



TRY YOURSELF

ANSWERS

1. Brazil
 2. It is difficult to estimate global diversity for prokaryotes because:
 - (i) The conventional taxonomic methods are not sufficient for identifying prokaryotes.
 - (ii) Many of prokaryotes cannot be cultured under laboratory conditions.
 - (iii) Biochemical and molecular biology techniques would put their diversity into millions.
 3. According to Humboldt's species area concept, species richness increases with the increasing explored area upto an extent. On a logarithmic scale, species area relationship is expressed as –
$$\text{Log } S = \text{Log } C + Z \text{ log } A.$$
 4. The decline of biodiversity leads to the disturbance in ecosystem, reduction in productivity and disturbance of ecological processes like water use, pest and disease cycles.
 5. Rare species are species with naturally small populations, either localised or thinly scattered which are always at risk from pests/pathogens/predators/exotic species.
 6. A taxon is critically endangered when it is facing very high risk of extinction in the wild and can become extinct any moment in the immediate future, for example *Porcula salvania* (Pigmy Hog), *Berberis nilghiriensis* and *Podophyllum* are critically endangered species.
 7. Vulnerable plant - *Cupressus cashmeriana*
Vulnerable animal - *Antilope cervicapra*
 8. MAB, i.e., Man and Biosphere programme is an international biological programme of UNESCO that aims to study human environment, impact of human interference and pollution on biotic and abiotic environments and conservation strategies for the present as well as future.
 9. Four biodiversity hotspots are found in India. These are Western Ghats, the Indo-Burma region, the Himalaya and Sundaland.
 10. The broadly utilitarian argument says that biodiversity plays a major role in many ecosystem services that nature provides. Photosynthesis and pollination are some services provided by ecosystem. There are some intangible benefits that we derive from nature-the aesthetic pleasures of walking through thick woods, watching spring flowers in full bloom or waking upto a bulbul's song in the morning.
 11. Tea, jackfruit.
 12. Orthodox seeds are those seeds which can tolerate reduction in moisture content (upto 5%), anaerobic conditions and low temperature of – 10 to – 20°C or even lower for prolonged periods.
 13. In cryopreservation method, seeds of plants, eggs and sperms of animals of threatened species or the species at the verge of extinction can be preserved for a long time. Hence, serving the purpose of *ex-situ* conservation.
 14. United Nations Conference on Environment and Development also called Earth summit was held at Rio de Janeiro, Brazil in 1992.
 15. World Conservation Union brings together states, government agencies and a diverse range of non-governmental organisations to influence, encourage and assist societies throughout the world to conserve the diversity of natural resources and their sustainable use. IUCN also helps countries to formulate their own National conservation strategies. WCU builds on strength of its members, networks and partners to enhance their capacity and to support global alliances to safeguard natural resources at local, regional and global levels.
 16. (i) Wildlife (Protection) Act, 1972.
(ii) Forest (Conservation) Act, 1980.
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