

### Topic :- Biodiversity & Conservation

- 1 **(d)**  
Forest is a renewable, exhaustible natural resource. Renewable resource are living, able to reproduce or replace themselves and to increase. The renewable resources get replenished, recycled or reproduced and they are not used beyond their renewability. Exhaustible resources are the natural resources with finite stock or supply, they are vulnerable to both qualitative and quantitative degradation.
- 2 **(a)**  
The Amazon rain forest is a moist broadleaf forest that covers most of the Amazon basin of South America. This region includes territory belonging to nine nations. The majority of the forest is contained within Brazil, with 60% of the rain forest, followed by Peru with 13% and with minor amounts in Columbia, Venezuela, Ecuador, Bolivia, Guyana, Surinam and French Guyana. States or departments in four nations bear the name Amazonas after it. The Amazon represents over half of the planet's remaining rain forests and comprises the largest and most species rich tract of tropical rain forest in the world.
- 3 **(c)**  
India has nearly 45000 plants and twice as many animals
- 4 **(b)**  
Although India has only 2.4% of the world's land area, its share of the global species diversity is 8.1%. That is why, our country is one of the 12 megadiversity countries of the world
- 5 **(a)**  
All are true except the (iv)  
It is species diversity and not biodiversity, which is important for maintaining higher levels of productivity and ecosystem health
- 6 **(b)**  
In the biosphere reserve, people are an integral part, but not in National Parks and wild life sanctuaries.
- 7 **(b)**  
India has more than 50,000 genetically different strains of rice.  
The diversity of rice in India is highest in the world. More than 50,000 genetically different strains of rice has been estimated in India, alone. Basmati rice has 27 documented varieties grown in India

- 8 **(c)**  
India is secondary centre for domestication of potato
- 9 **(a)**  
In India, the first biosphere reserve is Nilgiri Biosphere Reserve (NBR). It includes two well known national parks, viz, Bandipur National Park and Nagarhole Park.
- 10 **(d)**  
Endemic species restricted to a specific area. Sibling species are species which do not interbreed but are otherwise difficult to separate on the basis of morphological characters alone.  
  
Sympatric species are having overlapping are of geographical distribution.
- 11 **(a)**  
IUCN (International Union of Conservation of Nature and Natural Resources) is now called World Conservation Union (WCU). Its headquarter is at Morges, Switzerland
- 12 **(c)**  
The **World Wide Fund for Nature** (WWF) is an international non-governmental organisation working on issues regarding the conservation, research and restoration of the environment.
- 13 **(c)**  
When a species become extinct, the plants and animals species associated with it in an obligatory way also become extinct  
In the case of coevolved plant-pollinator mutualism, extinction of one invariably leads to the extinction of the other
- 14 **(a)**  
70%.  
When we discuss about earth's biodiversity, more than 70% of all the species recorded are animals, while plants (including algae, fungi, bryophytes, gymnosperms and angiosperms) comprises not more than 22% of the total
- 15 **(a)**  
Alpha diversity is the species diversity in a given community and gamma diversity is present in ranges of communities over a total geographical area
- 16 **(d)**  
Minerals and fossil fuels are the non-renewable (can not be regenerated after being used up) and exhaustible (limited) resources, while water, wildlife, soil fertility and aquatic plants and animals all are renewable resources.
- 17 **(b)**  
The term biodiversity was given by Edward Wilson.  
Immense diversity (heterogeneity) exists in our biosphere, not only at the species level but at all the levels of biological organization ranging from the macromolecules within to biomass  
Sociobiologist Edward Wilson described the combined diversity at all the levels of

biological organization

These are genetic diversity, species diversity and ecological diversity

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**(b)**

Taxa whose numbers have been reduced to a critical level or whose habitats have been so, drastically reduced that they are deemed to be in immediate danger of extinction are called endangered animals, *e.g.*, lion-tailed macaque, crocodile, musk deer, rhino, etc.

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**(b)**

Species diversity is a product of both species richness and evenness or equitability, *i.e.*, species richness weighed by species evenness. Odum *et. al*(1960) calculated species diversity (d) as the number of species in relation to the square root of the total number of individuals. In ecological studies, diversity index commonly used is Shannon index

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**(c)**

Extinction vertex is a combination of genetic and demographic factors

ANSWER-KEY										
<b>Q.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>A.</b>	<b>D</b>	<b>A</b>	<b>C</b>	<b>B</b>	<b>A</b>	<b>B</b>	<b>B</b>	<b>C</b>	<b>A</b>	<b>D</b>
<b>Q.</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>
<b>A.</b>	<b>A</b>	<b>C</b>	<b>C</b>	<b>A</b>	<b>A</b>	<b>D</b>	<b>B</b>	<b>B</b>	<b>B</b>	<b>C</b>