(d)**

The Nile perch, a voracious predator introduced to lake Victoria as a food fish, has already extinguished over one hundred species of native cichlid fish there.