Level - 1

MCQ Type Questions:

1. The number of species on Earth is estimated to be about
   - Ⓐ 1.5 million
   - Ⓑ 5 million
   - Ⓒ 7 million
   - Ⓓ 50 million

   [**Hint:** NCERT estimate]

2. Species restricted to a particular area are called
   - Ⓐ Keystone species
   - Ⓑ Endangered species
   - Ⓒ Endemic species
   - Ⓓ Alien species

   [**Hint:** Limited distribution]

3. Which region shows maximum biodiversity?
   - Ⓐ Temperate region
   - Ⓑ Arctic region
   - Ⓒ Tropical region
   - Ⓓ Desert region

   [**Hint:** Warm & stable climate]

4. The major cause of biodiversity loss is
   - Ⓐ Pollution
   - Ⓑ Habitat loss
   - Ⓒ Overpopulation
   - Ⓓ Climate change

5. Western Ghats in India are an example of
   - Ⓐ Sanctuary
   - Ⓑ Biosphere reserve
   - Ⓒ Hotspot
   - Ⓓ National park

   [**Hint:** High endemism]

6. In situ conservation includes
   - Ⓐ Zoo
   - Ⓑ Botanical garden
   - Ⓒ National park
   - Ⓓ Seed bank

   [**Hint:** Natural habitat]

7. Ex situ conservation includes
   - Ⓐ Wildlife sanctuary
   - Ⓑ Sacred groves
   - Ⓒ Zoo
   - Ⓓ National park

   [**Hint:** Outside natural habitat]

8. The extinction of passenger pigeon is an example of
   - Ⓐ Natural extinction
   - Ⓑ Mass extinction
   - Ⓒ Co-extinction
   - Ⓓ Anthropogenic extinction

   [**Hint:** Human activity]

9. Species richness refers to
   - Ⓐ Number of individuals
   - Ⓑ Number of species
   - Ⓒ Genetic variation
   - Ⓓ Population size

10. The Convention on Biological Diversity was held in
    - Ⓐ Kyoto
    - Ⓑ Rio de Janeiro
    - Ⓒ Paris
    - Ⓓ Geneva

    [**Hint:** Earth Summit]

Assertion-Reason based questions

Directions: The questions 11 to 15 have two statements—Assertion (A) and Reason (R). Of the two statements, mark the correct answer from the options given below :

A. Both Assertion and Reason are true and Reason is the correct explanation of the Assertion
B. Both Assertion and Reason are true but Reason is not the correct explanation of the Assertion
C. Assertion is true, but Reason is false
D. Assertion is false, but Reason is true

11. **Assertion:** Tropical regions show high biodiversity.

    Reason: Tropical regions have stable climate.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

    [**Hint:** Climate role]

12. **Assertion:** Habitat loss causes extinction.

    Reason: It reduces food and shelter.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

    [**Hint:** Direct effect]

13. **Assertion:** Biodiversity hotspots have high endemism.

    Reason: They have fewer species.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

    [**Hint:** Definition]

14. **Assertion:** Sacred groves help conserve biodiversity.
    Reason: They are protected by local communities.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

    [**Hint:** Traditional conservation]

15. **Assertion:** Ex situ conservation protects species in natural habitat.
    Reason: Zoos are examples of ex situ conservation.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

    [**Hint:** Definition check]

16. **Assertion:** Species extinction is irreversible.
    Reason: Once lost, species cannot reappear.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

    [**Hint:** Permanent loss]

17. **Assertion:** Over-exploitation leads to biodiversity loss.
    Reason: It reduces population size drastically.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

18. **Assertion:** Alien species threaten native species.
    Reason: They compete for resources.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

19. **Assertion:** Co-extinction affects dependent species.
    Reason: Loss of host leads to parasite extinction.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

20. **Assertion:** India is a megadiversity country.
    Reason: It has only 2% of world's land area.

    Ⓐ A   Ⓑ B   Ⓒ C   Ⓓ D

Short Answer Type Questions (2 marks)

21. Define biodiversity.
    [**Hint:** Variety of life]

22. What is species richness?
    [**Hint:** Number of species]

23. Name any two causes of biodiversity loss.
    [**Hint:** Evil quartet]

24. What is a biodiversity hotspot?
    [**Hint:** High endemism]

25. Define endemic species.
    [**Hint:** Restricted distribution]

Short Answer Type Questions (3 marks)

26. Explain habitat loss as a cause of biodiversity loss.
    [**Hint:** Deforestation, urbanisation]

27. Write any three ecosystem services of biodiversity.
    [**Hint:** Pollination, oxygen]

28. What is ex situ conservation? Give examples.
    [**Hint:** Zoo, botanical garden]

29. Explain over-exploitation with example.
    [**Hint:** Passenger pigeon]

30. Why are tropical regions rich in biodiversity?
    [**Hint:** Climate stability]

Long Answer Type Questions (5 marks)

31. (a) What is the Red Data Book? Mention its significance.
    (b) What do you mean by anthropogenic extinction?
    [**Hint:** Biodiversity check; human activities]

32. Describe in situ and ex situ conservation.
    [**Hint:** Definitions + examples]

33. Explain importance of biodiversity.
    [**Hint:** Ecological, economic, ethical]

34. What are biodiversity hotspots? Explain their significance.
    [**Hint:** Endemism + threat]

35. Explain conservation strategies in India.
    [**Hint:** Parks, laws, community role]

Case Based Questions

36. A forest area is cleared for agriculture, reducing species diversity.

    a) Name the cause of biodiversity loss.
    b) Which species are most affected?
    c) Name one conservation method to protect such areas.
    d) Is this in situ or ex situ conservation?

37. A zoo preserves endangered animals for breeding.

   a) Identify the conservation method.
   b) Name one advantage of this method.
   c) Give one limitation of this method.
   d) Name one animal conserved this way.

   [**Hint:** Ex situ]

38. A region with many endemic species is under threat due to human activities. There are plenty of such regions in our country. We have lost several species, many of which were endemic, due to our careless activities.

   a) What is such a region called?
   b) Name one example in India.
   c) Why is it important to conserve it?
   d) Name one major threat.

A N S W E R

1.	©	4.	Ⓑ	7.	©	10.	Ⓑ	13.	©	15.	Ⓓ	18.	Ⓐ
2.	©	5.	©	8.	Ⓓ	11.	Ⓐ	14.	Ⓐ	16.	Ⓐ	19.	Ⓐ
3.	©	6.	©	9.	Ⓑ	12.	Ⓐ			17.	Ⓐ	20.	Ⓑ