Chapter 15 Biodiversity and Conservation

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

In the given equation of species-area relationship, the value of regression coefficient for a whole continent, would be

(a) 0.1-0.2

- (b) 0.5-0.7
- (c) 0.6-1.2
- (d) 0.3-0.5

2. Which of the following organisation is responsible for maintaining the Red Data Book?(a) IDRI

- (b) IUCN
- (c) UNESCO
- (d) USDA

3. From his long term ecosystem experiments, David Tilman showed that

- (a) decreased diversity contributed to higher productivity
- (b) decreased diversity contributed to decreased productivity
- (c) increased diversity contributed to increased productivity
- (d) increased diversity contributed to decreased productivity

4. Which of the following is a hot-spot of biodiversity in India?

- (a) Western Ghats
- (b) Indo-gangetic plain
- (c) Eastern Ghats
- (d) Aravalli Hills

5. Which among the following is not a method of in-situ conservation?

- (a) National Park
- (b) Botanical garden
- (c) Wildlife sanctuary
- (d) Ramsar sites

6. The World Summit on Sustainable Development (2002) was held in

- (a) Brazil
- (b) South Africa
- (c) Sweden
- (d) Argentina

7. The most important cause of extinction of animals and plants, especially in tropical rain forests is

- (a) habitat loss
- (b) afforestation
- (c) pollution
- (d) soil erosion

8. The enormous number of varieties of mango in India represents

- (a) genetic diversity
- (b) species diversity 1

(c) ecological diversity

(d) hybridisation programmes

9. Which one of the following is not a major characteristic feature of biodiversity hot spots? [NCERT Exemplar]

- (a) Large number of species
- (b) Abundance of endemic species
- (c) Large number of exotic species
- (d) Destruction of habitat
- 10. Which of the following is not a cause for loss of biodiversity? [NCERT Exemplar]
- (a) Destruction of habitat
- (b) Invasion by alien species
- (c) Keeping animals in zoological parks
- (d) Over-exploitation of natural resources
- 11. The extinction of passenger pigeon was due to [NCERT Exemplar]
- (a) increased number of predatory birds.
- (b) over exploitation by humans.
- (c) non-availability of the food.
- (d) bird flu virus infection.

12. Which of the below mentioned regions exhibit less seasonal variations? [NCERT Exemplar]

- (a) Tropics
- (b) Temperates
- (c) Alpines
- (d) Both (a) & (b)

13. India now has _____ wildlife sanctuaries.

14. 70 per cent of the animal species recorded are _____.

15. _____ places the global species biodiversity at about 7 million.

16. The maximum diversity of amphibians in India is observed in _____.

17. The recent introduction of Clarias gariepinus is posing threat to our indigenous ______ in our rivers.

18. _____ introduced into Lake Victoria caused extinction of 200 species of cichlid fishes.

19. Thylacine from _____ and quagga from Africa are examples of recent extinctions.

20. _____ popularised the term Biodiversity.

21. India's share of global biodiversity is about _____ per cent.

22. _____, the last refuges of a number of threatened species of plants, are found in Aravalli Hills of Rajasthan and Jaintia Hills of Meghalaya.

23. Match the items in Column I with those in Column II.

| Column I | Column II |
|--------------------------------|-------------------------|
| A. Cryopreser-vation | 1. Hotspot |
| B. Tropical forests | 2. In situ conservation |
| C. Endemism | 3. Ex situ conservation |
| D. Lantana | 4. Coevolution |
| E. Plant-pollinator mutualifls | 5. Habitat loss |
| F. Wildlife sanctuary | 6. Alien species |

| | | 7. Stellar's Sea <u>cow</u> |
|--|--|-----------------------------|
|--|--|-----------------------------|

24. Match the items in Column I with those in Column II.

| Column I | Column II |
|-------------------------|------------------------------|
| A. Narrowly utilitarian | 1. Passenger pigeon |
| B. Broadly utilitarian | 2. Tannins, Resins of plants |
| C. The Earth Summit | 3. Pollination of plants |
| D. Over- exploitation | 4. Rio de Janeiro, in 1992 |
| | 5. Ethical Arguments |

25. Parthenium is an endemic species of our country. [True/False]

26. Stellar's sea cow is an extinct animal. [True/False]

27. India is one of the mega diversity countries of the world. [True/False]

28. 20 per cent of the total oxygen in the earth's atmosphere is produced by temperate forests like Amazon forest. [True/False]

29. Endemic species are those which are distributed in almost all parts on the globe. [True/False]

Directions (Q30 to Q33): Mark the odd one in each of the following groups. 30. Parthenium, Mangifera, Lantana Eichhornia

31. Bali, Javan, Caspian, Dodo

32. Seed banks, Tissue culture, Sacred groves, Cryopreservation

34. Name the type of biodiversity represented by the following:

(a) 50,000 different strains of rice in India.

(b) Estuaries and alpine meadows in India. [Delhi 2013]

Or

India has more than 50,000 strains of rice. Mention the level of biodiversity it represents. [AI2010]

35. Name the type of biodiversity represented by the following:

(a) 1000 varieties of mango in India.

(b) Variations in terms of potency and concentration of reserpine in Rauwolfia vomitoria growing in different regions of Himalayas. [AI 2013]

36. Write the level of biodiversity represented by a mangrove. Give another example falling in the same level. [AI 2014C]

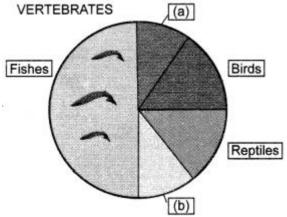
37. Why is genetic variation important in the plant Rauwolfia?

38. Why is India said to have greater ecosystem diversity than Norway? [Delhi 2012C]

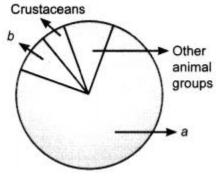
39. Define species diversity...

40. Which region in India has the maximum number of amphibian species?

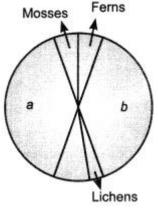
41. Identify 'a' and 'b' in the figure given below representing proportionate number of major vertebrate taxa. [Delhi 2014]



42. Name the unlabelled areas 'a' and 'b' of the pie chart (given) representing the global biodiversity of invertebrates showing their proportionate number of species of major taxa.



43. Name the unlabelled areas 'a' and 'b' of the pie chart representing the biodiversity of plants showing their proportionate number of species of major taxa.



44. Which region of the earth has the greatest biodiversity on earth?

45. What is the general range of the value of slope of the line of regression for any taxa in any region?

46. Name one animal species that has become 'extinct recently each in

- (a) Australia and
- (b) Mauritius, respectively.

47. What per cent of the earth's surface was covered by tropical rain forests at

(a) the beginning of 20th century and

(b) now, respectively?

48. The Amazon rain forest is referred to as 'the lungs of the planet'. Mention any one human activity which causes loss of biodiversity in this region. [AI 2010C]

49. What is the main reason for the extinction of passenger pigeon?

50. What is common about Eichhornia, Lantana and Parthenium with reference to threat to our biodiversity?

51. About 200 species of Cichlid fish became extinct when a particular fish was introduced in lake Victoria of Africa. Name the invasive fish.

52. What is meant by threatened species?

53. What is the total number of hot spots in the world? How many of them are there in India?

54. When was Ramsar Convention developed and adopted and when did it come into force?

55. What is the mission of Ramsar Convention?

56. Name the country that has the

(a) highest number of Ramsar sites

(b) greatest area of listed wetlands in the world, as on November 2013.

57. How many national parks and wildlife sanctuaries are there in India?

58. Why have Western Ghats in India been declared as biological hot spots? [AI 2015C]

59. Name any two conventional methods of ex situ conservation.

60. Write the importance of cryopreservation in conservation of biodiversity. [Delhi 2011]