

WILD LIFE CONSERVATION

Wild animal means any non-domesticated animal found wild in nature. It includes both vertebrates (fish, amphibians, reptiles, birds and mammals) and invertebrates (bees, butterflies, moths, crustaceans, etc.) the term “wild life” includes animals as well as plants, which form part of any habitat in nature. Some wild animals are so characteristic that they become symbols of their home countries. Thus, tiger is associated with India, white bear with Russia, Giant Panda with China, kangaroo with Australia, kiwi with New Zealand and springbok with South Africa.

3.1.1 IMPORTANCE (VALUES) OF WILD LIFE

Wild life is a source of danger to human life. It is a nuisance to a farmer because it often destroys his crops. The domestic livestock is denied grazing ground in sanctuaries and reserves for wild life. Similarly, the hunters are denied recreation by shooting wild life. Even then conservation of wild life becomes necessary and of great importance due to its many values to mankind.

(i) **Ecological value** : For a millennium, man and wild animals have evolved together on this planet, called Earth. All life on earth is one and all living things are inextricably interlinked (food chains) forming ecosystems. Destruction of wild life may cause upset in the ecological balance or equilibrium resulting in severe consequences. Thus, protection of every animal species is of great importance to the quality of life and to the survival of man himself. By rendering the planet uninhabitable for animals, we will not be able to avoid extinction ourselves.

(ii) **Commercial value** : Wild life forms an important natural resource. Unlike coal or petroleum which is nonrenewable, wild life is a renewable resource. With proper care and management, it can yield good dividends and even earn foreign exchange. The commercial value of wild life is best seen in the world's marine fisheries, with an annual output of about 100 million tons of sea food worth billions of rupees. Freshwater fish and other aquatic creatures also provide large amount of food for people. Wild life of dry land mainly contributes to the food of the so-called primitive people of the world. An entire industry, the fur trade is supported by fur-bearing animals. Trade in live as well as dead animals supports thousands of people and also earns foreign exchange. For example, an Indian rhino may fetch equivalent of Rs. 1,25,000 in the world market. Similarly, the ivory of elephants, the horns of rhinoceros, the glands of musk deer, the antlers of deer etc., all command high prices. Wild life of a country may even attract people from abroad and earn foreign exchange. Thus, the tourist industry of Kenya (East Africa), based on its wild life, ranks third after coffee and sisal.

(iii) **Game value** : Wild life has its worth as game also. In several European and American countries, millions of people hunt or fish for recreation, spending billions of dollars on these sports.

(iv) **Scientific value** : Scientific studies of many of the wild life species are of direct value to humans. Thus, sea urchins have helped greatly in the understanding of human embryology. A desert

load has helped in early determination of pregnancy. Rhesus monkeys have contributed to the present knowledge of human blood groups. Antlers of deer help in determining the degree of radioactive contamination of natural environments. We do not know when some obscure wild animal species may be shot to prominence by providing a clue to human health and survival.

(v) **Aesthetic value** : There is a great world wide aesthetic value of wild life because of their sheer beauty and appeal to the human spirit. A world without melodious birds, graceful beasts and rupturous forests would be a poorer place for humans to live in. Without wild animals, a country side looks dead, static, monotonous and like a picture postcard. People feel pleasure, satisfaction and happiness in the presence of wild life.

(vi) **Ethical value** : Generally people think that they have no right to destroy wild animals; rather they feel an obligation for the conservation of nature and protection of wild life. In fact all religions preach a healthy respect and reverence for life and consider it wrong to take the life of an animal.

3.2.2 SANCTUARIES AND NATIONAL PARKS

(i) **Definitions** : One of the best methods to save a wild life species, which is on the road to extinction, is to put it in a special enclosure to reproduce. This is best illustrated by sanctuaries and national parks whose legal definition varies from country to country. A *Sanctuary* or a *National Park* may be defined “as an area, declared by statute, for the purpose of protecting, propagating or developing wild life therein, or its natural environment, for their scientific, educational and recreational value.”

The difference between a sanctuary and a national park is subtle and even confusing. Hunting without permit is prohibited and grazing or movement of cattle regulated in a sanctuary. But hunting and grazing are absolutely prohibited in a national park which may be established within or outside a sanctuary.

(ii) **Famous national park of world** : The first national park in the world, the *Yellostone National Park*, was founded in 1872 in U.S.A. Since then, about 2,000 parks have been established all over the world. These offer protection to thousands of endangered species in their natural habitats. Some parks have been created for specific and very rare endangered species to be saved from extinction. Table provides a list of some of such famous parks of the world.

(iii) **Indian sanctuaries and national parks** : At present, 19 national parks and 202 sanctuaries are scattered throughout India. They comprise a total area of about 75,000 *sq. km.*, which roughly comes to 19% of reserve forest area and 2.3% of total geographical area of the country. Sanctuaries and parks not only protect wild life but safeguard varied ecosystems, prevent soil erosion and help in recycling of wastes. Many of them are accessible to the Indian as well as foreign tourists and therefore of economic value. A glimpse of some important Indian national parks and sanctuaries is provided by the table.

Famous National Parks of World created for Specific Endangered Species

S. No.	Name of National Park	Country	Specific Endangered Animal
(1)	Alberta National Park	Congo, Africa	Mountain Gorilla
(2)	Mt. Simien National Park	Ethiopia, Africa	Abyssinian Ibex or Steinbok
(3)	Bontebok National Park	South Africa, Africa	Bontebok antelope
(4)	Everglades National Park	Florida, U.S.A.	Puma
(5)	Rifugio di Los Padres	California, U.S.A.	Californian Condor
(6)	Ordesa National Park	Spain, Europe	Steinbok of pyrenees
(7)	Bialowieska National Park	Poland, Europe	European Bison
(8)	Corbett National Park	Uttar Pradesh, India	Kashmir Stag
(9)	Dachigam National Park	Kashmir, India	Kashmir Stag
(10)	Gir National Park	Gujarat, India	Asiatic Lion
(11)	Kaziranga National Park	Assam, India	One-homed Rhinoceros
(12)	Ghana bird sanctuary (Keoladeo National Park)	Bharatpur, Rajasthan, India	Avifauna

3.2.3 WILD LIFE CONSERVATION IN INDIA

A few voluntary organizations, like the **Bombay Natural History Society** (1883) have been involved in wildlife conservation in India since last century. Most of the British officers were fond of game hunting, but a few right-thinking officers who were concerned about the need for wildlife conservation wrote books about Indian wildlife and declared certain forests as protected areas. Mild legislative steps were also taken by the British Rule in 1873. However, an earnest effort for wildlife conservation through legislation was made only after independence. In 1952, the Central Government of India constituted the **Indian Board for Wildlife (IBWL)** for advising the Government for conserving our varied and fascinating natural bounty of wildlife. Subsequently, State Wildlife boards were also constituted in several Indian states.

A comprehensive Wildlife (Protection) Act, enacted by the Central Government in 1972, provided for legal protection of our wildlife, for nationalisation of already declared reserves, for setting up of National Parks and Sanctuaries for this purpose, and for severe punishment to poachers. Another important legislative step was the **42nd Amendment in Indian Constitution** empowering the Central Government to ensure wildlife protection and to acquire forests for this purpose. Later, the Forest (Conservation) Bill of 1980 forbade deforestation of any forest for non-forestry purpose without the permission of the Central Government. In the meanwhile, India also became an important signatory to several International bodies like the **International Union for Conservation of Nature and Natural**

Resources (IUCN), the World Wildlife Fund (WWF), Food and Agricultural Organisation (FAO), etc.

In accordance with the conservation strategies recommended by the World Convention of Conservationists mentioned earlier, wildlife conservation may be *ex situ* (i.e., in artificial habitats) or *in situ* (i.e., in natural habitats).

(i) **Ex Situ Conservation In India** : Ex situ conservation requires establishment of rehabilitation centres for highly endangered species of wild animals. In accordance with the National Wildlife Action Plan (NWAP) of 1983, the activities of these centres include:

(a) to capture some individuals of concerned species from their natural habitats and bring these to the centre,

(b) to thoroughly study the feeding, breeding and other habits, and the diseases of these animals,

(c) to provide all facilities to these animals for captive breeding and healthy growth of their brood, and

(d) to release and rehabilitate the young ones of these animals after a certain safe age into their natural habitats.

Several rehabilitation centres have been established in various states all over the country during the past decade. For instance, the Uttar Pradesh Government has established a rehabilitation centre for Musk deer at Kanchula Kharak near Chamoli. Similarly, a big rehabilitation centre has been established in Kukrail forest near Lucknow with a comprehensive plan for rehabilitation of a number of wild animal types (swamp deer, chinkara, chausingha, black deer, foxes, wild dogs, jackal, wild fowls, falcon etc.) Rehabilitation of turtles and crocodiles has so far been achieved here.

(ii) **In Situ Conservation In India** : In situ conservation requires protection of wild animals in their natural habitats. Obviously, it necessitates conservation of terrestrial and aquatic natural habitats of the wild animals. These habitats are, therefore, declared as prohibited reserves. According to the degree of environmental protection afforded, we have four types of reserves in our country as follows :

(a) **National Parks (N.Ps)** : A national park is an area strictly reserved for protection and betterment of wildlife, and maintenance of the ecosystems. Hence, no private ownership rights are allowed. Cutting of trees, grazing of livestock, plantation, cultivation or habitat manipulation in any form are prohibited. These parks are notified and controlled by central legislation, but are administered by state governments. We have 77 national parks in our country covering an area of about 35 thousand square kilometres, i.e., about 1% of our country's geographical area.

(b) **Sanctuaries** : These are notified and controlled by state governments solely for the protection of wild animal fauna. Private ownership rights, harvesting of timber, collection of fodder and minor forest products, grazing of livestock etc., are therefore, allowed so long as these do not jeopardise the welfare of the animals. There are about 421 sanctuaries in different states covering over one lac square kilometres, i.e., about 3% of India geographical area.

(c) **Tiger Reserves** : Fast decreasing census of the **Royal Bengal Tiger** prompted the Indian Government in 1972 to declare the tiger as **National Animal**, and to launch a special "**Project Tiger**" to save this magnificent member of our natural bounty from extinction. The project was spearheaded in collaboration with **World Wildlife Fund (WWF)** with substantial financial help from this international body. Some of the national parks and sanctuaries were declared as special "**Tiger**

Reserves" under this project by central legislation. These reserves are controlled by state governments, but funded by both central and state governments. Each reserve has a highly protected and strictly prohibited central, **core area** of about 300 or more *sq. km.*, and a sizable, peripheral, **buffer zone** with permission of limited, conservation-oriented human activities. Originally, 9 reserves were declared, but 10 more have since been added.

Besides tigers, these reserves are also protecting other threatened species. The 19 reserves are as follows:

S. No.	Names	Location	Special characteristics
(1)	Corbett national Park	Around Ramganga river, Ramnagar, Dhikola, Distt. Nainital. U.P.	First and Finest N.P.; Richest in biodiversity of threatened species.
(2)	Manas National Park	Around Manas river, Barpeta Road, Assam,	Largest population of elephants. Hispid hare and pigmy hog are found only here.
(3)	Sunderbans National Park	Estuarine and highly saline marshy forest between Hoogly and Tetulia rivers in West Bengal.	Largest tiger population. World-famous man-eating tigers.
(4)	Palamu National Park	Around Koel river near Chhota Nagpur, Daltenganj, Bihar	Presence of tuskless male elephants is a speciality
(5)	Ranthambhor National Park	Around Aravali and Vindhyachal ranges, Sawai Madhopur, Rajasthan	Smallest tiger reserve.
(6)	Melghat National Park	Near Tapi river, Ghaurilagarh hills, Maharashtra	-----
(7)	Kanha National Park	Around Sarpan river in Kanha valley, Mandla, Distt. Belaghat, Madhya Pradesh	Swamp deers or barahsingha are the jewels of this reserve.
(8)	Bandipur National Park	Between Nagarhole, Wynad and Mudumalai parks along west coast, Karnataka	Known as best habitat for elephants.
(9)	Simlipal National Park	Around 12 rivers in Mayur Bhanj, Bihar	-----
(10)	Namdapha National Park	Around 3 hill rivers, Miao Distt. Tirap, Arunachal Pradesh	Known for rare leopards. Easternmost abods of many threatened species

(11)	Sariska National Park	Aravali range, Thana Gazi, Sariska, Alwar, Rajasthan	-----
(12)	Dudhwa National Park	Near Sohali-Neora river, Dudhwa, Lakhimpur Kheri, U.P.	Rhinoceros reintroduced and is surviving.
(13)	Buxa National Park	Near Sunkosi river and Manas tiger reserve, West Bengal	-----
(14)	Periyar National Park	Around Periyar river, Nillimpatti on Western Ghats, Kottayam, Kerala	Only abode of Nilgiri Tahr.
(15)	Indravati National Park	Around Indravati river, Bijapur, Distt Bustar, Madhya Pradesh	Ideal for wild buffalo.
(16)	Nagarjunasagar Sanctuary	Near Nagarjunasagar reservoir of Krishna river, Mallamalai Hills, Andhra Pradesh	-----
(17)	Pench National Park	Pench, Distt, Seoni, Madhya Pradesh	-----
(18)	Valmiki Sanctuary	At Indo-Nepal border to west of Gandak river, Distt. Champaran, Bihar	-----
(19)	Kallakaddu Mundanthurai Sanctuary	Near Tambaravarni river, Distt. Tirunelveli, Tamil Nadu	-----

Some Wild life sanctuaries and National parks of India

S. No.	Name and Location	Area in Sq. Km.	Important Animals found
(1)	Nagarjuna Sagar (Ikshawaka Sanctuary) Guntur, Prakasham, Kamool, Mahbubnagar & Nalgonda Distt. ANDHRA PRADESH	3568	Tiger, panther, slothbear, wild bear, nilgai, chital, sambar, black buck, jackal, fox, wolf, mugger crocodile
(2)	Pulicat (Lake) Sanctuary Nellore Distt, ANDHRA PRADESH	500	Flamingo, pelican, duck, teal, stork, crane, heron
(3)	Kaziranga National Park Sibsagar, Jorhat Distt, ASSAM	430	Rhinoceros, elephant, wild buffalo, gaur, sambar, swamp deer, hog deer, wild boar, tiger, leopard, gibbon, python, pelican, stork, florican

(4)	Manas Sanctuary Barpeta Distt, ASSAM	80	As in Kaziranga. Also wild dog, panther, golden langur, water monitor, great pied hombill
(5)	Hazaribagh Sanctuary Hazaribagh, BIHAR	186	Tiger, leopard, hyaena, wild boar, gaur, samabar, chital, nigai, peafowl
(6)	Palamau Sanctuary Daltongunj, BIHAR	980	Elephant, panthor, leopard, wild boar, barking deer, gaur, chital, sambar, peafowl
(7)	Kaimur Sanctuary Rohtas, BIHAR	1342	Tiger, leopard, chinkara, sambar, nilgai, crocodiles
(8)	Gir National park Sasan-Gir, Junagarh Distt, GUJRAT	1412	Asiatic lion, panther, striped hyaena, sambar nilgai, chital, 4-horned antelope, chinkara
(9)	Sultanpur (Lake) Bird Sanctuary Gurgaon, HARYANA	1.2	Wild boar, crocodiles, python, green pigeon Sarus crane, spot bill, ducks, ruddy shell
(10)	Dachigam Sanctuary Srinagar, JAMMU & KASHMIR	89	Snow leopard, black & brown bears, hangul, musk deer, serow.
(11)	Shikari Devi Sanctuary Mandi, HIMACHAL PRADESH	213	Black bear, panther, snow leopard, goral, barking & musk deers, serow, flying fox, monal, chir, chukor, partridge
(12)	Govind Sagar Bird Sanctuary Bilaspur, HIMACHAL PRADESH	100	Teal, ducks, goose, crane
(13)	Bandipur National Park Mysore Distt. KARNATAKA	874	Elephant, tiger, panther, wild boar, wild dog, sloth bear, gaur, barking deer, 4-horned antelope, sambar, chital, malabar squirrel, green pigeon
(14)	Periyar Sanctuary Idukki Distt. KERALA	777	Elephant, tiger, panther, wild boar, wild dog, sloth bear, gaur, nilgai, sambar, barking deer, black nilgiri langur, grey hornbill, egret
(15)	Kanha National Park Mandla & Balaghat, MADHYA PRADESH	940	Tiger, panther, wild boar, wild dog, gaur, barasingha, sambar, chital, black buck, nilgai, barking & mouse deers
(16)	Tadoba National Park Chandrapur, MAHARASHTRA	116	Tiger, panther, sloth bear, gaur, sambar, chital, nilgai, chinkara,

			crocodiles.
(17)	<i>Pench National Park</i> Nagpur, MAHARASHTRA	257	Tiger, panther, sloth bear, gaur, sambar, chital, nilgai, chinkara, barking deer, peafowl
(18)	<i>Bhitarkanika Sanctuary</i> Cuttack, ORISSA	170	Salt water crocodile, leopard, hyaena, chital, sambar, giant squirrel, water monitor king cobra, python, storks, ibis.
(19)	<i>Chilka Lake Bird Sanctuary</i> Balagaon, ORISSA	900	Flamingo, pelican, egret, ibis, cormorant crane, duck, sandpiper, curlew
(20)	<i>Simlipal Sanctuary</i> Baripad, Mayurbhanj, ORISSA	303	Tiger, leopard, elephant, wild boar, gaur, sambar, mouse deer, flying squirrel, mugger
(21)	<i>Sariska (Project Tiger)</i> Alwar, RAJASTHAN	195	Tiger, Panther, wild boar, hyaena, sambar, chinkara, nilgai, 4-horned antelope, langur
(22)	<i>Keoladeo Ghana Bird Sanctuary</i> Bharatpur, RAJASTHAN	29	Siberian crane, storks, herons, cormorant, spoon bill, egret, ibis, etc., sambar, chital, boar, python
(23)	<i>Desert National Park</i> Jaisalmer, Barmer, RAJASTHAN	3000	Great Indian bustard, black buck, chinkara
(24)	<i>Annamalai Sanctuary</i> Coimbatore, TAMILNADU	958	Elephant, tiger, panther, sloth bear, wild dog, gaur, chital, sambar
(25)	<i>Corbett National Park</i> Nainital Distt. UTTAR PRADESH	525	Elephant, tiger, panther, sloth bear, wild boar, nilgai, sambar, chital, crocodiles, python, king cobra, peafowl, partridge
(26)	<i>Jaldapara Sanctuary</i> Madarihat, WESTBENGAL	115.5	Rhino, elephant, tiger, leopard, gaur, deers, sambar, variety of birds
(27)	<i>Sajnakhal Sanctuary</i> 24-Parganas, WEST BENGAL	362	Tiger, Wild boar, chital, storks, cormorant, herons, ibis, pelican, bittern, darter
(28)	<i>Sundarbans (Tiger Reserve)</i> 24-Pargana, WEST BENGAL	2585	Tiger, Wild boar, deers estuarine crocodile, gangetic dolphin.

3.2.4 THREATENED SPECIES

Species of wild animals whose normal survival upon the earth is jeopardised due to their destruction or destruction of their habitats by human beings are called threatened species.

Threatened species in India about 81 species of wild mammals, about 30 wild birds, about 15 bird reptiles and amphibians and many invertebrates are presently on the verge of extinction. Some important animals are following.

(i) **Wild mammals** on the verge of extinction include the lion, tiger, wolves, jackals, foxes, bears, civets, loris, most species of monkeys, scaly anteater (manis), snow leopard, rhinoceros, wild ass, wild pigs, musk deer. Kashmir stag and several other species of deers, black buck and other species of antelopes, flying squirrels, dolphins, porcupine, gaur, wild sheeps and goats, Gibbon, elephant, wild buffalo, etc.

(ii) **Wild birds** of our fauna at the verge of extinction mainly include white-winged ducks, swans, falcon, sea eagle, bamboo partridge, mountain quail, Indian skimmer, painted spur fowls, hornbill, bustard, pheasant, Sarus crane, etc.

(iii) **Wild reptiles** on the verge of extinction include several species of turtles, tortoises, crocodiles, gharial, monitor lizard, and poisonous snakes and python.

(iv) **Wild amphibians** on the verge of extinction include viviparous toad and Himalayan newt.

List of some Protected Indian Wild Life

(a) Mammals			
(1)	Bharal (<i>Ovis nahura</i>)	(32)	Leopard or panther (<i>Panthera pardus</i>)
(2)	Bison or gaur or mithun (<i>Bos gaurus</i>)	(33)	Leopard cat (<i>Felis bengalensis</i>)
(3)	Black buck (<i>Antelope cervicapra</i>)	(34)	Lesser or red panda (<i>Ailurus fulgens</i>)
(4)	Capped langur (<i>Presbytis pileatus</i>)	(35)	Lion-tailed macaque (<i>Macaca silenus</i>)
(5)	Caracal (<i>Felis caracal</i>)	(36)	Loris (<i>Loris tardigradus</i>)
(6)	Chinkara or Indian Gazelle (<i>Gazella gazella bennetti</i>)	(37)	Malabar civet (<i>Viverra megaspila</i>)
(7)	Chital (<i>Axis axis</i>)	(38)	Markhor (<i>Capra falconeri</i>)
(8)	Clouded leopard (<i>Neofelis nebulosa</i>)	(39)	Musk deer (<i>Moschus moschiferus</i>)
(9)	Crab-eating macaque (<i>Macaca irus umbrosa</i>)	(40)	Nilgai (<i>Boselaphus tragocamelus</i>)
(10)	Fishing cat (<i>Felis viverrina</i>)	(41)	Nilgiri langur (<i>Presbytis johni</i>)
(11)	Flying squirrels (<i>Petaurista, Eupetaurus, Belomys, Hylopetes</i> . All species)	(42)	Nilgiri tahr (<i>Hemitragus hylocrius</i>)
(12)	Four-horned antelope (<i>Tetracerus quadricornis</i>)	(43)	Otters (<i>Lutra lutra, L. perspicillata, Aonyx cinerea</i>)
(13)	Gangetic dolphin (<i>Platanista gangetica</i>)	(44)	Pallas's cat (<i>Felis manul</i>)

(14)	Gaint squirrels (<i>Ratufa macroura</i> , <i>R. indica</i> , <i>R. bicolor</i>)	(45)	Pig-tailed macaque (<i>Macaca nemestrina</i>)
(15)	Golden cat (<i>Felis temmincki</i>)	(46)	Pigmy hog (<i>Sus sylvanius</i>)
(16)	Golden langur (<i>Presbytis geei</i>)	(47)	Red fox (<i>Vulpes vulpes</i>)
(17)	Gorals (<i>Nemorhaedus goral</i> , <i>N. hodgsoni</i>)	(48)	Rhinoceros (<i>Rhinoceros unicornis</i>)
(18)	Himalayan black bear (<i>Selenarctos thibetanus</i>)	(49)	Sambar (<i>Cervus unicolor</i>)
(19)	Himalayan brown bear (<i>Ursus arctos</i>)	(50)	Sloth bear (<i>Melursus ursinus</i>)
(20)	Himalayan ibex (<i>capra ibex</i>)	(51)	Slow loris (<i>Nycticebus coucang</i>)
(21)	Himalayan crestless porcupine (<i>Hystrix hodgsoni</i>)	(52)	Snow leopard (<i>Panthera uncia</i>)
(22)	Himalayan tahr (<i>Hemitragus jemlahicus</i>)	(53)	Swamp deer or gond (<i>Cervus duvauceli</i> , all species)
(23)	Hispid hare (<i>Caprolagus hispidus</i>)	(54)	Tibetan antelope or chiru (<i>Panthelope hodgsoni</i>)
(24)	Hoolock or gibbon (<i>Hylobates hoolock</i>)	(55)	Tibetan fox (<i>Vulpes ferrilatus</i>)
(25)	Hyaena (<i>Hyaena hyaena</i>)	(56)	Tibetan gazelle (<i>Procapra picticaudata</i>)
(26)	Indian elephant (<i>Elephas maximus</i>)	(57)	Tibetan wild ass (<i>Equus hemionus kiang</i>)
(27)	Indian lion (<i>Panthera leo persica</i>)	(58)	Tiger (<i>Panthera tigris</i>)
(28)	Indian pangolin (<i>Manis crassicaudata</i>)	(59)	Wild buffalo (<i>Bubalus bubalis</i>)
(29)	Indian wild ass (<i>Equus hemionus khur</i>)	(60)	Wild dog or dhole (<i>Cuon alpinus</i>)
(30)	Indian Wolf (<i>Canis lupus</i>)	(61)	Wild pig (<i>Sus scrofa</i>)
(31)	Kashmir stag or hangul (<i>Cervus elaphus hanglu</i>)	(62)	Wild yak (<i>Bos grunniens</i>)
	(b) Reptiles		(c) Birds
(1)	Estuarine crocodile (<i>crocodilus porosus</i>)	(1)	Cheer pheasant (<i>Catreus wallichii</i>)
(2)	Gharial (<i>Gavialis gangeticus</i>)	(2)	Great Indian bustard (<i>Choriostis nigriceps</i>)
(3)	Leathery turtle (<i>Dermochelys coriacea</i>)	(3)	Great Indian hornbill (<i>Buceros bicornis</i>)
(4)	Marsh crocodile (<i>Crocodilus palustris</i>)	(4)	Jerdons's courser (<i>Cursorius bitorquatus</i>)
(5)	Monitor lizards (<i>Varanus griseus</i> , <i>V. bengalensis</i> , <i>V. flavescens</i> , <i>V. salvator</i> ,	(5)	Large falcons (<i>Falco peregrinus</i> , <i>F.</i>

	<i>V. nebulosus</i>)		<i>biarmicus, F. chicquera</i>)
(6)	Pythons (<i>Python molurus, P. reticulatus</i>)	(6)	Mountain Quail (<i>Oppassia superciliosa</i>)
		(7)	Peafowl (<i>Pavo cristatus</i>)
		(8)	Pink-headed duck (<i>Rhodonessa caryophyllacea</i>)
		(9)	Sclater's monal (<i>Lophophorus sclateri</i>)
		(10)	Siberian white crane (<i>Grus leucogeranus</i>)
		(11)	Tragopan pheasants (<i>Tragopan species</i>)

ASSIGNMENT

WILD LIFE CONSERVATION

Basic Level

1. The famous 'Chipko Movement' was started by
(a) Bahuguna (b) Rajeev Gandhi (c) Indira Gandhi (d) Salim Ali
2. When did famous 'Bhopal Disaster' occurred in India
(a) 1956 (b) 1984 (c) 1980 (d) 1986
3. Which Indian state has named all its tourist resorts after different birds
(a) Assam (b) Kerala (c) Andhra Pradesh (d) Haryana
4. 'Central Public Health Engineering Research Institute' is situated at
(a) Delhi (b) Bombay (c) Nagpur (d) Bihar
5. The largest Indian poisonous snake is
(a) Python (b) Krait (c) Cobra (d) Sea snake
6. Most serious threat to wild life comes from
(a) Introduction of exotic species (b) Over exploitation
(c) International trade (d) Habitat destruction
7. Gir forests are home for
(a) Elephant (b) Tiger (c) Lion (d) Leopard
8. "Red data book" is a record of extinct
(a) Plants (b) Animals
(c) Both plants and animals (d) All plants and animals that are fossils
9. The species inhabiting different geographical areas are
(a) Allopatric (b) Sympatric (c) Morphospecies (d) Sibling species
10. 'Central Ganga Water Pollution Board' was established in
(a) 1982 (b) 1985 (c) 1987 (d) 1989
11. Which animal is symbol of 'World Wide Fund for Nature'
(a) Red panda (b) Polar bear (c) Lion (d) None of these
12. 'World Environment Day' is on
(a) 5th June (b) 6th July (c) 10th August (d) 2nd October
13. National bird of India is
(a) Hornbill (b) Black swan (c) Peacock (d) House sparrow
14. What is the generic name of Indian peacock
(a) *Pavo cristatus* (b) *Milvus migrans* (c) *Paradise flycatcher* (d) *Parser domesticus*

15. Wild life conservation means the protection and preservation of
(a) Ferocious wild animals only (b) Wild plants only
(c) Non-cultivated plants and non-domesticated animals
(d) All the above living in natural habitat
16. Why it is necessary to conserve the wild life
(a) To protect the destroying wild animals (b) To protect the ecosystem
(c) To safe guard the environment of earth (d) All of the above
17. Which of the following is an anti-forest conservation activity
(a) Tree falling (b) Preservation of wild animals
(c) Economy in timbering (d) Prevention of fires
18. Which step is required for better survival of human beings
(a) Conservation of wild life (b) Afforestation
(c) Ban on mining (d) Reduced utilization or resources
19. What is the major cause of diminishing wild life number
(a) Cannibalism (b) Habitat destruction (c) Falling of trees (d) Paucity of drinking water
20. Which of the following is mainly responsible for the extinction of wild life
(a) Hunting for flesh (b) Destruction of habitats
(c) Pollution of air and water (d) All of these
21. Which animals is commonly depicted as a symbol of fertility in many ancient religion of the world
(a) Cat (b) Dog (c) Bull (d) Tiger
22. Which bird is symbol of 'Bombay Natural History Society'
(a) Horn bill (b) Egret (c) Spoon bill (d) Sun bird
23. Identify the incorrect statement among the following statements on the effects of deforestation
(a) It destroys the natural habitat of wild animals (b) It alters the local weather patterns
(c) It speeds up nutrient recycling (d) It leads to soil erosion
24. The most important human activity leading to the extinction of wildlife is
(a) Alternation and destruction of the natural habitats
(b) Hunting for commercially valuable wild life products
(c) Pollution of air and water
(d) Introduction of alien species

25. New '*Wild Life Protection Act*' was passed in
(a) 1962 (b) 1972 (c) 1982 (d) 1987
26. At a time, a lioness usually gives birth to
(a) One cub (b) Two cubs (c) Three cubs (d) Four cubs
27. Whales when washed ashore will die because
(a) Their body temperature will increase
(b) They cannot respire
(c) Their skin will crack
(d) Their bones will be crushed because of the weight of the body
28. Which of the following has become extinct in India
(a) Lion (b) Tiger (c) Two horned *Rhino* (d) Dodo
29. Which of the following bird has gained importance as wild life in recent years
(a) Pheasant (b) Egret (c) Indian Bustard (d) Pelican

PROTECTED INDIAN WILD LIFE

Basic Level

30. Which of the following types of animals does man chiefly protect
(a) Harmless animals (b) Economically (c) Those likely to perish (d) Feeble animals
31. Animals species should be preserved mainly because
(a) They are lovely creatures
(b) They are useful to mankind
(c) Man cannot recreate a species of animals if it be destroyed
(d) Zoologists want to study them
32. Which one of the following is a refuge for Asiatic lion (*Panthera leo persica*)
(a) Kanha National Park (M.P.) (b) Corbett National Park (U.P.)
(c) Kaziranga National Park (Assam) (d) Gir Forest (Gujarat)
33. The percentage of living species in danger is
(a) 10 (b) 20 (c) 30 (d) 40
34. The number of vertebrate species facing extinction is about
(a) 10 (b) 100 (c) 1000 (d) 10000
35. In a biosphere reserve, limited human activity is permitted in
(a) Core zone (b) Buffer zone (c) Manipulation zone (d) None of these
36. When was 'Man and the Biosphere' programme launched by the UNESCO
(a) 1971 (b) 1975 (c) 1981 (d) 1986

37. Corbett national park is in
(a) Uttar Pradesh and is famous tiger (b) Rajasthan and is home for black buck
(c) Punjab and is home for antelopes (d) Himachal Pradesh and is famous for birds
38. Which is the first national park established in India
(a) Bandipur national park (b) Corbett national park
(c) Kanha national park (d) Periyar national park
39. Nandan-kanan zoo is known for the
(a) Hippopotamus (b) Nilgiri Tahr (c) White tiger (d) Whale
40. Lions in India are now found in
(a) The forest of western ghats (b) Gir forest
(c) The forests of Madhya Pradesh (d) Jim Corbett national park
41. In which state is the Kanha National Park
(a) Rajasthan (b) Uttar Pradesh (c) Madhya Pradesh (d) Assam
42. Ranthombar is a sanctuary in
(a) Uttar Pradesh (b) Andhar Pradesh (c) Bihar (d) Rajasthan
43. Kaladeo sanctuary is well known for
(a) Birds (b) Mammals (c) Reptiles (d) Fishes
44. Khaziranga wild life sanctuary is famous for
(a) Tiger (b) Musk deer (c) Elephant (d) Rhino
45. The Ranthambore National Park is located in
(a) Maharashtra (b) Uttar Pradesh (c) Gujarat (d) Rajasthan
46. Kanha National Park is famous for
(a) Birds (b) *Rhinoceros* (c) Tigers (d) Crocodiles
47. The number of national parks in India is
(a) 56 (b) 69 (c) 76 (d) 86
48. Rajaji National Park is situated in
(a) Tamil Nadu (b) Karnataka (c) Uttranchal (d) Rajasthan
49. 'Project Tiger' in India was started in
(a) 1970 (b) 1972 (c) 1981 (d) 1985
50. Which one of the following is the matching pair of a sanctuary and its main protected wild animal
(a) North-Eastern Himalayan Region-Sambhar (b) Sunderban-*Rhino*
(c) Gir-Lion (d) Kaziranga-Musk deer
51. Identify the correct match between 'tiger reserve' and its state
(a) Corbett-Madhya Pradesh (b) Palamau-Orissa
(c) Manas-Assam (d) Bandipur-Tamil Nadu
52. Bandipur in Karnataka state is the site of
(a) The tiger project (b) The deer project
(c) The peacock project (d) The elephant project

53. Flamingoes reproduces in
 (a) Chilka lake (b) Sambhar lake (c) Kutch (d) Mansarovar
54. Which one of the following pair is correctly matched to the wild life and national park
 (a) Rann of Kutch-Wild ass (b) Gir forest-Tiger
 (c) Manas-Elephant (d) Corbett park-Asiatic lion
55. A well known bird sanctuary of our country is situated at
 (a) Bandipur (b) Kaziranga (c) Palamu (d) Bharatpur
56. Khaziranga wild life sanctuary is located in
 (a) Uttar Pradesh (b) Gujarat (c) Jammu and Kashmir (d) Assam
57. Dudhawa National Park is located in
 (a) Madhya Pradesh (b) Himachal Pradesh (c) Arunachal Pradesh (d) Uttar Pradesh

PROTECTED INDIAN WILD ANIMALS

Basic Level

58. The bird '*Dodo*' became extinct because of
 (a) Its beautiful feathers (b) Its fearlessness (c) Its curved beak (d) Its melodious songs
59. Which of the following birds have become extinct recently
 (a) Carolina Parakeet (b) Atitlan Grebe (c) Kirtland Warbler (d) Reed Bunting
60. Elephant is an inhabitant of hot climate. This is suggested by
 (a) Huge size (b) Fleshy feet (c) Almost hairless skin (d) Small eyes
61. Indian elephant is
 (a) *Elephas maximus* (b) *Elephas africana* (c) *Loxodonta* (d) *Loxodonta indicus*
62. The species which are very few in number in the world are known as
 (a) Living fossils (b) Endangered (c) Threatened (d) Rare
63. Endangered, vulnerable and rare animals are known as
 (a) Living fossils (b) Protected species (c) Threatened species (d) None
64. The biological name of domestic cat is
 (a) *Panthera domestica* (b) *Felis domestica* (c) *Felis leo* (d) *Panthera indica*
65. Which of the following animal has become almost extinct in India
 (a) Wolf (b) Rhinoceros (c) Hippopotamus (d) Cheeta
66. Hippopotamus is found in
 (a) America (b) Africa (c) Asia (d) Australia
67. Hippopotamus is found in
 (a) Amazon river (b) Nile river (c) Ganges river (d) Darling river
68. Which monkey has prehensile tail
 (a) Spider monkey (b) Semnopithecus (c) Rhesus monkey (d) Bonnet monkey

69. Now-a-days rhino is present in
(a) Asia (b) Africa (c) America (d) Africa and Asia
70. The animals which are in danger of extinction of which is also possible are known as
(a) Threatened (b) Vulnerable (c) Endangered (d) Rare
71. The species which may become the endangered category are known as
(a) Vulnerable (b) Threatened (c) Rare (d) Living fossils
72. In nature, which of the following animals has the power of killing the snakes
(a) Falcon (b) Peacock (c) Squirrel (d) Pangolin
73. In India, commonly available Rhesus monkey is
(a) *Macaca mulatta* (b) *Alouatta* (c) *Ateles paniscus* (d) *Ateles geoffroyi*
74. The lion tailed monkeys '*Malaca Malaca Silenus*' are found only in these regions
(a) Khaziranga and other parts of Assam (b) Eastern ghats and Madras
(c) Western ghats including Travancore-Mysore (d) Himalayan mountains
75. In India the rhinoceros is the most important protected species in
(a) Dachigam National Park (b) Kaziranga National Park
(c) Sunderbans National Park (d) Dudhwa National Park
76. The leopard or 'tendwa' is zoologically named as
(a) *Panathera tigris* (b) *Panthera leo* (c) *Panthera uncia* (d) *Panthera pardus*
77. In elephants the tusks are
(a) Incisors (b) Canines (c) Premolars (d) Molars
78. Which one of the following monkeys shows branchiation
(a) Jumping monkey (*Aotus*) (b) Typical monkey (*Cebus*)
(c) Spider monkey (*Ateles*) (d) Rhesus monkey (*Macaca*)
79. While at ease, some monkeys spend their some time for searching something in each others fur which they eat up. Actually they search for
(a) The ticks attached to body fur (b) The body lice
(c) The salt granules that deposit when perspiration dries up
(d) The dust particles which entangled with fur
80. Elephant has very few hairs while bear has a thick fur because the bear
(a) Has much more natural enemies (b) Has not been domesticated
(c) Lives in cold climate (d) Has to regulate body temperature more accurately
81. Source of 'Ivory' is
(a) Tusks of elephant (b) Bones of whale (c) Antlers of deer (d) Bones of elephant

82. In India, wild ass (*Asinus hemionus*) is found in
(a) Garhwal Himalayas (b) Thar desert (c) Plateau of Ladakh (d) Rann of Kutch
83. At present, the lions (*Panthera leo*) are found only in
(a) Africa (b) India (c) Both India and Africa (d) Zoos
84. A tiger think twice before attacking this animals, even though it is alone. Which is it
(a) Nilgai (b) Wild dog (c) Wild Buffalo (d) Chital
85. Which monkey is active during the night and rest during the day
(a) Lion tailed Macaque (b) Nilgiri langur (c) Bonnet Macaque (d) Gorilla
86. Which group of vertebrates comprises the highest number of endangered species
(a) Birds (b) Mammals (c) Fishes (d) Reptiles
87. Giraffe is common animal of
(a) Desert (b) Savanna (c) Rain forest (d) Praire
88. The first white tiger in the world was found in
(a) Gir in Saurashtra (b) Rewa in Madhya Pradesh
(c) Sunderban in Bengal (d) Corbett National Park
89. Red Data Book is produced by
(a) IBWL (b) WWF (c) IUCN (d) ZSI
90. Which is true for National parks
(a) Tourism is allowed in buffer zone (b) No human activity is allowed
(c) Hunting allowed in core zone (d) Cattle grazing is allowed in buffer zone
91. Similipal is a
(a) National Park (b) Sanctuary (c) Biosphere reserve (d) Zoo
92. Which is correct about white tiger
(a) White tiger is recessive mutant (b) It is a part of subspecies of Indian tiger
(c) It is a type of albino (d) It is a transgenic animal
93. Which one of the following is a pair of endangered species
(a) Garden lizard and mexican poppy (b) Rhesus monkey and sal tree
(c) Indian peacock and carrot grass (d) Hornbill and Indian Aconite
94. If the Bengal tiger becomes extinct
(a) Hyenas and wolves will become scarce
(b) The wild area will be safe for man and domestic animals
(c) Its gene pool will be lost for ever
(d) The population of beautiful animals like deers will get stablized

ANSWER

ASSIGNMENT (BASIC & ADVANCE LEVEL)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
a	b	d	c	c	d	c	c	a	a	a	a	c	a	d	d	c	d	b	d
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
c	b	c	a	b	b	d	c	c	c	b	d	a	c	b	d	a	b	b	b
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
c	d	a	d	d	c	b	c	b	c	c	a	a	a	d	d	d	a	a	c
61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
a	d	c	b	d	b	b	a	d	c	a	b	a	c	b	d	a	c	c	c
81	82	83	84	85	86	87	88	89	90	91	92	93	94						
a	d	c	c	d	b	b	c	c	b	a	a	d	c						
