



# BIOLOGY

## NEET & AIIMS

### BIODIVERSITY AND CONSERVATION

#### Example

1. Identify true or false in the following statements :

(i) Term biodiversity was popularised by

Edward Wilson to describe the combined heterogeneity at all levels of biological organisation.

(ii) More than 5000 genetically different varieties of mango occur in India.

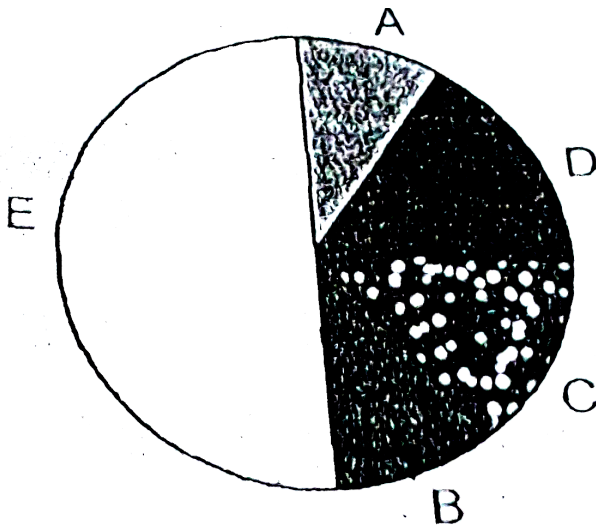
(iii) Western Ghats have greater amphibian species diversity as compared to Eastern Ghats.

We could lose all wealth of biodiversity in less than two decades if the present rates of species losses continue.



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2. In the following pie chart of global vertebrate diversity, what does A,B,C,D and E represent respectively?



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3. Fill in the blanks with suitable words or number in the following table :

Biodiversity in Amazonian rain forest	
Taxa or Group	No. of species
Amphibians	A
C	More than 40000
E	1300
Pisces	D
Reptiles	B



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4. Indicate whether the following statements are true or false :

(i) New York in temperate area has 56 species



of birds.

(ii) Tropical biomes unlike temperate ones, are more seasonal, relatively less constant and predictable.

(iii) Relationship between species richness ( $S$ ) and area ( $A$ ) turned out to be rectangular hyperboia on a logarithmic scale.

(iv) Slope of regression ( $Z$ ) is 1.15 for frugivorous birds and mammals in tropical forests of different continents.



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5. Write whether the following statements are true or false .

(i) Communities with more species tend to be more stable than those with less species.

(ii) David Tilman found that plots with less species showed less year-to-year variation in total biomass.

(iii) A stable community must be resistant to invasions by exotic species.

(iv) Effect of reduction in diversity has been explained by Alexander von Humboldt through rivet popper hypothesis.



**6.** Fill in the blanks with suitable words :

(i) Loss of species which occurred in the geological past at a..... Rate, is called natural extinction.

(ii) Colonisation of tropical Pacific Islands by humans have resulted in extinction of.....  
Species of native birds.

(iii) Dodo from.....and.....from Australia have become extinct in last 500 years.

(iv) Anthropogenic extinction is causing a.....mass extinction of species.



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7. Consider the following six statements (a-e) about causes of biodiversity losses.

a. Tropical rain forests once covering more than 14% of the earth's land surface, these forests now cover no more than 0.6%.

b. Biological system should not be exploited beyond the degree of their renewability.

c. Nile perch, a large predator fish was introduced into Lake Victoria of East Australia.

d. Lantana is an indigenous plant of our country.

e. Recent illegal introduction of the American catfish for aquaculture purpose is posing a threat to the indigenous catfishes in our rivers.

Which of the above statement(s) is/are correct?

A. a & b

B. b,c & d

C. b,c and e

D. b,d & e

**Answer:**



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**8. Match the following (Column I with Column**

**II)**

*Column I*  
*(Significance of biodiversity)*

- a. *Narrowly utilitarian*
- b. *Broadly utilitarian*

*Column II*  
*(Benefits)*

- (i) *Construction material*
- (ii) *Aesthetic pleasures*
- (iii) *Pollination*
- (iv) *Industrial products*

A. a(i,ii), b(iii,iv)

B. a(i,iv), b(ii,iii)

C. a(iii,iv), b(i,ii)

D. a(i,iii), b(ii,iv)

**Answer:**



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**9.** State true/false in the following statements.

Correct each false statements to make it true.

(i) The in-situ conservation strategies

emphasise protection of whole ecosystem, therefore its biodiversity at all levels is protected.

(ii) Biodiversity hotspots put together cover 2.4% of the earth's land area.

(iii) In india, ecologically unique and biodiversity rich regions are legally protected as sanctuaries, national parks and biosphere reserves.

(iv) In Uttar Pradesh, the sacred groves are the last refuges for a large number of rare and threatened plants.



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## Try Yourself

1. State true or false statements. Correct each false statements to make it true.

(i) Within a species, genetic diversity occurs in the differences of alleles, entire genes and chromosomal structures.

(ii) 1000 varieties of rice occur in India due to genetic variation.

(iii) Ecosystem diversity is high in Norway

because of the occurrence of a large number of ecosystems.



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2. Find out the correct option w.r.t. number of plant and animal species recorded in India.

A. 4500050000

B. 1,00,000 , 3,00,000

C. 45000 , 91000

D. 1400, 1,25,000

**Answer: 3**

**Plant species = 45000, Animal species = 91000 ( approx.)**



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**3. Fill in the blanks with suitable words in following statements.**

**(i) Colombia located near the equator has about..... Species of birds.**

**(ii) More than 1,25,000 species of..... have been reported in Amazonian rain forest.**

**(iii) Favourable and less seasonal environments**

has helped.....organism to gain more niche specialisation.

(iv) Value of slope of regression (Z) of species-area relationship lies in the range of.....molluscs in New York state.



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4. Identify true or false statements. Correct each false statement to make it true.

(i) Number of species in a community really matter to the functioning of the ecosystem.

(ii) David Tilman proved that decreased diversity contributed to higher productivity.

(iii) Rich biodiversity is not essential for ecosystem health but required for survival of human race of earth.

(iv) Species which are dangerously harmful beings and their interests can be thought of deliberate extinction.



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5. Fill in the blanks with suitable words w.r.t. Rivet popper hypothesis.

Airplane	B
Rivets	A
C	Key species



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6. Indicate whether the following statements are true or false. Correct each false statement to make it true.

(i) Mass extinction is the extermination of a large number of species due to catastrophers.

(ii) IUCN Red list (2004) documents the extinction of 359 animal species.

(iii) Quagga from Africa and Stellers sea cow from America have been extinct in last few years.

(iv) Anthropogenic extinction is 10-100 times more faster than the rate of natural extinctions.



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7. Fill in the blank with appropriate words.

(i) Major causes of biodiversity losses called as.....

(ii) Amazon rain forest is being cut and cleared for cultivating ..... Or for conversion of grassland for raising.....

(iii) Passenger pigeon has been become extinct due to.....

(iv) When a species becomes extinct the plant and animal species associated with it in..... way also become extinct.



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**8.** Mark true or false in the following statements.

(i) Habitat loss and fragmentation is the most important cause driving animals and plants to extinction.

(ii) Steller's sea cow has been extinct due to habitat loss.

(iii) When alien species are introduced deliberately or unintentionally for whatever purpose, some of them turn invasive and cause extinction of indigenous species.

(iv) When a host fish species becomes extinct its unique assemblage of parasites also meets the same fate.



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9. Fill in the blanks with suitable words : (i) ..... percent of the drugs currently sold in the market worldwide are derived from plants.

(ii) Broadly utilitarian argument says that biodiversity plays a major role in.....that nature provides.

(iii) Amazon forest estimated to product through photosynthesis.....percent of the total oxygen in the earth's atmosphere.

(iv) The..... argument for conserving biodiversity relates to what we owe to millions of plants animal and microbe species with whom we share this planet.



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**10.** Fill in the blank with appropriate words.

(i) Initially 25 biodiversity hotspots were

identified but subsequently..... More have been added to the list.

(ii) Strict protection to biodiversity hotspots could reduce the ongoing mass extinction by almost.....

(iii) India has..... biosphere reserves..... national parks and ..... wildlife sanctuaries.

(iv) The..... on sustainable development held in 2002 in Johannesburg 190 countries pledged their commitment achieve by 2010.



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## Exercise

1. Which of the following represents diversity at ecosystem level?

- A. Genetic diversity
- B. Ecological diversity
- C. Species diversity
- D. Species evenness

**Answer: B**



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2. If we accept May's global estimates, then the total species that have been recorded so far are about

A. 0.3

B. 0.1

C. 0.22

D. 0.15

**Answer: C**



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3. Choose the Incorrect option w.r.t. species diversity of Amazonian rain forest in South America.

A. Plants → gt 40,000

B. Birds - 3,000

C. Mammals - 427

D. Amphibians - 427

**Answer: B**



4. Greater biological diversity of tropics than temperate regions is due to the

- A. Presence of more seasonal environment
- B. Frequent glaciations in the past
- C. Highly variable climate and availability of less solar energy in the past
- D. Availability of more solar energy which contributes to higher productivity



**Answer: D**



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5. In the following pie chart of global vertebrates diversity, what does A, B and C represent respectively?

A. Birds, Fishes, Amphibians

B. Mammals, Reptiles, Birds

C. Fishes, Birds, Amphibians

D. Amphibians, Fishes, Reptiles

**Answer: C**



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6. Which of the following equation correctly represent species-area relationship?

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

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

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

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

**Answer: D**



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7. Rivet popper hypothesis' to explain the role of species richness for ecosystem healthy was given by

A. Paul Ehrlich

B. Alexander Von Humboldt

C. Edward Wilson

D. Robert May

**Answer: A**



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**8.** If we analyse the species-area relationships among very large areas like the entire continents, then slope of line becomes much steeper in the range of

A. 0.1 to 0.6

B. 0.1 to 0.2

C. 0.6 to 1.2

D. 0.2 to 0.6

**Answer: C**



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**9. Which of the following feature(s) should be shown by a stable community?**

A. Resistant to invasion of alien species

B. Resistant to occasional disturbances

C. Less variation in year to year productivity

D. All of these

**Answer: D**



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**10.** Most species-rich taxonomic group among animals comprises

A. More than 80% of total diversity

B. No more than 50% of total diversity

C. More than 70% of total diversity

D. No more than 60% of total diversity

**Answer: C**



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**11.** Which of the following is an example of organism with recent extinction in Australia?

A. Dodo

B. Quagga

C. Thylacine

D. Steller's sea cow

**Answer: C**



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**12.** Choose the odd one w.r.t. Alein species invasion

A. Nile perch



B. Water hyacinth

C. Clarias gariepinus

D. Cichild fish

**Answer: D**



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**13.** The present area covered by tropical rain forests is ..... Of the earth's land surface.

A. 0.2

B. 0.13

C. 0.06

D. 0.12

**Answer: B**



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**14.** Amazon rainforests are considered as 'lungs of the planet' as they contribute \_\_\_\_\_ of the total oxygen in the earth's atmosphere.

A. 0.1

B. 0.2

C. 0.15

D. 0.25

**Answer: B**



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**15.** Number of biosphere reserves, national parks and wild life sanctuaries in India are respectively

A. 90,14,448

B. 18,104,551

C. 90,448,14

D. 14,448,19

**Answer: B**



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**16.** Choose the odd one w.r.t. ex-situ conservation strategies

- A. Zoological parks
- B. Botanical gardens
- C. Wildlife safari parks
- D. Hot spots

**Answer: D**



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**17. How many hot spots are identified globally?**

A. 20

B. 3

C. 34

D. 50

**Answer: C**



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**18.** The World Summit on sustainable development held in 2002 in.....

A. South America

B. South Canada

C. South Africa

D. South Asia

**Answer: C**



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**19.** Which of the following is not under broadly utilitarian reasons for conserving biodiversity?

A. Pollination

B. Aesthetic pleasures

C. Controlling soil erosion

D. 25% drugs sold in market are plants based

**Answer: D**



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**20.** Most important cause driving animals and plants to extinction is



A. Over-exploitation

B. Co-extinction

C. Alein species invasions

D. Habitat loss and fragmentation

**Answer: D**



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**Section A Objective Type Questions**

1. Which of the following taxon shows maximum species diversity?

A. Fishes

B. Beetles

C. Ants

D. Orchids

**Answer: B**



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2. The variations shown by the medicinal plant *Rauwolfia vomitoria* growing in different Himalayan ranges represents

- A. Genetic diversity
- B. Species diversity
- C. Ecological diversity
- D. Community diversity

**Answer: A**



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3. More conservative and scientifically sound estimate made by Robert May places the global species diversity at about

A. 1.5 million

B. 7 million

C. 1.7 million

D. 17 million

**Answer: B**



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4. Insects are the most numerous with estimate of

A. 7 out of 10 invertebrates

B. 4 out of 10 invertebrates

C. 7 out of 10 animals

D. 4 out of 10 animals

**Answer: C**



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5. Which of the following group represents minimum species diversity among vertebrates?

A. Birds

B. Mammals

C. Reptiles

D. Amphibians

**Answer: B**



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6. In global biodiversity of plants, the

A. Angiosperms represent maximum

number

B. Algae represent the minimum number

C. Fungi represent the minimum number

D. Mosses represent the maximum number

**Answer: A**



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7. Conventional taxonomic methods are not suitable for identifying

- A. Amphibian species
- B. Insect species
- C. Microbial species
- D. Gymnospermic species

**Answer: C**



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8. India has % of the world's land area, its share of the global species diversity is an impressive %.

A. 8.1,2.4

B. 22,12

C. 12,22

D. 2.4,8.1

**Answer: D**



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9. What is the approximate ratio of animals and plants species in our country?

A. 3:1

B. 2:1

C. 1:3

D. 1:2

**Answer: B**



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10. Select incorrect statements w.r.t. greater biological diversity in tropics

(A) Tropical latitudes have remained relatively undisturbed for millions of years and thus had a long evolutionary time for species diversification.

(B) Tropical environments are more seasonal and less predictable than temperates.

(C) There is more solar available which contributes to higher productivity.

A. (A) & (B)

B. Only (B)

C. (B) & ( C)

D. Only (A)

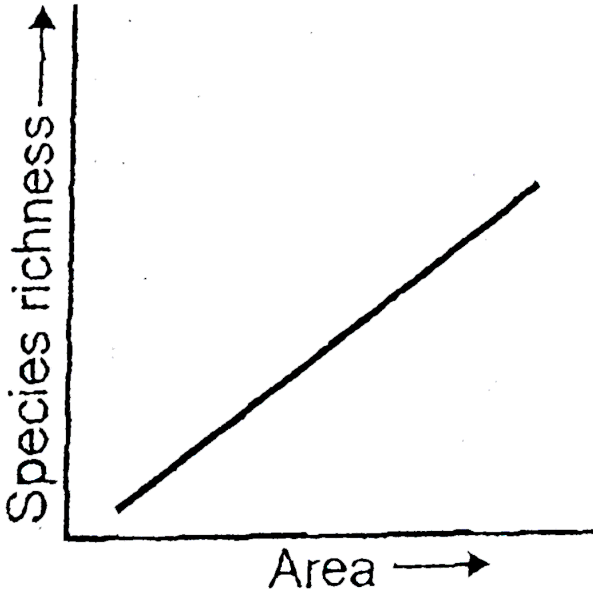
**Answer: B**



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**11.** Relationship between species richness ( $S$ ) and area ( $A$ ) represent in the following graph

is described by the equation



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

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

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

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

**Answer: B**



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**12.** The species-area relationships among very large areas like entire continents

A. 0.1 to 0.2

B. 1.15

C. 0.3 to 0.6

D. 0.6 to 1.2

**Answer: D**



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**13.** Rivet popper hypothesis' to explain the role of species richness for ecosystem healthy was given by

- A. David Tiliman
- B. Alexander Von Humboldt
- C. Robert May
- D. Paul Ehrlich

**Answer: D**



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**14.** Colonisation of tropical pacific Islands by humans have resulted in extinction of more than..... Species of native birds.

A. 1000

B. 7000

C. 784

D. 15000



**Answer: A**



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**15.** Match the animals given in column A with their location in column B.

Column A

Column B

(i) Dodo

A. Africa

(ii) Quagga

B. Russia

(iii) Thylacine

C. Mauritius

(iv) Stellar's sea cow

D. Australia

Choose the correct match from the following.

A. a(ii), b(iii), c(i), d(iv)

B. a(iv), b(i), c(ii), d(iii)

C. a(iii), b(iv), c(ii), d(i)

D. a(iii), b(ii), c(iv), d(i)

**Answer: D**



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**16.** IUCN Red List (2004) documents the extinction of A species in the last B years.

A. A- 500, B - 300

B. A -784, B -500

C. A - 654, B - 500

D. A - 984, B -300

**Answer: B**



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**17.** Loss of biodiversity in a region may lead to all of the following, except

A. Decline in plant production

B. Lowered resistance to environment perturbations

C. Increased variability in certain ecosystem processes

D. Increased endemism

**Answer: D**



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**18.** Presently A % of all mammal species and B % of all gymnosperm species in the world face threat of extinction.

A. A -32, B -12

B. A -22, B -31

C. A-23 , B -31

D. A-31, B -23

**Answer: C**



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**19.** The Evil Quartet represents the major causes of

A. Soil pollution

B. Inbreeding depression

C. Biodiversity losses

D. Air pollution

**Answer: C**



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20. Which of the following is the most important cause driving animals and plants to extinction?

A. Alien species invasions

B. Co-extinctions

C. Habitat loss and fragmentation

D. Over-exploitation

**Answer: C**



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21. Which of the following organisms are badly affected when large habitats are broken up into small fragments due to various human activities?

- A. Mammals requiring small territories
- B. Planktons showing diapause
- C. Animals with migratory habits
- D. Birds requiring small territories

**Answer: B**



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22. Extinction of more than 200 species of cichlid fish in lake Victoria was due to introduction of

- A. African catfish
- B. Nile perch
- C. *Clarias gariepinus*
- D. Lantana

**Answer: B**



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23. When a host fish species becomes extinct, its unique assemblage of parasites also meets the same fate. It is an example of

- A. Co-extinction
- B. Alien species invasion
- C. Over-exploitation
- D. Habitat loss

**Answer: A**



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24. More than % of the drugs currently sold in the market worldwide are derived from plants.

A. 70

B. 25

C. 90

D. 55

**Answer: B**



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25. Bio-prospecting is exploring molecular, genetic and species level diversity for products of

A. Ecosystem services

B. Economic benefits

C. Aesthetic pleasures

D. Both (1) & (3)

**Answer: B**



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**26.** The fast dwindling A forest is estimated to produce B percent of the total oxygen in earth's atmosphere.

A. A - Siberian, B - 30

B. A - Temperate, B - 20

C. A - Alpine, B - 15

D. A - Amazon, B-20

**Answer: D**



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27. How many biodiversity hotspots have been identified in the world?

A. 30

B. 3

C. 34

D. 20

**Answer: C**



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**28.** Strict protection of biodiversity hotspots could reduce ongoing mass extinctions by almost

A. 0.3

B. 0.15

C. 0.1

D. 0.05

**Answer: A**



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**29.** "When we conserve and protect the whole ecosystem, its biodiversity at all levels is protected"

This approach includes all of the following, except



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**30.** Mark the correct match



A. Wildlife sanctuaries in world - 90

B. Sacred groves - On-site conservation

C. Western Ghat - Rajasthan and M.P.

D. National park in India -448

**Answer: B**



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**31.** In which of the following method threatened animals are taken out from natural habitat and placed in special setting?

- A. Zoological parks
- B. Botanical gardens
- C. Biosphere reserves
- D. Both (1) & (2)

**Answer: A**



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**32.** Gametes of threatened species can be preserved in viable and fertile condition for long periods using

A. Wildlife safari parks

B. On-site conservation

C. Cryopreservation

D. Botanical gardens

**Answer: C**



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**33. Select the incorrect match**

A. Aravalli hills -Gujarat

B. Khasi and Jaintia hills - Meghalaya

C. Sarguja - Madhya Pradesh

D. Western ghats -Karnataka, Maharashtra

**Answer: C**



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**34.** How many countries pledged their commitment to achieve by 2010, a significant reduction in the current rate of biodiversity

loss at global, regional and local levels in the World Summit held in 2002?

A. 119

B. 121

C. 193

D. 195

**Answer: C**



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1. Which is not true regarding genetic diversity?

A. It enables a population to adapt to its environment

B. It is also basis of speciation

C. Ecotype formation depends upon it

D. Higher diversity increases uniformity

**Answer: D**



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2. Regional diversity is also called

- A. Alpha diversity
- B. Beta diversity
- C. Gamma diversity
- D. Ecosystem diversity

**Answer: C**



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### 3. Beta diversity

A. Is also called regional diversity

B. Is within community diversity

C. Is generally calculated by dividing  
gamma diversity by alpha diversity

D. Is local diversity

**Answer: C**



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4. India covers the world land area of ..... And contributes the global diversity of.....

A. 4% , 8%

B. 8.1% , 2.4%

C. 2.4%, 8.1%

D. 8% , 4%

**Answer: C**



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5. Read the following statements :

(A) India has a greater ecosystem diversity than Norway.

(B) According to the IUCN (2004), the total number of plant and animal species described so far is slightly more than 15 millions.

A. Both (A) & (B) are correct

B. Only (B) is correct

C. Both (A) & (B) are incorrect

D. Only (A) is correct

**Answer: D**



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**6.** Which is not a reason of maximum diversity in tropics?

- A. Higher pest pressure
- B. Evolutionary older zone
- C. High rate of out crossing
- D. Greater enviromental variations

**Answer: D**



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7. Select an incorrect statements w.r.t. biodiversity

A. Mountain peaks are more diverse than foot hills

B. Valley's are more diverse than mountain peaks

C. Shade sides are more diverse than sun sides of mountains

D. Western ghats are more diverse than eastern ghats

**Answer: B**



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**8. Read the following statements :**

(A) Tropics harbour more species than temperate or polar areas.

(B) Colombia located near the equator has nearly 1400 species of birds.

(C ) India has less tha 105 species of birds.

A. (A) & (B) are incorrect

B. (B) & (C ) are incorrect

C. (A) & (C ) are incorrect

D. Only (C ) is incorrect

**Answer: D**



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9. Amazon rain forest in South America is home to more than A species of plants and B species of fishes.

A. A - 3,000. B - 40,000

B. A - 1500, B - 2,500

C. A - 40,000, B - 3,000

D. A - 427, B - 378

**Answer: C**



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10. Which of the following statements is wrong?

A. A stable community should show much variation in productivity from year to year

B. According to Tillman's long term ecosystem experiments increased diversity contributed to higher productivity



C. Stable community must be resistant to occasional disturbances

D. Rich biodiversity is essential for ecosystem health but imperative for the very survival of the human race on this planet

**Answer: A**



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11. Degree of biodiversity increases from

A. Equator to poles

B. Poles to equator

C. Low latitudes to high latitude

D. Low altitude to high altitude

**Answer: B**



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12. Which sample area shows maximum diversity?

A. (1) 

Birds - 4
Insects - 4
Elephant - 4

B. (2) 

Crow - 8
Pigeon - 8
Cuckoo - 8
Myana - 8

C. (3) 

Pigeon - 10
Crow - 3
Insect - 7

D. (4) 

Butter fly - 20
Banana fly - 20
Lizards - 20

**Answer: A**



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**13.** Threats to biodiversity come from

- A. Habitat loss
- B. Over exploitation
- C. Intensive agriculture
- D. All of these

**Answer: D**



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14. A population characteristic of a species susceptible to extinction is

A. Low trophic level in food chain

B. Inability to switch over to alternate food source

C. Wide range of distribution

D. High biotic potential

**Answer: B**



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**15.** The number of red list categories prepared by WCU (IUCN) is

A. 6

B. 7

C. 8

D. 9

**Answer: C**



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**16.** According to IUCN, when a taxon is facing an extremely high risk of extinction in the immediate future, it is

- A. Extinct in wild
- B. Endangered
- C. Critically endangered
- D. Vulnerable

**Answer: C**



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17. Exotic species *Eichhornia crassipes*

A. Was introduced by Europeans in India

B. Was introduced in India accidentally

C. Was introduced in Lake Victoria of South  
Africa

D. Is a staggling shrub of tropical America

**Answer: A**



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**18.** Silent Valley of Kerala is being preserved because it has

- A. Rare plants and animals
- B. Only natural forest in India
- C. Costly timber plants
- D. Recreational value

**Answer: A**



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**19.** Protected areas are example of

A. In-situ conservation

B. Ex-situ conservation

C. Cryopreservation

D. Green Houses

**Answer: A**



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20. The Indian lion is the most important protected species in

- A. Gir National Park
- B. Bandipur National Park
- C. Corbett National Park
- D. Kaziranga National Park

**Answer: A**



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21. The Government of India has provided private ownership rights in

- A. A national park
- B. A sanctuary
- C. A biosphere reserve
- D. Zoo

**Answer: B**



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22. Wild populations of plants and animals and traditional life styles of tribals are protected in

A. Biosphere reserve

B. Sanctuary

C. National parks

D. None of these

**Answer: A**



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23. Which is not a criterion used for determining hot spots

A. Number of endemic species

B. Degree of habitat destruction

C. Having traditional strategy for protection of biodiversity

D. Degree of exploitation

**Answer: C**



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24. Which of the following is correct match w.r.t. biodiversity rich region ?

A. National parks -95

B. Wildlife sanctuaries -448

C. Biosphere reserves -24

D. Zoological parks - 25

**Answer: B**



**Watch Video Solution**

25. Select the odd w.r.t. ex-situ conservation.

A. Botanical gardens

B. Wildlife safari parks

C. Zoological parks

D. Sacred grooves

**Answer: D**



**Watch Video Solution**



**26. Mark the odd one out (w.r.t. National Parks)**

A. Cultivation of land is not permitted

B. Meant for protection of both flora and  
fauna

C. Forest products are not harvested

D. Grazing is allowed

**Answer: D**



**Watch Video Solution**

## 27. Match the column -I with column-II

Column-I	Column-II
a. <i>Artemesia annua</i>	(i) Henna
b. <i>Lawsonia inermis</i>	(ii) Anticancer drug
c. <i>Vinca rosea</i>	(iii) Kattha
d. <i>Acacia catechu</i>	(iv) Antimalarial drug

A. a(i), b(ii), c(iii), d(iv)

B. a(iii), b(i), c(iv), d(ii)

C. a(iv), b(i), c(ii), d(iii)

D. a(iv), b(ii), c(i), d(iii)

**Answer: C**



**Watch Video Solution**

28. Which of the following statement for biosphere reserve is incorrect?

A. They are meant for preserving genetic diversity in representative ecosystem

B. They are also notified as National Parks

C. Transition zone is legally protected undisturbed ecosystem

D. Importance in conservation, development, scientific research and

monitoring

**Answer: C**



**Watch Video Solution**

**29.** Which one of the following is not a Bird sanctuary?

A. Govind Sagar sanctuary

B. Ranganathittu sanctuary

C. Gahana sanctuary

D. Singhori sanctuary

**Answer: B**



**Watch Video Solution**

**30.** Conservation of plant diversity is mostly  
a/an

A. Aesthetic necessity

B. Economic necessity

C. Genetic necessity

D. Enviromental necessity

**Answer: C**



**Watch Video Solution**

**31.** In-situ conservation of one horned Rhino is being done in

A. Kaziranga National Park

B. Kanha National Park

C. Gir National Park

## D. Hazaribag Sanctuary

**Answer: A**



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### 32. Match the following

Column I	Column II
a. World Forestry Day	(i) October 3
b. World Animal Day	(ii) June 5
c. World Habitat Day	(iii) March 21
d. World Environment Day	(iv) October 4

A. a(i), b(iii), c(iv), d(ii)

B. a(iv), b(i), c(iii), d(ii)

C. a(iii), b(i), c(iv), d(ii)

D. a(ii), b(i), c(iv), d(iii)

**Answer: C**



**Watch Video Solution**

**33.** Which one of the following is not related to 5 F's of Chipko movement?

A. Fibres

B. Flood



C. Fertilizier

D. Fodder

**Answer: B**



**Watch Video Solution**

**34.** In India, forests constitute about

A. 19.4% of the land area

B. 38.7% of the land area

C. 33% of the land area

D. 67% of the land area

**Answer: A**



**Watch Video Solution**

## Section C Previous Years Questions

1. Which one of the following is related to Ex-situ conservation of threatened animals and plants

- A. Wildlife safari parks
- B. Biodiversity hot spots
- C. Amazon rainforest
- D. Himalayan region

**Answer: A**



**Watch Video Solution**

2. The region of Biosphere Reserve which is legally protected and where no human activity is allowed is known as

A. Core zone

B. Buffer zone

C. Transition zone

D. Restoration zone

**Answer: A**



**Watch Video Solution**

**3. Alexander Von Humbolt described for the first time**

A. Ecological Biodiversity

B. Laws of limiting factor

C. Species area relationships

D. Population Growth equation

**Answer: C**



**Watch Video Solution**

4. How many hot spots of biodiversity in the world have been identified till date by Norman Myers ?

A. 17

B. 25

C. 34

D. 43

**Answer: C**



**Watch Video Solution**

**5. Red List contains data or information on**

**A. All economically important plants**

B. Plants whose products are in

international trade

C. Threatened species

D. Marine vertebrates only

**Answer: C**



**Watch Video Solution**

6. Which of the following National Parks is home to the famous musk deer or hangul

A. Keibul Lamjao National Park, Manipur

B. Bandhavharh National Park, Madhya Pradesh

C. Eaglenest Wildlife Sanctuary, Arunachal Pradesh

D. Dachigam National Park, Jammu & Kashmir

**Answer: D**



**Watch Video Solution**



7. Which of the following is the most important cause of animals and plants being to extinction ?

A. Co-extinction

B. Over exploitation

C. Alein species invasions

D. Habitat loss and fragmentation

**Answer: D**



**Watch Video Solution**

8. Which is the National Aquatic Animal of India

A. Sea-horse

B. Gangetic shark

C. River dolphin

D. Blue whale

**Answer: C**



**Watch Video Solution**

9. The species confined to a particular region and not found elsewhere is termed as

A. Rare

B. Keystone

C. Alein

D. Endemic

**Answer: D**



**Watch Video Solution**

**10.** Cryopreservation of gametes of threatened species in viable and fertile condition can be referred to as

- A. In situ cryo-conservation of biodiversity
- B. In situ conservation of biodiversity
- C. Advanced ex-situ conservation of biodiversity
- D. In Situ conservation by sacred groves

**Answer: C**





**11.** In which of the following both pairs have correct combination?

A. In situ conservation : Tissue culture

Ex situ conservation : Sacred groves

B. In situ conservation : National Park

Ex situ conservation : Botanical Garden

C. In situ conservation : Cryopreservation

Ex situ conservation : Wildlife Sanctuary

D. In situ conservation : Seed Bank

Ex situ conservation : National Park

**Answer: B**



**Watch Video Solution**

**12.** A species facing extremely high risk of extinction in the immediate future is called:

A. Vulnerable

B. Endemic

C. Critically endangered

D. Extinct

**Answer: C**



**Watch Video Solution**

**13.** The organization which publishes the Red

List of species is :

A. ICFRE

B. IUCN

C. UNEP

D. WWF

**Answer: B**



**Watch Video Solution**

**14.** An example of ex situ conservation is

Or

Which is the best method of germplasm conservation



A. National Park

B. Seed bank

C. Wildlife Sanctuary

D. Sacred Grove

**Answer: B**



**Watch Video Solution**

**15.** Which of the following are likely to be present in deep sea water?

A. Eubacteria

B. Blue-green-algae

C. Saprophytic fungi

D. Archaeobacteria

**Answer: D**



**Watch Video Solution**

**16.** Which of the following represent maximum number of species among global biodiversity

A. Lichens

B. Fungi

C. Mosses and Ferns

D. Algae

**Answer: B**



**Watch Video Solution**

**17.** Which one of the following is not used for ex situ plant conservation

A. Seed banks

B. Shifting cultivation

C. Botanical Gardens

D. Field gene banks

**Answer: B**



**Watch Video Solution**

**18.** Which of the following is considered a hotspot of biodiversity in India?

A. Sunderbans

B. Western Ghats

C. Eastern Ghats

D. Gangetic Plain

**Answer: C**



**Watch Video Solution**

**19.** Select the correct statement about biodiversity

- A. The desert areas of Rajasthan and Gujrat have a very high level of desert animal species as well as numerous rare animals
- B. Large scale planting of BT cotton has no adverse effect on biodiversity
- C. Western Ghats have a very high degree of species richness and endemism
- D. Conservation of biodiversity is just a fad pursued by the developed countries

**Answer: A**



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20. Sacred groves are specially useful in

- A. Generating environmental awareness
- B. Preventing soil erosion
- C. Year-round flow of water in rivers
- D. Conserving rare and threatened species

**Answer: C**



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21. Which one of the following expanded forms of the following acronyms is correct ?

A. IUCN = International Union for Conservation of Nature and Natural Resources

B. IPCC = International Panel for Climate Change

C. UNEP = United Nations Environmental Policy



D. EPA = Environmental Pollution Agency

**Answer: D**



**Watch Video Solution**

**22.** Which one of the following shows maximum genetic diversity in India

Or

Which one has the largest species variety India

A. Mango

B. Groundnut

C. Rice

D. Maize

**Answer: C**



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**23.** Biodiversity of a geographical region represents

- A. Genetic diversity present in the dominant species of the region
- B. Species endemic to the region
- C. Endangered species found in the region
- D. The diversity in the organisms living in the region

**Answer: C**



**Watch Video Solution**

24. Which one of the following have the highest number of species in nature?

A. Angiosperms

B. Fungi

C. Insects

D. Birds

**Answer: A**



**Watch Video Solution**

25. Which one of the following is an example of ex-situ conservation?

- A. National Park
- B. Wildlife sanctuary
- C. Seed bank
- D. Sacred groves

**Answer: D**



**Watch Video Solution**

**26.** A renewable inexhaustible natural resource is

A. Forest

B. Coal

C. Petroleum

D. Minerals

**Answer: A**



**Watch Video Solution**

27. The Indian rhinoceros is a natural inhabitant of which one of the Indian states ?

A. Uttarkhand

B. Uttar Pradesh

C. Himachal Pradesh

D. Assam

**Answer: D**



**Watch Video Solution**

28. Which one of the following has maximum genetic diversity in India

A. Mango

B. Wheat

C. Tea

D. Teak

**Answer: A**



**Watch Video Solution**



29. Tiger is not a resident in which one of the following national park

A. Sunderbans

B. Gir

C. Jim Corbett

D. Ranthambour

**Answer: B**



**Watch Video Solution**

**30.** Which one of the following is not observed in biodiversity hotspots

A. Species richness

B. Endemism

C. Accelerated species loss

D. Lesser inter-specific competition

**Answer: C**



**Watch Video Solution**

31. The table below gives the population ( in thousands) of ten species (A-J) in four areas (a-d) consisting of the number of habitats given within brackets against each. Study the table and answer the questions which follow.

Area and No. of habitats	Species and their populations (in thousands) in the areas									
	A	B	C	D	E	F	G	H	I	J
<i>p</i> (11)	2.3	1.2	0.52	6.0	—	3.1	1.1	9.0	—	10.3
<i>q</i> (11)	10.2	—	0.62	—	1.5	3.0	—	8.2	1.1	11.2
<i>r</i> (13)	11.3	0.9	0.48	2.4	1.4	4.2	0.8	8.4	2.2	4.1
<i>s</i> (12)	3.2	10.2	11.1	4.8	0.4	3.3	0.8	7.3	11.3	2.1

Which area out of a-d shows maximum species diversity?

A. a

B. b

C. c

D. d

**Answer: C**



**Watch Video Solution**

**32.** Identify the odd combination of the habitat and the particular animal concerned

A. Rann of Kutch-Wild Ass

B. Danchigam National Park-Snow Leopard

C. Sunderban -Bengal Tiger

D. Periyar - Elephant

**Answer: B**



**Watch Video Solution**

**33.** Which one of the following is being utilized as a source of biodiesel in the Indian countryside

Or

An example of Petrocrop is

A. Pongamia

B. Euphorbia

C. Beetroot

D. Sugarcane

**Answer: A**



**Watch Video Solution**

**34.** Which one of the following pairs of organisms are exotic species introduced in India

A. Nile perch, *Ficus religiosa*

B. *Ficus religiosa*, *Lantana camara*

C. *Lantana camara*, Water hyacinth

D. Water hyacinth, *Prosopis cineraria*

**Answer: C**



**Watch Video Solution**

**35.** One of endangered species of Indian medicinal plants is that of

A. Nepenthes

B. Podophyllum

C. Ocimum

D. Garlic

**Answer: B**



**Watch Video Solution**

**36.** All the following are included under in situ conservation except



A. Sanctuary

B. Botanical gardens

C. Biosphere reserves

D. National park

**Answer: B**



**Watch Video Solution**

**37.** Which one of the following is the correctly matched pair of an endangered animal and a National Park ?

A. Lion - Corbett National Park

B. Rhinoceros - Kaziranga National Park

C. Wild ass - Dudhwa National Park

D. Great Indian bustard - Keoladeo National  
Park

**Answer: B**



**Watch Video Solution**

**38.** Which of the following pairs of an animal and a plant represent endangered organism in India

A. *Bentinckia nicobarica* and red panda

B. Tamarind and rhesus monkey

C. *Cinchona* and leopard

D. Banyan and black buck

**Answer: A**



**Watch Video Solution**

**39.** Which one is a hot spot of biodiversity

A. Western ghats

B. Indo-Gangetic plain

C. Eastern Ghats

D. Aravalli hills

**Answer: A**



**Watch Video Solution**

40. According to IUCN Red List, what is the status of Red Panda (*Ailurus fulgens*)

- A. Vulnerable species
- B. Critically endangered species
- C. Extinct species
- D. Endangered species

**Answer: C**



**Watch Video Solution**

41. One of the most important functions of botanical gardens is that

A. One can observe tropical plants there

B. They allow ex situ conservation of germplasm

C. They provide the natural habitat for wild life

D. They provide a beautiful area for recreation

**Answer: B**



Watch Video Solution

**42.** Biodiversity Act of India was passed by the Parliament in the year

A. 1996

B. 1992

C. 2002

D. 2000

**Answer: C**



**43.** Total number of all species of organisms in a given region is known as the region's:

A. Blota

B. Flora

C. Fauna

D. Diversity

**Answer: D**





**44.** How many biogeographical regions are present in India ?

A. 3

B. 4

C. 7

D. 10

**Answer: D**



**Watch Video Solution**

**45.** Diversification in plant life appeared

A. Due to long periods of evolutionary changes

B. Due to abrupt mutations

C. Suddenly on earth

D. By seed dispersal

**Answer: A**



**Watch Video Solution**

**46.** Red data book is maintained by

Or

List of endangered species was released by

Or

The organization which publishes the Red List of species is

A. GEF

B. IUCN

C. UNEP

D. WWF

**Answer: B**



**Watch Video Solution**

**47.** If we uncover half of the forest covering of the Earth what crisis will be produced at most and at first?

A. Some species will be extincted

B. Population and ecological imbalance will  
rise up

C. Energy crisis will occur

D. Reset half forests will maintain this imbalance

**Answer: B**



**Watch Video Solution**

**48.** Land mass occupied by forest is about

A. 0.3

B. 0.6

C. 0.11

D. 0.22

**Answer: A**



**Watch Video Solution**

**49.** Which one of the following have the highest number of species in nature?

A. Angiosperms

B. Fungi

C. Insects

D. Birds

**Answer: C**



**Watch Video Solution**

**50.** What is the major cause of diminishing wildlife number?

A. Felling of trees

B. Paucity of drinking water

C. Cannibalism

D. Habitat destruction

**Answer: D**



**Watch Video Solution**

51. Which of the following communities is more vulnerable to invasion by outside animals and plants?

A. Temperate forests

B. Oceanic island communities



C. Mangroves

D. Tropical evergreen forests

**Answer: D**



**Watch Video Solution**

**52.** Which part of the world has a high density of organism?

A. Deciduous forests

B. Tropical rain forests

C. Grasslands

D. Savannahs

**Answer: B**



**Watch Video Solution**

**53.** Which group of vertebrates comprises the highest number of endangered species

A. Mammals

B. Fishes

C. Reptiles

D. Birds

**Answer: A**



**Watch Video Solution**

**54.** The largest tiger reserve in India is

A. Nagarhole

B. Valmiki

C. Nagarjunsagar-Srisaïlam

D. Periyar

**Answer: C**



**Watch Video Solution**

**55. World Summit on Sustainable Development (2002) was held in:**

A. South Africa

B. Brazil

C. Sweden

D. Argentina

**Answer: A**



**Watch Video Solution**

**56.** Identify the correct match between 'tiger reserve' and its state

A. Manas - Assam

B. Corbett - Madhya Pradesh

C. Bandipur - Tamil Nadu

D. Palamau - Orissa

**Answer: A**



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**57.** Which of the following is the matching pair of a sanctuary and its main protected wild animal?

A. Kaziranga- Musk deer

B. Gir - Lion

C. Sunderban - Rhino

D. All of these

**Answer: B**



**Watch Video Solution**

**58.** Identify the correctly is the matched pair :

A. Corbett park - Aves

B. Runn of Kutch - Tiger

C. Gir forest - Rhino

D. Kaziranga - Elephant

**Answer: D**



**Watch Video Solution**

**59.** The breeding place of Flamingo (Hansawar) in India is most likely :

A. Runn of Kutch

B. Ghana Vihar

C. Sambhar lake



D. Chilka lake

**Answer: D**



**Watch Video Solution**

**60. MAB stands for :**

A. Mammals And Biosphere

B. Mammals And Biology Programme

C. Man And Biology Programme

D. Man And Biospher Programme

**Answer: D**



**Watch Video Solution**

**61.** In your opinion, which is the most effective way to conserve the plant diversity of an area?

- A. By tissue culture method
- B. By creating biosphere reserve
- C. By creating botanical garden
- D. By developing seed bank

**Answer: B**



**Watch Video Solution**

**62.** Which of the following is considered a hot-spot of biodiversity in India?

- A. Aravalli hills
- B. Western Ghats
- C. Indo-gangetic plain
- D. Eastern ghats

**Answer: B**



**Watch Video Solution**

**63.** Viable material of endangered species can be preserved by

- A. Gene bank
- B. Gene Library
- C. Herbarium
- D. Gene pool

**Answer: A**



**Watch Video Solution**

**64.** The most important human activity leading to the extincing of wildlife is

- A. Pollution of air and water
- B. Hunting for valuable wildlife products
- C. Introduction of alien species

D. Alteration and destruction of the natural habitats

**Answer: D**



**Watch Video Solution**

## Section D Assertion Reason Type Questions

1. Assertion: Western Ghats are included among the hot spots of biodiversity.

Reason: Western Ghats have greater amphibian diversity than Eastern Ghats

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: B**



**Watch Video Solution**

2. Assertion: Tropical regions are more diversity-rich in comparison to temperate areas.

Reason: Availability of more solar energy



directly affects the presence of more species in these areas.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: C**



**Watch Video Solution**

**3. Assertion:** The process of extinction is random.

**Reason:** Any species not adapted to environmental conditions cannot survive.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: D**



**Watch Video Solution**

**4. Assertion:** Habitat destruction is the main reason of loss of biodiversity.

**Reason:** This actually causes the increase in edge area and reduction in core area.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: C**



**Watch Video Solution**

5. Assertion: Pristine forests are among in situ conservation strategies.

Reason: These are sacred grooves where biota is protected on site

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: A**



**Watch Video Solution**

**6. A :** A stable community should show much variation in year to year productivity.

R : It must not be resilient to occasional disturbance.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)



D. If both Assertion and Reason are false statements, then mark(4).

**Answer: D**



**Watch Video Solution**

**7.A :** Biodiversity of the prokaryotes cannot be estimated.

**R :** Conventional taxonomic methods are not suitable for identification and characterisation of microbes.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: A**



**View Text Solution**

**8. A :** Biosphere reserves are also included under the ex-situ conservation strategies.

**R :** Cropping and grazing are allowed in the transition zone of biosphere reserve.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: D**



**Watch Video Solution**

9. A : Taxonomic diversity represents the maximum level of species diversity.

R : It represents species of taxonomically different groups occurring in equal balance.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: A**



**Watch Video Solution**

**10. A :** tropics have more biodiversity.

**R :** Climate of tropical region is more seasonal.

A. If both Assertion & Reason are true and the reason is the correct explanation of the assertion, then mark(1)

B. If both Assertion & Reason are true but the reason is not the correct explanation of the assertion, then mark (2)

C. If Assertion is true statements but Reason is false, then mark (3)

D. If both Assertion and Reason are false statements, then mark(4).

**Answer: C**



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