

## BIODIVERSITY AND CONSERVATION

1. Match the following–

- |             |                         |
|-------------|-------------------------|
| (a) Ants    | (i) 20,000 species      |
| (b) Beetles | (ii) >28,000 species    |
| (c) Fishes  | (iii) >3,00,000 species |
| (d) Orchids | (iv) >20,000 species    |

- (1) a (iv), b (ii), c (iii), d (i)  
(2) a (ii), b (iii), c (iv), d (i)  
(3) a (iv), b (iii), c (ii), d (i)  
(4) a (iii), b (ii), c (i), d (iv)

2. In biosphere, diversity (heterogeneity) exist at –

- (1) Species level  
(2) Genetic level  
(3) Ecosystem level  
(4) All the above

3. Term "**biodiversity**" was popularised by–

- |                   |                  |
|-------------------|------------------|
| (1) Edward Wilson | (2) Humboldt     |
| (3) Tilman        | (4) Paul Ehrlich |

4. In India, how many genetically different strains of rice and mango varieties are present –

- (1) <50,000 and 1,0000 respectively  
(2) 1000 and 50000 respectively  
(3) >50.000 and 1.000 respectively  
(4) >50,000 and 5,000 respectively

5. Find out incorrect statement –

- (1) Biodiversity exists at all levels of biological organisation  
(2) A single species cannot show more diversity at genetic level  
(3) Western ghats have a greater amphibian species diversity  
(4) India has greater ecological diversity than Scandinavian country.

6. According to IUCN (2004), how many plant and animal species have been described so far –

- |                  |                  |
|------------------|------------------|
| (1) <1.5 billion | (2) >1.5 million |
| (3) 7.1 million  | (4) 7.1 billion  |

7. Which method is thought to be best for estimation of microbial biodiversity –

- (1) Bio statistical method  
(2) Bio chemical or molecular method  
(3) Paleobotanical method  
(4) Culture method

8. What is the contribution of India in global species diversity –

- |           |           |
|-----------|-----------|
| (1) 2.4 % | (2) 12 %  |
| (3) 8.1 % | (4) 7.1 % |

9. Find out the right one –

- (1) India has 7.1% species diversity  
(2) India is one of the 22 mega diversity countries of world  
(3) According to Robert May's global estimate only 22% of the total species have been recorded so far  
(4) According to Robert May's estimation, more than 3,00,000 plant species yet to be discovered in India

10. Pattern of Biodiversity depends upon –

- (1) Latitudinal gradient  
(2) Altitudinal gradient  
(3) Species - area relationship  
(4) All of these

11. Which of the following is not the reason of great biodiversity in tropics ?

- (1) Undisturbed climate for millions of years  
(2) Less seasonal variations  
(3) More nutritive soil  
(4) More solar energy

12. Which statement is incorrect –

- (1) There is increase in biodiversity from pole to equator  
(2) There is increase in biodiversity from low altitude to high altitude  
(3) There is directly proportional relationship between area & biodiversity  
(4) Tropics has less seasonal, relatively more constant and predictable environment.

- 13.** In species area relationship, on a logarithmic scale. The relationship is –
- (1) Rectangular hyperbola
  - (2) Rectangular parabola
  - (3) Straight line
  - (4) Sigmoid
- 14.** In equation  $\log S = \log C + Z \log A$ , what is Z –
- (1) Species richness
  - (2) Area
  - (3) Regression coefficient
  - (4) Y-intercept
- 15.** For frugivorous birds and mammals in tropical forest of different continents, the slope(Z) is found to be :-
- (1) 0.1 - 0.2
  - (2) 0.6 - 1.2
  - (3) 1.15
  - (4) 11.5
- 16.** More species in community, tends to more stability than communities with less species'. It was supported by–
- (1) David Tilman
  - (2) Paul Ehrlich
  - (3) Humboldt
  - (4) Tansley
- 17.** "Rivet popper hypothesis" was proposed by –
- (1) Tilman
  - (2) Hombolat
  - (3) Paul Ehrlich
  - (4) Mayer
- 18.** Select the wrong match for extinction of species as per the IUCN red list 2004 –
- (1) Vertebrates – 338
  - (2) Invertebrates - 359
  - (3) Plants - 87
  - (4) Prokaryotes - 2001
- 19.** Careful analysis of records shows that extinction across taxa are not random, some groups like \_\_\_\_\_ appear to be more vulnerable to extinction.
- (1) Reptiles
  - (2) Mammals
  - (3) Aves
  - (4) Amphibians
- 20.** According to ecologists warn that if the present trends continue. Nearly half of the species on earth might be wiped out within how many years –
- (1) 100
  - (2) 1000
  - (3) 50
  - (4) 500
- 21.** In general, the loss of biodiversity in a region may not lead to –
- (1) Decline in plant production
  - (2) Lowered resistance to environmental perturbations
  - (3) Constant pest and disease cycles
  - (4) Increased variability in certain ecosystem processes such as plant productivity
- 22.** From 'The Evil Quartet' which of the following is most important cause of biodiversity loss –
- (1) Habitat loss and fragmentation
  - (2) Over - exploitation
  - (3) Alien species invasion
  - (4) Co-extinctions
- 23.** The most dramatic examples of habitat loss come from tropical rain forests. Once covering more than 14 percent of earth's land surface and now cover no more than –
- (1) 5%
  - (2) 6%
  - (3) 10%
  - (4) 13%
- 24.** The Amazon rain forest 'lungs of Planet' harbouring probably millions of species is being cut & cleared for which purpose –
- (1) For cultivation of soybeans
  - (2) For conversion to grasslands for raising beef cattle
  - (3) For cultivation of Medicinal plants
  - (4) Both (1) and (2)
- 25.** When large habitats are broken up into small fragments due to human activities, which of the following get badly affected –
- (1) Mammals and birds requiring large territories
  - (2) Animals with migratory habitats
  - (3) Animals with large body size
  - (4) Both (1) and (2)

26. Alien species invasion is one of the cause of Biodiversity loss. Introduction of Nile perch in victoria lake lead to extinction of more than 200 species of –

  - (1) Cichlid fish
  - (2) Gambusia
  - (3) Salmon fish
  - (4) Cat fish

27. The recent illegal introduction of which African fish becomes severe cause of threatening of indigenous cat fishes –

  - (1) Gambusia
  - (2) Labeo
  - (3) *Clarias gariepinus*
  - (4) Dog fish

28. Find out the following w.r.t. economic importance of biodiversity –

  - (1) Production of oxygen
  - (2) Pollination
  - (3) Medicinal utility
  - (4) All

29. When we conserve and protect the whole ecosystem, its biodiversity at all levels is called –

  - (1) In situ conservation
  - (2) Ex -situ conservation
  - (3) On site conservation
  - (4) Both (1) and (3)

30. Which among the following is the criterion for determination of 'Biodiversity hot spot' –

  - (1) Very high level of species richness
  - (2) High degree of habitat loss and fragmentation
  - (3) High degree of Endemism
  - (4) All of the above

31. Find out the odd one with respect to 'Biodiversity hot spots' –

  - (1) Western Ghats & Srilanka
  - (2) Indo - Burma
  - (3) Himalaya
  - (4) Gangatic plains

32. Find out the wrong match –

  - (1) Bioshpere reserves – 14
  - (2) National parks – 85
  - (3) Wild life sanctuaries – 448
  - (4) Indian Biodiversity hot spot – 3

33. 'Sacred groves is also one of the important mean of Biodiversity conservation. In respect of this find out the odd one –

  - (1) Khasi and Jaintia – Meghalaya
  - (2) Aravalli hills – Rajasthan
  - (3) Sarguja, Chanda and Bastar – Mizoram
  - (4) Western Ghat – Maharashtra

## ANSWERS KEY

<b>Que.</b>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<b>Ans.</b>	3	4	1	3	2	2	2	3	3	4	3	2	3	3	3	1	3	4	4	1
<b>Que.</b>	21	22	23	24	25	26	27	28	29	30	31	32	33							
<b>Ans.</b>	3	1	2	4	4	1	3	3	4	4	4	2	3							