

# ANNUAL ACTIVITY REPORT

## 2023-24

**NANDANKANAN BIOLOGICAL PARK**  
**BHUBANESWAR, ODISHA**



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## **1. Report of the Officer-in-charge**

As its name signifies, Nandankanan is indeed a veritable Garden of Gods. With the largest animal collection of any zoo, this Zoological Park is recognized as one of the best zoos in India and is the only large zoo of the State. Established on 29th December 1960, Nandankanan over the years has witnessed significant improvements in providing the highest standards in housing, husbandry and health care to its denizens and a fascinating experience to its visitors. It enjoys a special place in the wildlife conservation annals of our country for its inimitable amalgamation of in-situ and ex-situ conservation initiatives. It is worth mentioning that the forested landscape encompassing the Zoological Park, Kanjia lake and State Botanical Garden has been declared as Nandankanan Wildlife Sanctuary, spread over an area of 4.37 sq.km on 3rd August, 1979. The sprawling zoo houses about 4300 plus individuals belonging to 165 species of mammals, reptiles, birds and amphibians. Further, the Nandankanan Sanctuary is home to a rich assemblage of wild flora and free-living wildlife. The State Botanical Garden which spreads over an area of 75 ha adjoining the Zoological Park is one of the most important plant conservation facilities in the State with more than 750 species of plants having been documented. There are two important wetlands namely Kanjia lake (66 ha) and Kiakani lake (25 ha) in Sanctuary. The former is the main water source for Nandankanan Zoological Park and State Botanical Garden. It supports a rich diversity of flora and fauna and is an ideal site for spreading awareness and education for conserving wetlands. Therefore, it has been listed as a Wetland of National importance by the Ministry of Environment, Forests and Climate Change, Government of India in the year 2006.

As the head of Team Nandankanan, it is my pleasure to inform you that we have completed another outstanding year of biodiversity conservation, zoo management, research and education. Nandankanan has been very popular, as always, among tourists and local inhabitants and has attracted 3.9 million visitors during the year 2023-24 and has earned revenue of more than Twenty One crores. Significant improvements were achieved in the infrastructure development, animal collection, care of rescued and infant animals, health care, fodder production and conservation research. The notable species which were born during the current year includes Sloth bear, Mouse deer Blackbuck, Hog deer, Stump-tailed macaque, Swamp deer, Jackal, Assamese macaque, Manipuri deer, Four-horned antelope, Asiatic lion, Indian grey wolf, Sambar, Hippopotamus, Black kite, Painted stork, Grey pelican, Indian peafowl, Alexandrine parakeet, Night heron, Mandarin duck, Ratel, Indian hare, Common palm civet, Emu, Mugger, Red jungle fowl, Leopard cat, Indian fox, Squirrel monkey etc. Adding to its expertise in neo-natal care and hand-rearing of abandoned baby animals, the Zoo successfully reared very young babies of Hill Mynah (4 nos), Four horned Antelope (1 no), Ratel cubs (2 nos), Elephant calves (2 nos) and Lion cubs (2 nos) during the period. During the financial year 2023-24, we have welcomed 46 animals of 14 species to the zoo in animal exchange programme with an objective of infusion of new blood line to the existing stock and also addition of new species to the zoo collection.

During the year, many enclosures and visitor facilities were added which includes Wallaby enclosure, Hoolock gibbon enclosure, Quarantine unit for Indian pangolin, Back kraal for small mammal sections, Whats app based ticketing for visitors, up gradation of visitor roads, Ropeway facility, Drinking water fountains, Development and beautification of Lily pool at Multi Level Car Parking facility, New quarters for Foresters and Forest Guards, Deweeding of Kanjia lake, Up gradation of Conference Hall, Bambusetum and Hydrophyte Aquarium at State Botanical Garden have significantly enhanced the park's ecological and aesthetic value.

As a commitment to in-situ conservation, during 2023-24, It was heartening that the natural breeding of Gharial occurred for the third consecutive year at Satkosia Gorge, the project implementation site. On 24th May 2023, 35 Gharial hatchlings hatched at the same nest from the same mother as the previous year. Community awareness activities were prioritized to protect gharials and their hatchlings by the field researchers in addition to daily monitoring of gharials.

Research is in the DNA of Nandankanan. Following the long-term commitment to scientific contribution, three research papers in various national and international journals were published on numerous aspects of ex-situ conservation and managing captive wild animals. Significant enhancements of the Zoo Laboratory have taken place.

As regards healthcare, the Zoo Hospital has witnessed a tremendous upgradation of facilities during the last year. The highest standards of health care and animal husbandry practices have resulted in a reduced annual death rate in 2023-24. This was possible due to sincere efforts by our Zoo veterinarians, cooperation from the College of Veterinary Sciences and Animal Husbandry, OUAT, Bhubaneswar, and valuable advice and guidance from the Health Committee and Technical Committee on important health care issues.

Many zoo education and citizen science programmes including Celebration of World Environment Day, World Crocodile Day, International Tiger Day, Cheetah Awareness Week, Vanmahotsav, World Elephant Day, 69<sup>th</sup> Wildlife Week, World Wetland Day, World Pangolin Day and World Wildlife Day were organized during the year 2023-24. Nandankanan has started promoting Citizen Science (the voluntary involvement of the public in scientific study) in a big way. Various programs include Sunday Bird Walk, Great Backyard Bird Count, Odisha Birders Conclave, Tree Walk, Butterfly and Moth Watch, Nature Trail Walks and Herp Walks were conducted at regular intervals. Twelve interns completed their internship work and contributing to our research efforts

Needless to say, all this could not have been achieved but for the sincere efforts of all members of Team Nandankanan, and I would take this opportunity to thank them all - our dedicated staff, members of various technical and advisory committees and senior officers.

I am optimistic that with their hard work and sound advice, aided by the constant guidance of the Chief Wildlife Warden, we will continue to build upon our impactful legacy and forge ahead with our vision to place Nandankanan in the list of world-class zoos.

**Dr. Manoj V. Nair, IFS**  
**Director, Nandankanan Biological Park**

## **2. History of the Zoo**

For a zoo that is the envy of others now, the birth and evolution of Nandankanan is a fascinating story that needs recounting. Many people will be surprised to know that it was never planned as a zoo in the first place and came into existence purely by a curious interplay of circumstances. So here goes the interesting story:

A motley collection of animals and birds sourced from various parts of the state were put together by the Odisha government for the World Agricultural Fair organized in New Delhi in January-February, 1960. The collection included two spotted deer, two barking deer, two blackbucks, a mouse deer, a leopard cat, a flying squirrel, an racket tailed drongo, a hornbill, two parrots, two hill mynahs, a peacock, a mongoose, a pangolin, two porcupines, a pair of wild boars and a python. Having played their part at the Fair, the animals and birds were brought back to the state in May and put up for public display at a temporary location near the Khandagiri-Udaygiri hills on the outskirts of Bhubaneswar. But soon, water scarcity emerged as a major problem for their continued stay in the area. It was the search for an alternative site for the animals and birds which ultimately led to the birth of what is now known as ‘Nandankanan’.

Once the decision was taken to establish a zoo, the search for a suitable site with a perennial source of water began in right earnest. After several rounds of deliberations with senior officials of the Forest department, the then Chief Minister Dr Hare Krushna Mahatab and Development minister Dr Radhanath Rath finally settled on a stretch of forest in the then famous Chandaka forest, which had a good natural water body called Kanjia lake. The site had the added advantage of being close to the Barang Railway Station. The present day Nandankanan zoo was established with parts of the Jujhagarh and Krushnanagar Demarcated Protected Forest (DPFs). Construction activities were taken up over a very small area to house the animals.

On 29<sup>th</sup> December, 1960, Sri S.K. Patil, the then Union Minister for Food and Agriculture, inaugurated the new Biological Park named “Nandankanan”, which literally means ‘Heavenly Garden’. A Botanical Garden came up close to the park on the other side of Kanjia lake in 1963. The park, along with the adjoining forests, has been notified as Nandankanan Wildlife Sanctuary vide Notification No. 8F(WL)-160/78-20672/FFAH dated 3<sup>rd</sup> August, 1979 of the erstwhile Forest, Fisheries & Animal Husbandry Department, Government of Orissa and published in the Official Gazette vide S R O No.935/79 dated 3<sup>rd</sup> August, 1979. The Nandankanan Biological Park was renamed as Nandankanan Zoological

Park in the 1980s as per the recommendation of the Orissa Legislative Assembly Committee on Estimates, 1981-82.

The zoo evolved steadily with the addition of new animals and enclosures at regular intervals. The first tiger, along with a pair of African lions, a puma and a pair of muggers, were brought to the zoo from the Alipore Zoo in Calcutta during the All India Congress Committee session at Bhubaneswar in 1964. In 1967, the first open air tiger enclosure was constructed in the zoo. It surprised everybody when the last surviving tigress in the Chandaka forest was lured into this enclosure, where a male tiger “Pradeep” was already housed, on the 04<sup>th</sup> January, 1967. She was named “Kanan” by the zoo officials. Proximity to wilderness had earlier led to another interesting incident in 1964 when a courting wild tusker kidnapped a cow elephant from the zoo. The cow elephant, however, returned to its enclosure later.

Nandankanan achieved a rare distinction with the first-ever breeding of the Gharial in captivity with a full-grown male gharial brought from the Frankfurt zoo on breeding loan in a naturalistic pool created for the purpose. It was a miracle of sorts when as many as 24 hatchlings hatched in the gharial pool on 7<sup>th</sup> May, 1980. Earlier the same year, two normal coloured tigers ‘Deepak’ and ‘Ganga’ had given birth to three white off springs named ‘Debabrata’, ‘Alaka’ & ‘Nanda’ on 8<sup>th</sup> January, creating history in the process. With this, Nandankanan created its own family of white tigers and a separate gene pool.

In the years that followed, the park forged ahead in its developmental activities with the advice and guidance of the Nandankanan Development Board to become a leading zoo in the country with a wide variety of animals housed in a near natural environment. On 20<sup>th</sup> January, 1984, a Lion safari over an area of 20 ha. was inaugurated inside the zoo premises. In 1991 came the first White Tiger safari spread over 12 ha. Two more safaris - namely Herbivore safari (21ha) and Bear safari (5 ha) - were established in 2011 and 2012 respectively.

The zoo has bred innumerable of species of animals, birds and reptiles, many of them designated endangered as per the Wildlife Protection Act, 1972. They include tigers (normal coloured, white and melanistic), leopards (black & normal), Asiatic lion, all the three types of Indian crocodiles, Indian tiger, elephant, lion-tailed macaque, Nilgiri langur, Indian peafowl, Indian pangolin, Thamin deer, Ratel, Black kite, Water monitor lizard, Gaur and many others.

The steady growth of the park was accompanied by a matching enhancement of facilities for the visitors. A toy train donated by the Ministry of Railways, Government of India was introduced in the park on 10<sup>th</sup> August, 1971. A ropeway linking the zoological park with the botanical garden has been in operation since the 1<sup>st</sup> of October, 1994. An aquarium was dedicated to the visitors by the Honourable Chief Minister, Odisha on 4<sup>th</sup> February, 2008.

Several other amenities like electronic entry gate, battery operated vehicles, RO drinking water kiosk, interpretation centre, zoo museum, live feed rearing centre etc. were added or renovated for better management of animals and visitors.

In the six decades since its inception, the first zoo in the state has grown into one of the premier Zoos of the country.

### **3. Vision:**

To achieve global standards in all aspects of management become a truly World-class zoo by the next decade, and thereby to significantly contribute in conserving our country's biodiversity.

### **4. Mission**

To plan and implement best practices in captive animal welfare and health care, enclosure design and display, aesthetics and visitor amenities, education and outreach, research and conservation, technology and teamwork so as to foster the people-nature connect and transform the zoo to a global leader in ex-situ conservation.

### **5. Objective**

- To leverage the unique juxtaposition of natural wetlands, lakes and forests as well as favourable location inside a wildlife sanctuary and make Nandankanan an unparalleled example of seamless synergy between ex-situ and in-situ conservation.
- To retain and augment the USP of being a “Green Zoo” by increasing the forest cover so as an important green lung to the fast growing urban population of the twin cities of Bhubaneswar and Cuttack.
- To cater to the recreational needs of people and strengthen the people-wildlife connects by providing an immersive experience through large naturalistic and enriched enclosures and modern thematic exhibits.
- To build upon and consolidate the excellent reputation for animal health care, rescue and rehabilitation, cutting edge research and documentation, effective practices in conservation breeding, thereby contributing immensely to endangered species conservation in the State and the Country.
- To function as a hub for nature and environmental education in Odisha, especially her young citizens and foster in them a love for Nature, Wildlife and its Conservation.
- To keep innovating and add to first-of –its kind initiatives such as Captive Fodder Farm, Slaughterhouse, Live Feed Rearing Centre.

## **6. About us:**

### **S.No. Particulars**

### **Information**

#### **Basic Information about the Zoo**

|    |                                       |   |
|----|---------------------------------------|---|
| 1  | Name of the Zoo                       | Nandankanan Zoological Park   |
| 2  | Year of Establishment                 | 1960  |
| 3  | Address of the Zoo                    | Nandankanan Zoological Park,<br>Barang, Bhubaneswar - 754005  |
| 4  | State                                 | Odisha  |
| 5  | Telephone Number                      | +91-674 2547850   |
| 6  | Fax Number                            | +91-674 2547840   |
| 7  | E-mail address                        | <a href="mailto:nandankanzoo@yahoo.com">nandankanzoo@yahoo.com</a>  |
| 8  | Website                               | <a href="http://www.nandankanan.org">www.nandankanan.org</a>  |
| 9  | Distance from nearest                 | Airport: 18Km<br>Railway Station: 2Km<br>Bus Stand: 1Km   |
| 10 | Recognition Valid upto (Date)         | 19.08.2023  |
| 11 | Category of zoo                       | Large   |
| 12 | Area (in Hectares)                    | 362.1 ha.   |
| 13 | Number of Visitors (Financial Year)   | 3918720   |
| 14 | Visitors' Facilities Available in Zoo | <ul style="list-style-type: none"><li>• Multi-Level Car Parking</li><li>• Drinking water kiosks with RO facility</li><li>• Free toilets at convenient locations</li><li>• Special toilets, wheel chairs &amp; ramps for differently abled persons</li><li>• Rest areas / sit-outs / visitors' shed at</li></ul> |

**S.No. Particulars****Information**

various locations.

- Tourist cottages
- Restaurant Snacks bar & Cafeteria (run by OTDC)
- Free cloak room near the entrance gate
- Perambulator for children
- First-aid (at zoo hospital, observatory & administrative office)
- Zoo Library & Digital Hub
- Emission free battery operated vehicles
- Guide maps
- Publications
- Nature shop (Souvenir shop)
- Children Park
- Baby care centre

15 Weekly Closure Day of the Zoo

Monday

**Management Personnel of the zoo**

16 Name with designation of the Officer in-charge

Dr Manoj V. Nair, Director

Name of the Veterinary Officer

Dr Sarat Kumar Mishra

Name of the Curator

Dr Rashmi Ranjan Swain

Name of the Biologist

Dr Rajesh Kumar Mohapatra

Name of the Education Officer

Mr Milan Kumar Panda

Name of the Compounder

Mr Pradeep Kumar Nandi

Mr Beda Prakash Sahoo

**Owner / Operator of the Zoo**

17 \*Name of the Operator

Government of Odisha, Forests  
Environment and Climate Change  
Department

Address of the Operator

Additional chief secretary to Govt, Forests  
Environment and Climate Change Dept,

| S.No. | Particulars                              | Information  |
|-------|--|--|
| 19    | Contact details/Phone number of Operator | Odisha<br>0647-2536822                               |
| 20    | E-mail address of Operator               | <a href="mailto:efsec.od@nic.in">efsec.od@nic.in</a> |

\* Rule 2(m) of the Recognition of Zoo Rules, 2009.

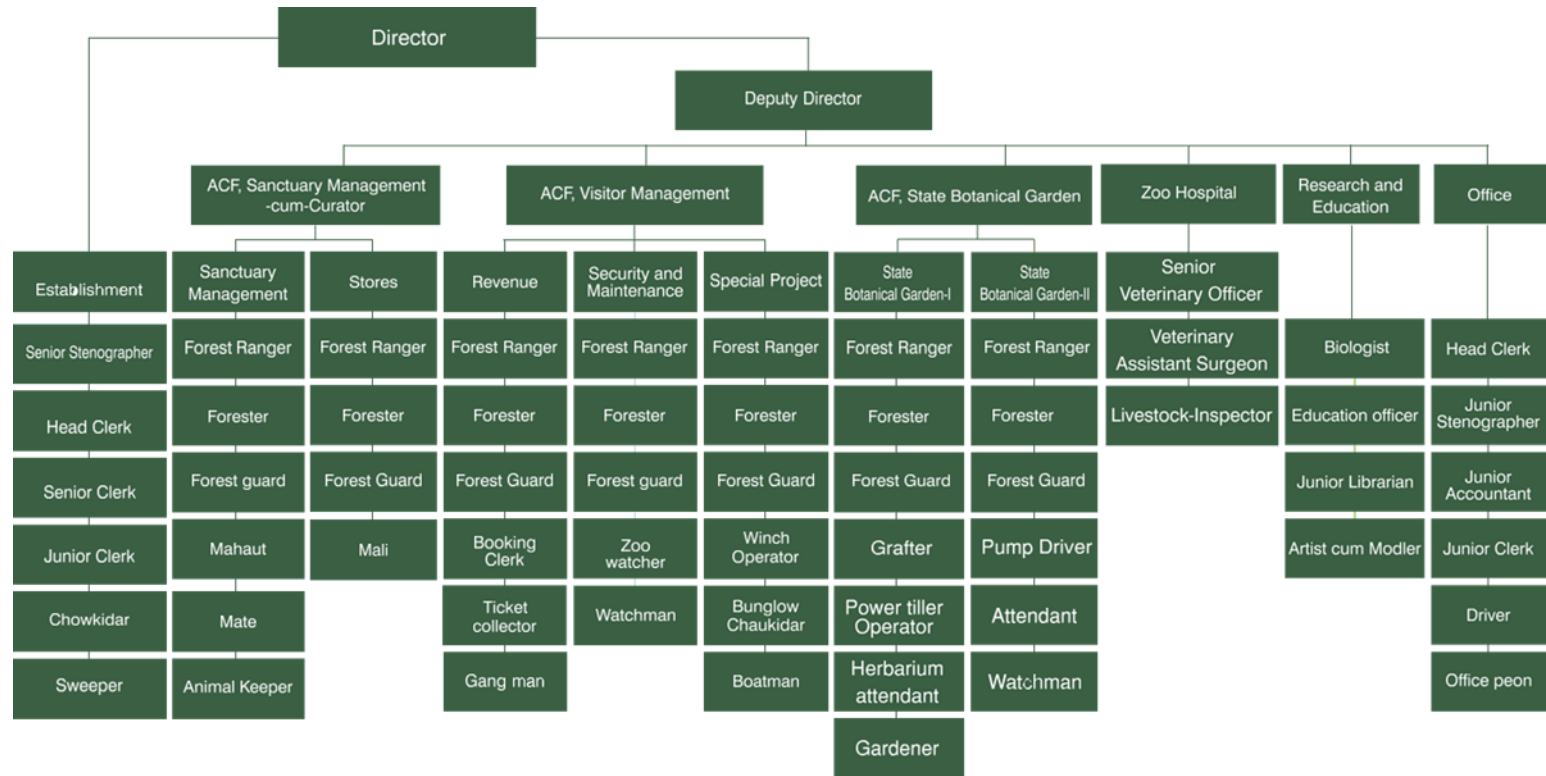
*“Zoo Operator” means the person who has ultimate control over the affairs of the zoos provided that \_\_\_\_\_*

*I. in the case of a firm or other association of individuals, any one of the individual partners or members thereof; or*

*II. in the case of a company, any director, manager, secretary or other officer, who is in-charge of and responsible to the company for the affairs of the zoo; or*

*III. In case of zoo owned or controlled by the Central Government or any State Government or Union Territory Administration or any Trust or Society funded by the Central Government or a State Government or a Union Territory Administration, the Secretary of the concerned Department of that Government, or as the case may be the Union Territory Administration, shall be deemed to be the Zoo Operator.*

## 7. Organizational Chart



## **8. Human Resources:**

### **(A) Director's office in Mayur Bhawan, Bhubaneswar**

| <b>Sl. No.</b> | <b>Designation</b>  | <b>Number of Sanctioned Posts</b> | <b>Number of the incumbent</b> |
|----------------|---------------------|-----------------------------------|--------------------------------|
| 1              | Director            | 1                                 | 1                              |
| 2              | D.C.F.              | 1                                 | 0                              |
| 3              | Senior Stenographer | 1                                 | 0                              |
| 4              | Senior Assistant    | 4                                 | 4                              |
| 5              | Junior Assistant    | 4                                 | 1                              |
| 6              | Driver              | 1                                 | 0                              |
| 7              | Office Peon         | 1                                 | 1                              |
| 8              | Office Sweeper      | 1                                 | 0                              |
| 9              | Office Chowkidar    | 1                                 | 0                              |
| 10.            | Watchman            | 1                                 | 1                              |
|                | <b>TOTAL</b>        | <b>16</b>                         | <b>8</b>                       |

### **(B) Deputy Director's Office, Nandankanan Zoological Park**

| <b>Sl. No.</b> | <b>Name of each category of post.</b> | <b>Sanctioned strength.</b> | <b>No. of staff in position.</b> |
|----------------|---------------------------------------|-----------------------------|----------------------------------|
| 1              | Deputy Director, N.K.Z.P.             | 1                           | 1                                |
| 2              | Sr. Veterinary Officer                | 1                           | 1                                |
| 3              | ACF                                   | 3                           | 3                                |
| 4              | Vet. Assistant Surgeon.               | 1                           | 1                                |
| 5              | Forest Ranger                         | 8                           | 2                                |
| 6              | Section Officer                       | 1                           | 1                                |
| 7              | Zoo Biologist                         | 1                           | 1                                |
| 8              | Education Officer                     | 1                           | 1                                |
| 9.             | Dy. Ranger                            | 0                           | 3                                |
| 10             | Fitter-cum-Mechanic                   | 1                           | 0                                |
| 11             | Senior Assistant                      | 5                           | 5                                |
| 12             | Junior Stenographer.                  | 1                           | 1                                |
| 13             | Forester                              | 9                           | 9                                |
| 14             | Driver(H.V)                           | 3                           | 0                                |
| 15             | Driver (L.V.)                         | 4                           | 1                                |
| 16             | Livestock-Inspector.                  | 3                           | 2                                |
| 17             | Projector Operator                    | 1                           | 0                                |

|    |                                  |            |            |
|----|----------------------------------|------------|------------|
| 18 | Junior Librarian                 | 1          | 0          |
| 19 | Artist- cum- Modeler.            | 1          | 0          |
| 20 | Guide                            | 1          | 0          |
| 21 | Junior Assistant                 | 4          | 3          |
| 22 | Booking Clerk                    | 3          | 0          |
| 23 | Welder-cum-Blacksmith            | 1          | 0          |
| 24 | Forest Guard                     | 25         | 15         |
| 25 | Mahunta                          | 8          | 0          |
| 26 | Mali                             | 5          | 1          |
| 27 | Khansama                         | 1          | 0          |
| 28 | Mahunta                          | 3          | 0          |
| 29 | Asst. Mahunta                    | 8          | 0          |
| 30 | Animal Keeper                    | 101        | 56         |
| 31 | Office Peon/Attendant            | 6          | 4          |
| 32 | Sweeper                          | 11         | 5          |
| 33 | Bungalow Chowkidar               | 3          | 2          |
| 34 | Winch Operator                   | 1          | 0          |
| 35 | Ticket Collector                 | 10         | 7          |
| 36 | Gangman                          | 1          | 0          |
| 37 | Mate                             | 2          | 1          |
| 38 | Boat Man                         | 2          | 0          |
| 39 | Zoo Watcher                      | 22         | 9          |
| 40 | Watchman                         | 26         | 20         |
| 41 | Cook-Cum-Animal feed Distributor | 2          | 0          |
|    | <b>GRAND TOTAL:</b>              | <b>292</b> | <b>155</b> |

## **9. Capacity Building of zoo personnel:**

### **Capacity Building Programme for Zoo Keepers of the Eastern Region**

The three days capacity building programme for zoo keepers of the eastern region was organised by Central Zoo Authority, New Delhi & Nandankanan Biological Park from 5<sup>th</sup> to 7<sup>th</sup> March, 2024. 34 participants from 27 different zoos were participated in this programme.

### **Exposure visit of Zoo Officials**

Dr Manoj V. Nair, IFS, Director and Dr Rajesh Kumar Mohapatra, Biologist were gone for an exposure visit to Dubai Safari Park, Dubai from 24<sup>th</sup> to 26<sup>th</sup> February, 2024.

Sri Sanath Kumar N., IFS, Deputy Director and Sri Purna Chandra, Forester were gone for an exposure visit to Dubai Safari Park, Dubai from 16<sup>th</sup> to 19<sup>th</sup> March, 2024.

Sri Sanath Kumar N., IFS, Deputy Director went for an exposure visit to Chamarajendra Zoological Park, Mysore & Bannerghatta Biological, Park, Bangalore from 27<sup>th</sup> to 29<sup>th</sup> January, 2024.

#### **10. Zoo Advisory Committee:**

##### **Committees constituted by Government of Odisha:**

##### **Expert Committee:**

Government of Odisha, Forest & Environment Department, vide Office order No FE-WL-WLF-0027-2019/21236/F&E dated 05.11.2019, constituted an 'Expert Committee' under the chairmanship by Shri S. K. Patnaik, IFS (Rtd. PCCF, Wildlife, Odisha and Member CEC) for strengthening healthcare and upkeep of animals of Nandankanan Zoo.

##### **Expanded Technical Committee:**

In view of the demise of some of the members of the Technical Committee, and as per current requirements of animal health management, proposal for reconstitution of the Committee is under consideration by the Government.

##### **Health Committee:**

Government of Odisha, Forest & Environment Department, vide Office order No FE-WL-WLF-0027-2019/21234/F&E dated 05.11.2019, constituted a Health Committee for strengthening healthcare and upkeep of animals of Nandankanan Zoo, with the following members:

- Professor and Head, Department of Preventive Medicine, CVSc & AH –cum-Project Coordinator, Centre for Wildlife Health, OUAT, Bhubaneswar- Chairman
- Professor and Head, Department of Surgery, CVSc & AH or his Nominee- Member
- Professor and Head, Department of Pathology, CVSc & AH or his Nominee- Member
- Head, Department of Parasitology, CVSc & AH or his Nominee- Member
- HOD, Department of Nutrition, CVSc & AH or his Nominee- Member
- Senior Veterinary Officer/ VAS Nandankanan- Member Convener
- All Veterinary Officers of Nandankanan- Members
- Deputy Director, Nandankanan Zoological Park- Member
- Curator, Nandankanan Zoological Park- Member
- Range Officer, Sanctuary Management Range- Member

**Date on which Health Committee visited/meeting held during the year-**

03/04/2023, 11/04/2023, 18/04/2023, 28/05/2023, 21/06/2023, 12/07/2023, 24/07/2023,  
30/07/2023, 17/08/2023, 26/08/2023, 25/09/2023, 09/10/2023, 10/10/2023, 03/11/2023, 09/11/2023,  
14/12/2023, 03/01/2024, 03/02/2024, 07/03/2024, 11/03/2024, 24/03/2024

**12. Statement of income and expenditure of the Zoo**

| Year    | Expenditure & Allotment | Non-Plan/AE OM | State-Plan/PE | Centrally sponsored plan | CZA grant | CAMPA  | Society Fund | Eco Tourism | Total   |
|---------|-------------------------|----------------|---------------|--------------------------|-----------|--------|--------------|-------------|---------|
| 2023-24 | Allotment               | 674.00         | 2267.071      | 31.66                    | 60.91     | 314.27 | 1967.26      | -           | 5315.17 |
|         | Expenditure             | 674.00         | 2267.071      | 31.64                    | 19.76     | 314.27 | 1875.00      | -           | 5181.74 |

**13. Daily feed Schedule of animals**

| SL.N O       | SPECIES    | FOOD ITEM  | QTY IN KG/Nos   |
|--------------|------------|--|---|
| <b>BIRDS</b> |            |  |   |
| 1            | BUDGERIGAR | MILLET<br>PADDY<br>GREEN SAG<br>EGG (BOILED)<br>(FOR GROUP OF 50 BIRDS)<br>CUTTLE FISH BONE (MONDAYS)                          | 0.015<br>0.005<br>0.005<br>1 No.<br><br>0.002                                 |
| 2            | CASSOWARY  | APPLE<br>RIPE PAPAYA<br>RIPE BANANA<br>GRAPE<br>TOMATO<br>KHAJARA<br>BOILED EGG<br>WATERMELON (APR-MAY)<br>RIPE GUAVA(SEP-OCT) | 0.500<br>0.750<br>0.750<br>0.250<br>0.500<br>0.100<br>1 NO.<br>0.750<br>0.250 |

|   |  |   |  |
|---|--|---|--|
| 3 | COCKATIEL, WHITE/<br>CINNAMON PEARS PIED                               | BENGAL GRAM<br>MILLET<br>GREEN SAG<br>ONION<br>SUNFLOWER SEED<br>EGG BOILED<br>(FOR THE GROUP OF 10)<br>CUTTLE FISH BONE (MONDAYS)  | 0.010<br>0.020<br>0.025<br>0.010<br>0.010<br>1 No.<br>0.002                            |
| 4 | COCKATOO, LESSER/<br>SULPHUR CRESTED/<br>UMBRELLA                      | APPLE<br>EGG (BOILED)<br>GROUND NUT<br>GRAPE<br>RIPE BANANA<br>BENGAL GRAM<br>SUNFLOWER SEED<br>RIPE PAPAYA<br>GREEN MAIZE WITH SPIKE (AUG-<br>SEP)<br>RIPE GUAVA (SEP-OCT) | 0.030<br>½ No.<br>0.030<br>0.030<br>0.030<br>0.015<br>0.020<br>0.025<br>0.050<br>0.050 |
| 5 | CONURE, BROWN<br>THROATED/ JANDAYA /<br>SUN/PINEAPPLE/ YELLOW<br>SIDED | APPLE<br>BENGAL GRAM<br>GRAPE<br>GREEN SAG<br>RIPE PAPAYA<br>SUNFLOWER SEED<br>GREEN MAIZE WITH SPIKE (AUG-<br>SEP)<br>RIPE GUAVA (SEP-OCT)<br>PINEAPPLE (MAY-JULY)         | 0.030<br>0.005<br>0.015<br>0.025<br>0.020<br>0.010<br>0.050<br>0.030<br>0.025          |
| 6 | CRANE, SARUS   | KERANDI FISH<br>PULSES & GRAIN FEED<br>BENGAL GRAM  | 0.250<br>0.150<br>0.050  |
| 7 | DOVE, BARBARY/<br>LAUGHING/RING NECKED                                 | POULTRY FEED<br>PULSES & GRAIN FEED   | 0.010<br>0.050<br>0.010  |

|    |   |  |  |
|----|---|--|--|
|    |   | GREEN SAG<br>BOILED EGG  | ¼ No.  |
| 8  | DOVE, SPOTTED/EMERALD                             | POULTRY FEED<br>PULSES & GRAIN FEED<br>GREEN SAG<br>BOILED EGG<br>MUSTARD                                  | 0.010<br>0.030<br>0.010<br>½ No.<br>0.005                          |
| 9  | DOVE, DIAMOND                                     | MILLET<br>PADDY<br>PULSES & GRAIN FEED<br>GREEN SAG<br>CUTTLE FISH BONE (MONDAYS)                          | 0.005<br>0.005<br>0.020<br>0.005<br>0.002                          |
| 10 | DUCK, MANDARIN                                    | GREEN SAG<br>PADDY<br>POULTRY FEED<br>PULSES & GRAIN FEED<br>WHEAT, SOAKED<br>BENGAL GRAM                  | 0.030<br>0.010<br>0.050<br>0.060<br>0.025<br>0.025                 |
| 11 | EGRET, LITTLE/MEDIAN/<br>CATTLE/ LARGE            | GADISHA FISH<br>KERANDI FISH   | 0.200<br>0.100   |
| 12 | EMU   | BENGAL GRAM CHHATU<br>BENGAL GRAM<br>EGG (BOILED)<br>GARLIC<br>GREEN SAG<br>ONION<br>RIPE BANANA<br>GRAPES | 0.200<br>0.300<br>1NO<br>0.010<br>0.250<br>0.050<br>0.200<br>0.050 |
| 13 | FINCH (BENGALESE /<br>LONG TAILED<br>/STAR/ZEBRA) | MILLET<br>PADDY<br>GREEN SAG<br>EGG (BOILED)   | 0.010<br>0.005<br>0.005<br>1NO                                     |

|    |   |   |  |
|----|---|---|--|
|    |   | (FOR GROUP OF 50 INDIVIDUALS)<br>CUTTLE FISH BONE (MONDAYS)   | 0.002  |
| 14 | HORNBILL, GREY/<br>ORIENTAL PIED            | RIPE BANANA<br>GRAPE<br>BENGAL GRAM CHHATU  | 0.100<br>0.050<br>0.050  |
| 15 | HERON, GREY/NIGHT                           | KERANDI FISH  | 0.100  |
| 16 | HILL MYNAH                                  | BENGAL GRAM CHHATU<br>RIPE BANANA<br>APPLE<br>GRAPE   | 0.025<br>0.050<br>0.025<br>0.025                                 |
| 17 | IBIS (BLACK/ WHITE)                         | KERANDI FISH  | 0.300  |
| 18 | JUNGLE FOWL, RED/ GREY                      | BENGAL GRAM<br>POULTRY FEED<br>PULSES AND GRAIN FEED<br>PADDY<br>GARLIC<br>ONION<br>MEAL WORM<br>BOILED EGG (FOR THE GROUP) | 0.050<br>0.050<br>0.030<br>0.020<br>0.005<br>0.010<br>5NO<br>1NO |
| 19 | KITE, BRAHMINY                              | CHICKEN MEAT<br>DAY OLD CHICKS/WHITE MICE   | 0.100<br>1NO   |
| 20 | KITE, BLACK                                 | KERANDI FISH<br>BUFFALO MEAT<br>(EXCEPT MONDAY)<br>DAY OLD CHICK/WHITE MICE   | 0.050<br>0.200<br>1No.   |
| 21 | KOEL  | BENGAL GRAM CHHATU<br>RIPE BANANA<br>GRAPE<br>RIPE PAPAYA   | 0.025<br>0.050<br>0.025<br>0.025                                 |
| 22 | LOVE BIRD (FISCHERS/<br>PEACH-FACED/MASKED) | BENGAL GRAM<br>MILLET<br>PADDY  | 0.010<br>0.020<br>0.010  |

|    |   |   |  |
|----|---|---|--|
|    |   | GROUND NUT<br>GREEN SAG<br>SUNFLOWER SEED<br>CUTTLE FISH BONE (MONDAYS)   | 0.005<br>0.030<br>0.010<br>0.002   |
| 23 | LORIKEET, BLUE FACED/<br>SWAINSON' S        | APPLE<br>BENGAL GRAM<br>RIPE PAPAYA<br>GRAPE<br>GREEN SAG<br>RIPE BANANA<br>CARROT<br>CUCUMBER<br>RIPE GUAVA (SEPT-OCT)<br><br>GREEN MAIZE WITH SPIKE (AUG-<br>SEP) | 0.050<br>0.010<br>0.050<br>0.025<br>0.030<br>0.025<br>0.025<br>0.025<br>0.050<br><br>0.050 |
| 24 | LORRY, YELLOW BACKED<br>/<br>RED CHATTERING | APPLE<br>BENGAL GRAM<br>GRAPE<br>GREEN SAG<br>RIPE BANANA<br>RIPE PAPAYA<br>RIPE GUAVA (SEPT-OCT)<br><br>GREEN MAIZE WITH SPIKE (AUG-<br>SEP)                       | 0.050<br>0.010<br>0.025<br>0.030<br>0.050<br>0.030<br>0.050<br><br>0.050                   |
| 25 | MACAW,<br>GREEN WINGED/ BLUE &<br>YELLOW    | APPLE<br>BENGAL GRAM<br>PISTACHIO WITH SHELL<br><br>GRAPE<br>SUNFLOWER SEED<br>RIPE BANANA<br>CARROT<br>CUCUMBER<br>POMEGRANATE                                     | 0.050<br>0.015<br>0.010<br><br>0.030<br>0.015<br>0.025<br>0.025<br>0.025<br>0.025          |

|    |   |  |  |
|----|---|--|--|
|    |   | GREEN COCONUT<br>AMLA (NOV- DEC)<br>GREEN PEA POD (DEC-FEB)<br>CUSTARD APPLE (SEPT-OCT)<br>GREEN MAIZE WITH SPIKE (AUG-SEP)<br>WATER MELON (APR-MAY)<br>RIPE GUAVA (SEP-OCT)   | 1 NO (ON MONDAY)<br>0.010<br>0.100<br>0.050<br>0.050<br>0.050<br>0.050                                       |
| 26 | MUNIA<br>(RED/BLACKHEAD/SPOTTED/ SCALY BREASTED)                                  | MILLET<br>CUTTLE FISH BONE (MONDAYS)<br>PADDY<br>GREEN SAG   | 0.010<br>0.002<br>0.010<br>0.010   |
| 27 | OWL (BARN/<br>ORIENTAL SCOPS)   | DAY OLD CHICK  | 2NO  |
| 28 | OWL, BROWN FISH   | DAY OLD CHICK<br><br>WHITE MICE<br>KERANDI FISH  | 2NO<br><br>2NO<br>0.100  |
| 29 | PARAKEET,<br>(MOUSTACHED/ ROSE RINGED/ BLOSSOM HEADED/<br>ALEXANDRINE/RING NECKED | BENGAL GRAM<br>SUNFLOWER SEED<br>GROUNDNUT<br>APPLE<br>GREEN SAG<br>RIPE BANANA<br>RIPE PAPAYA<br>RED CHILI<br>GREEN MAIZE WITH SPIKE (AUG-SEP)<br>RIPE GUAVA (SEPT-OCT)<br><br>WATER MELON (APR-MAY)<br>GREEN PEA POD (DEC-FEB) | 0.010<br>0.010<br>0.010<br>0.020<br>0.020<br>0.015<br>0.025<br>0.005<br>0.025<br>0.025<br><br>0.010<br>0.025 |
| 30 | PEAFOWL, INDIAN/ WHITE  | BENGAL GRAM<br>GROUND NUT<br>GARLIC  | 0.050<br>0.050<br>0.005<br>0.100   |

|    |   |   |   |
|----|---|---|---|
|    |   | GREEN SAG<br>ONION<br>POULTRY FEED<br>PULSES & GRAIN FEED<br>PADDY  | 0.050<br>0.040<br>0.040<br>0.050  |
| 31 | PELICAN, GREY/ROSY  | GADISHA FISH  | 1.000   |
| 32 | PHEASANT, GOLDEN/<br>SILVER/ YELLOW<br>GOLDEN/ LADY<br>AMHERST'S /REEV'S /<br>RING NECKED | GARLIC<br>GREEN SAG<br>ONION<br>POULTRY FEED<br>PULSES AND GRAIN FEED<br>BOILED EGG<br>CRICKET WORM/MEAL WORM   | 0.010<br>0.050<br>0.020<br>0.050<br>0.050<br>½ NO<br>5NO  |
| 33 | ROSELLA, EASTERN  | APPLE<br>BENGAL GRAM<br>GREEN SAG<br>GROUND NUT<br>RIPE BANANA<br>SUNFLOWER SEED<br>RIPE PAPAYA<br>GREEN MAIZE WITH SPIKE (AUG-<br>SEP) RIPE GUAVA (SEPT-OCT)<br>PINE-APPLE (MAY-JULY)<br>WATER MELON (APR-MAY) | 0.050<br>0.010<br>0.025<br>0.030<br>0.050<br>0.010<br>0.025<br>0.050<br>0.050<br>0.025<br>0.050 |
| 34 | SPARROW, JAVA   | MILLET<br>PADDY<br>GREEN SAG<br>BOILED EGG (FOR 20 GROUP)<br>CUTTLE FISH BONE (MONDAYS)   | 0.010<br>0.010<br>0.010<br>1NO<br>0.005   |
| 35 | SPOON BILLED EURASIAN   | KERANDI FISH<br>PG MIX FEED<br>CHICKEN MEAT KIMA  | 0.250<br>0.020<br>0.020   |

|    |   |  |   |
|----|---|--|---|
|    |   | EGG BOILED   | 1/4 Pcs   |
| 36 | STORK, OPEN BILLED                      | SNAIL WITH SHELL   | 0.400   |
| 37 | STORK, PAINTED                          | GADISHA FISH   | 0.300   |
| 38 | STORK, LESSER ADJUTANT                  | GADISHA FISH<br>DAY OLD CHICK  | 0.200<br>2NO  |
| 39 | STORK, GREATER ADJUTANT                 | CHICKEN MEAT KIMA<br>FISH FINGERLING-LIVE ABOUT 6"<br>(EXCEPT MONDAY)<br>ROHI FISH<br>(EXCEPT MONDAY)                                  | 0.250<br>0.350<br>0.500   |
| 40 | SIKRA                                   | DAY OLD CHICKS   | 2NO   |
| 41 | SWAN, BLACK                             | BLACK SWAN FEED<br>SOYABEAN SEED<br>GREEN SAG<br>BENGAL GRAM<br>CABBAGE<br>DHANIA SAG<br>WHEAT (SOAKED)<br>WHEAT BREAD<br>POULTRY FEED | 0.250<br>0.020<br>0.250<br>0.100<br>0.100<br>0.100<br>0.100<br>0.100<br>0.050 |
| 42 | VULTURE, CINEREOUS                      | CHICKEN MEAT<br>(EXCEPT MONDAY)  | 1.000   |
| 43 | VULTURE, LONG BILLED AT ENCLOSURE       | CHICKEN MEAT<br>(EXCEPT MONDAY)  | 0.500   |
| 44 | VULTURES, LONG BILLED AT VCBC           | BUFFALO MEAT (ON TUESDAY AND SATURDAY)-<br>THE BUFFALO TO BE RETAINED MIN. 7 DAYS BEFORE SLAUGHTER                                     | 2.000   |
| 45 | VULTURES, GRIFFON AT VCBC               | BUFFALO MEAT (ON TUESDAY AND SATURDAY)-<br>THE BUFFALO TO BE RETAINED MIN. 7 DAYS BEFORE SLAUGHTER                                     | 3.000   |
| 46 | VULTURE, HIMALAYAN GRIFFON AT ENCLOSURE | CHICKEN MEAT   | 0.750   |

|                |                              | (EXCEPT MONDAY)   |   |
|----------------|------------------------------|---|---|
| 47             | OSTRICH                      | LUCERN GRASS/ DHANIA SAG<br>OSTRICH FEED<br>RIPE PUMPKIN<br>CARROT<br>BENGAL GRAM<br>BOILED EGG (WITH SHELL)                                  | 1.000<br>1.500<br>0.250<br>0.250<br>0.250<br>2NO                              |
| 48             | PARROT, AFRICAN GREY         | APPLE<br>BENGAL GRAM<br>GRAPE<br>GROUND NUT<br>SUNFLOWER SEED<br>RIPE PUMPKIN<br>RIPE PAPAYA<br>RIPE SAPETA (APR-MAY)<br>WATER MELON(APR-MAY) | 0.030<br>0.015<br>0.030<br>0.030<br>0.010<br>0.050<br>0.050<br>0.050<br>0.050 |
| 49             | PARROT, MEYER'S/ RED BELLIED | APPLE<br>BENGAL GRAM<br>BEANS<br>GRAPES<br><br>POMEGRANATE<br>SUNFLOWER SEED<br>RIPE PAPAYA   | 0.030<br>0.015<br>0.030<br>0.020<br><br>0.020<br>0.010<br>0.050               |
| 50             | TURACO, VIOLET/ LIVINGSTONE  | APPLE<br>GRAPE<br>TOMATO<br>POMEGRANATE<br><br>RIPE BANANA<br>RIPE PAPAYA<br>WATERMELON (APR-MAY)<br>RIPE MANGO (APR-MAY)                     | 0.025<br>0.025<br>0.050<br>0.025<br><br>0.050<br>0.050<br>0.050<br>0.025      |
| <b>MAMMALS</b> |                              |   |   |

|                      |                          |   |       |
|----------------------|--------------------------|---|-------|
| 51                   | ANTELOPE, FOUR HORNED    | COMMON GRASS                                | 1.000 |
|                      |                          | DEER MASH                                   | 0.500 |
|                      |                          | DEER FODDER                                 | 1.000 |
|                      |                          | BENGAL GRAM                                 | 0.100 |
|                      |                          | BIRIDAL                                     | 0.100 |
|                      |                          | RIPE BANANA                                 | 0.100 |
|                      |                          | RIPE PUMPKIN                                | 0.100 |
|                      |                          | JHUDANGA                                    | 0.100 |
| 52                   | BEAR, HIMALAYAN<br>BLACK | BIRIDAL                                     | 0.100 |
|                      |                          | HONEY                                       | 0.025 |
|                      |                          | MILK  | 0.100 |
|                      |                          | RICE (PAR BOILED)                           | 0.800 |
|                      |                          | RIPE PUMPKIN                                | 0.350 |
|                      |                          | RIPE BANANA                                 | 0.350 |
|                      |                          | WATER MELON (APR-MAY)                       | 0.500 |
|                      |                          | CARROT                                      | 0.100 |
|                      |                          | SWEET POTATO (OCT-MAR)                      | 0.150 |
|                      |                          | GREEN MAIZE WITH SPIKE (AUG-<br>SEP)        | 0.200 |
| BOILED EGG (NOV-FEB) | 2NO                      |   |       |
| 53                   | BEAR, SLOTH              | BIRIDAL                                     | 0.100 |
|                      |                          | HONEY                                       | 0.025 |
|                      |                          | MILK  | 0.100 |
|                      |                          | RICE (PAR BOILED)                           | 0.700 |
|                      |                          | RIPE PUMPKIN                                | 0.300 |
|                      |                          | RIPE BANANA                                 | 0.300 |
|                      |                          | WATER MELON (APR-MAY)                       | 0.500 |
|                      |                          | SWEET POTATO (OCT-MAR)                      | 0.100 |
|                      |                          | GREEN MAIZE WITH SPIKE (AUG-<br>SEP) CARROT | 0.200 |
|                      |                          | BOILED EGG (NOV- FEB)                       | 0.100 |
| 2NO                  |                          |   |       |
| 54                   | BLACK BUCK               | COMMON GRASS                                | 1.000 |
|                      |                          | DEER MASH                                   | 0.500 |
|                      |                          | DEER FODDER                                 | 1.000 |

|    |                           |                        |        |
|----|---------------------------|------------------------|--------|
|    |                           | RIPE PUMPKIN           | 0.100  |
|    |                           | JHUDANGA               | 0.100  |
| 55 | BABOON, HAMADRYAS         | GROUND NUT             | 0.050  |
|    |                           | APPLE                  | 0.200  |
|    |                           | BRINJAL                | 0.100  |
|    |                           | LADIES FINGER          | 0/050  |
|    |                           | EGG (BOILED)           | 1NO    |
|    |                           | BEAN                   | 0.050  |
|    |                           | MILK                   | 0.010  |
|    |                           | RICE (PAR BOILED)      | 0.050  |
|    |                           | RIPE BANANA            | 0.250  |
|    |                           | GRAPE                  | 0.100  |
|    |                           | POMEGRANATE            | 0.150  |
|    |                           | CARROT                 | 0.100  |
|    |                           | AMLA (NOV-DEC)         | 0.025  |
|    |                           | SWEET POTATO (OCT-MAR) | 0.050  |
|    |                           | GREEN MANGO (APR-MAY)  | 0.050  |
|    |                           | PINE-APPLE (MAY-JUL)   | 0.100  |
|    |                           | WATER MELON (APR-MAY)  | 0.150  |
| 56 | CAPUCHIN,<br>BLACK TUFTED | MILK                   | 0.010  |
|    |                           | RICE                   | 0.025  |
|    |                           | BOILED EGG             | 1 ½ No |
|    |                           | APPLE                  | 0.050  |
|    |                           | RIPE BANANA            | 0.100  |
|    |                           | CUCUMBER               | 0.100  |
|    |                           | CARROT                 | 0.100  |
|    |                           | POMEGRANATE            | 0.050  |
|    |                           | GRAPES                 | 0.050  |
|    |                           | RIPE PAPAYA            | 0.050  |
|    |                           | RIPE GUAVA (SEPT-OCT)  | 0.025  |
|    |                           | MEAL WORMS             | 5 Nos  |
|    |                           | SWEET CORN (BOILED)    | 0.025  |
|    |                           | BENGAL GRAM            | 0.025  |
|    |                           | SUNFLOWER SEEDS        | 0.025  |

|    |              |   |   |
|----|--------------|---|---|
|    |              | CHICKEN MEAT(BOILED)<br>(ON WEDNESDAY)  | 0.100   |
| 57 | CAT, JUNGLE  | CHICKEN DRESSED<br>DAY OLD CHICK  | 0.400<br>1 NO   |
| 58 | CAT, LEOPARD | CHICKEN DRESSED<br>DAY OLD CHICK  | 0.300<br>2 NO.S   |
| 59 | CAT, FISHING | FISH FINGERLING-LIVE<br>ABOUT 6"<br>KERADI FISH   | 0.350<br>0.150  |
| 60 | CHIMPANZEE   | APPLE<br>BENGAL GRAM WHOLE<br>CUCUMBER<br>EGG (BOILED)<br>BEAN<br>GRAPE<br>MILK<br>TOMATO<br>RICE (PAR BOILED)<br>GREEN SAG<br>RIPE BANANA<br>BEDANA<br>HONEY<br>CARROT<br>KHAJARA<br>PINE-APPLE (MAY-JUL)<br>WATER MELON (APR-MAY)<br>RIPE GUAVA (SEPT-OCT)<br>GREEN COCONUT (APR-JUN)<br>CUSTARD APPLE (SEPT-OCT)<br>RIPE PAPAYA<br>PALANGA SAG (DEC-FEB)<br>ORANGE (NOV-MAR)<br>AMLA (NOV-DEC)<br>GARLIC | 0.300<br>0.100<br>0.200<br>1 NO<br>0.050<br>0.200<br>0.150<br>0.100<br>0.200<br>0.200<br>0.300<br>0.200<br>0.025<br>0.100<br>0.050<br>0.100<br>0.500<br>0.050<br>2NO<br>0.100<br>0.400<br>0.100<br>0.150<br>0.050<br>0.010<br>0.030 |

|    |                         |   |       |
|----|-------------------------|---|-------|
|    |                         | ONION   | 0.200 |
|    |                         | GREEN MAIZE WITH SPIKE (AUG-SEP)<br>GREEN PEA POD (DEC-FEB) | 0.100 |
| 61 | CHIMPANZEE,<br>JUVENILE | APPLE   | 0.150 |
|    |                         | BENGAL GRAM WHOLE   | 0.025 |
|    |                         | CUCUMBER  | 0.050 |
|    |                         | EGG (BOILED)  | 1 NO  |
|    |                         | BEAN  | 0.030 |
|    |                         | GRAPE   | 0.050 |
|    |                         | MILK  | 0.100 |
|    |                         | TOMATO  | 0.050 |
|    |                         | RICE (PAR BOILED)   | 0.050 |
|    |                         | GREEN SAG   | 0.050 |
|    |                         | RIPE BANANA   | 0.150 |
|    |                         | BEDANA  | 0.150 |
|    |                         | HONEY   | 0.025 |
|    |                         | CARROT  | 0.050 |
|    |                         | KHAJARA   | 0.025 |
|    |                         | PINE-APPLE (MAY-JUL)  | 0.050 |
|    |                         |   | 0.200 |
|    |                         | WATER MELON (APR-MAY)                                       | 0.020 |
|    |                         | RIPE GUAVA (SEPT-OCT)                                       | 1NO   |
|    |                         | GREEN COCONUT (APR-JUN)                                     | 0.050 |
|    |                         | CUSTARD APPLE (SEPT-OCT)                                    | 0.100 |
|    |                         | RIPE PAPAYA   | 0.050 |
|    |                         | PALANGA SAG (DEC-FEB)                                       | 0.050 |
|    |                         | ORANGE (NOV-MAR)  | 0.025 |
|    |                         | AMLA (NOV-DEC)  | 0.005 |
|    |                         | GARLIC  | 0.020 |
|    |                         | ONION   | 0.050 |
|    |                         | GREEN MAIZE WITH SPIKE (AUG-SEP)<br>GREEN PEA POD (DEC-FEB) | 0.050 |
| 62 | CIVET, COMMON PALM      | CHICKEN MEAT KIMA   | 0.050 |
|    |                         | MILK  | 0.005 |

|    |                     |                             |        |
|----|---------------------|-----------------------------|--------|
|    |                     | APPLE                       | 0.050  |
|    |                     | RIPE BANANA                 | 0.250  |
|    |                     | RIPE PAPAYA                 | 0.050  |
|    |                     | DAY OLD CHICK               | 1 NO   |
| 63 | CIVET, SMALL INDIAN | CHICKEN MEAT KIMA           | 0.050  |
|    |                     | MILK                        | 0.005  |
|    |                     | KERANDI FISH                | 0.050  |
|    |                     | RIPE BANANA                 | 0.200  |
| 64 | BAT, FRUIT          | RIPE BANANA                 | 0.150  |
|    |                     | APPLE                       | 0.050  |
|    |                     | RIPE PAPAYA                 | 0.100  |
|    |                     | GRAPE                       | 0.025  |
| 65 | DEER, BARKING       | COMMON GRASS                | 1.000  |
|    |                     | DEER MASH                   | 0.500  |
|    |                     | DEER FODDER                 | 0.500  |
| 66 | DEER, MOUSE         | RIPE BANANA                 | 0.250  |
|    |                     | APPLE                       | 0.050  |
|    |                     | GREEN SAG                   | 0.050  |
|    |                     | RIPE PUMPKIN                | 0.050  |
|    |                     | LADIES FINGER               | 0.100  |
|    |                     | BEAN                        | 0.125  |
|    |                     | CARROT                      | 0.125  |
|    |                     | SWEET POTATO (OCT-MAR)      | 0.100  |
| 67 | DEER, SAMBAR        | COMMON GRASS                | 12.000 |
|    | ADULT, 1YR ABOVE    | DEER MASH                   | 2.500  |
|    |                     | RIPE BANANA (FOR THE GROUP) | 3.000  |
|    |                     | DEER FODDER                 | 2.000  |
|    | DEER, SAMBAR        | COMMON GRASS                | 8.000  |
|    | SUB-ADULT,          | DEER MASH                   | 1.750  |
|    | 2MONTHS-1 YEAR      | DEER FODDER                 | 1.000  |
| 68 | DEER, SPOTTED       | COMMON GRASS                | 2.000  |
|    | ADULT, 1YR ABOVE    | DEER MASH                   | 1.100  |
|    |                     | DEER FODDER                 | 1.000  |
|    | DEER, SPOTTED       | DEER MASH                   | 0.750  |

|    |                      |                             |        |
|----|----------------------|-----------------------------|--------|
|    | SUB-ADULT            | COMMON GRASS                | 1.000  |
|    | 2MONTHS- 1YEAR       | DEER FODDER                 | 1.000  |
| 69 | DEER,SWAMP           | BENGAL GRAM, WHOLE          | 0.100  |
|    | ADULT, 1YR ABOVE     | COMMON GRASS                | 10.000 |
|    |                      | DEER MASH                   | 1.500  |
|    |                      | PARA GRASS                  | 3.000  |
|    |                      | CARROT                      | 0.100  |
|    |                      | JHUDANGA                    | 0.100  |
|    |                      | RIPE PUMPKIN                | 0.100  |
|    |                      | RIPE BANANA (FOR THE GROUP) | 1.000  |
| 69 | DEER, SWAMP          | BENGAL GRAM, WHOLE          | 0.050  |
|    | SUB-ADULT            | COMMON GRASS                | 5.000  |
|    | 2MONTHS-1YR          | DEER MASH                   | 1.000  |
|    |                      | PARA GRASS                  | 1.500  |
|    |                      | CARROT                      | 0.100  |
|    |                      | JHUDANGA                    | 0.100  |
|    |                      | RIPE PUMPKIN                | 0.100  |
| 70 | DEER, BROW ANTLERED, | BENGAL GRAM WHOLE           | 0.600  |
|    | MANIPURI             | DEER FODDER                 | 5.000  |
|    |                      | WHEAT BRAN (CHOKAD)         | 1.000  |
|    |                      | NB21                        | 10.000 |
|    |                      | CARROT                      | 0.200  |
|    |                      | RIPE BANANA                 | 0.200  |
|    |                      | BLACK SALT                  | 0.020  |
|    |                      | JHUDANGA                    | 0.200  |
| 71 | DEER, HOG            | WHEAT BRAN                  | 0.250  |
|    |                      | BENGAL GRAM                 | 0.250  |
|    |                      | COMMON GRASS                | 1.000  |
|    |                      | DEER FODDER                 | 1.000  |
| 72 | ELEPHANT (HIRA)      | WHEAT                       | 3.000  |
|    |                      | COMMON GRASS                | 50.000 |
|    |                      | ELEPHANT FODDER             | 50.000 |
|    |                      | NB21                        | 75.000 |
|    |                      | PARA GRASS                  | 75.000 |

|    |                    |                          |        |
|----|--------------------|--------------------------|--------|
|    |                    | TURMERIC WHOLE           | 0.050  |
|    |                    | MOLASES                  | 0.300  |
|    |                    | COMMON SALT              | 0.050  |
|    |                    | 1NO                      |        |
|    |                    | COCONUT                  | 2.000  |
|    |                    | STRAW                    | 0.100  |
|    |                    | CASTOR OIL               | 10.000 |
|    |                    | BAMBOO LEAVES (JULY-OCT) | 15.000 |
|    |                    | SUGARCANE (MARCH-APRIL)  | 4.000  |
|    |                    | WATER MELON (APR-MAY)    | 2.000  |
|    |                    | RIPE BANANA              | 2.000  |
|    |                    | BROWN RICE               | 1.000  |
|    |                    | HORSE GRAM (CRUSHED)     | 0.500  |
|    |                    | GREEN GRAM (CRUSHED)     | 0.500  |
|    |                    | BENGAL GRAM              | 1.500  |
|    |                    | RAGI (CRUSH)             | 1.000  |
|    |                    | CARROT                   | 1.000  |
|    |                    | RIPE PUMPKIN             | 1.000  |
|    |                    | BOTTLE GOURD             |        |
| 73 | ELEPHANT (BASANTI) | CRUSHED WHEAT            | 1.000  |
|    |                    | RAGI CRUSHED             | 1.500  |
|    |                    | BROWN RICE               | 1.000  |
|    |                    | HORSE GRAM CRUSHED       | 1.000  |
|    |                    | RIPE BANANA              | 7.000  |
|    |                    | RIPE PAPAYA              | 7.000  |
|    |                    | CARROT                   | 5.000  |
|    |                    | RIPE PUMPKIN             | 5.000  |
|    |                    | BOTTLE GOURD             | 7.000  |
|    |                    | RADISH(DEC-MAR)          | 5.000  |
|    |                    | WATER MELON (APR-MAY)    | 7.000  |
|    |                    | SWEET POTATO (OCT-MAR)   | 5.000  |
|    |                    | COMMON GRASS             | 50.000 |
|    |                    | ELEPHANT FODDER          | 50.000 |
|    |                    | NB21                     | 50.000 |
|    |                    | PARA GRASS               | 50.000 |

|    |                      |                                 |        |
|----|----------------------|---------------------------------|--------|
|    |                      | TURMERIC WHOLE                  | 0.050  |
|    |                      | MOLASES                         | 0.300  |
|    |                      | COMMON SALT                     | 0.050  |
|    |                      | COCONUT                         | 1NO    |
|    |                      | STRAW                           | 2.000  |
|    |                      | CASTOR OIL                      | 0.100  |
|    |                      | BAMBOO LEAVES (JULY-OCT)        | 10.000 |
|    |                      | SUGARCANE (MARCH-APRIL)         | 15.000 |
| 74 | FOX, INDIAN          | BUFFALO MEAT<br>(EXCEPT MONDAY) | 0.250  |
|    |                      | CHICKEN MEAT                    | 0.250  |
|    |                      | BOILED EGG                      | 1 No   |
|    |                      | DAY OLD CHICK                   | 1 No   |
| 75 | GIRAFFE, RETICULATED | WHEAT, SOAKED                   | 1.000  |
|    |                      | BENGAL GRAM, SOAKED             | 1.000  |
|    |                      | MUNG, SOAKED                    | 1.000  |
|    |                      | DEER MASH                       | 1.250  |
|    |                      | FRESH RIPE BANANA               | 5.000  |
|    |                      | CUCUMBER                        | 3.000  |
|    |                      | TOMATO                          | 0.500  |
|    |                      | ONION                           | 0.250  |
|    |                      | SALT(powdered free flow)        | 0.100  |
|    |                      | TREE FODDER (OSTA/BARA)         | 30.000 |
|    |                      | NB21                            | 5.000  |
|    |                      | GREEN SAG                       | 2.000  |
|    |                      | JHUDANGA                        | 1.500  |
|    |                      | RIPE PUMPKIN                    | 2.000  |
|    |                      | GARLIC                          | 0.025  |
|    |                      | SWEET POTATO (OCT-MAR)          | 1.000  |
|    |                      | CARROT                          | 3.000  |
|    |                      | APPLE                           | 2.000  |
|    |                      | WATER MELON (APR-MAY)           | 2.000  |
|    |                      | GREEN PEA POD (DEC- FEB)        | 1.000  |

|                          |                   |                         |        |
|--------------------------|-------------------|-------------------------|--------|
| 76                       | GIRAFFE, NORTHERN | WHEAT BRAN              | 2.250  |
|                          |                   | CRUSHED OAT             | 0.200  |
|                          |                   | CRUSHED BARLEY          | 0.400  |
|                          |                   | WHOLE GRAM              | 0.400  |
|                          |                   | CRUSHED MAIZE           | 0.400  |
|                          |                   | LENTIL, BOILED          | 0.200  |
|                          |                   | ONION                   | 0.250  |
|                          |                   | CARROT                  | 4.000  |
|                          |                   | SWEET POTATO(OCT-MAR)   | 0.400  |
|                          |                   | BEANS                   | 1.000  |
|                          |                   | BANANA                  | 3.500  |
|                          |                   | APPLE                   | 2.500  |
|                          |                   | ORANGE (NOV-MAR)        | 4 Pcs  |
|                          |                   | GUAVA                   | 0.500  |
|                          |                   | GROUND NUT CAKE         | 0.250  |
|                          |                   | MUSTARD OIL CAKE        | 0.200  |
|                          |                   | FREE FLOWING SALT       | 0.010  |
|                          |                   | BLACK SALT              | 0.010  |
|                          |                   | MOLASSES                | 0.200  |
|                          |                   | TREE FODDER (OSTA/BARA) | 15.000 |
| WATER MELON (APR-MAY)    | 2.000             |                         |        |
| GREEN PEA POD (DEC- FEB) | 1.000             |                         |        |
| 77                       | GAUR              | BALCK GRAM, SOAKED      | 0.250  |
|                          |                   |                         | 2.000  |
|                          |                   | WHEAT BRAN              | 5.000  |
|                          |                   | DEER MASH               | 0.050  |
|                          |                   | MOLASSES                | 15.000 |
|                          |                   | PARA GRASS              | 15.000 |
|                          |                   | NB21                    | 5.000  |
|                          |                   | TREE FODDER (OSTA)      | 0.500  |
|                          |                   | RIPE BANANA             |        |
| 78                       | GIANT SUIRREL     | BENGAL GRAM             | 0.050  |
|                          |                   |                         | 0.050  |
|                          |                   | APPLE                   | 0.025  |
|                          |                   | GRAPE                   | 0.100  |

|    |                 |                                  |           |
|----|-----------------|----------------------------------|-----------|
|    |                 | RIPE BANANA                      | 0.050     |
|    |                 | GREEN PEA POD (DEC-FEB)          | 0.100     |
|    |                 | RIPE GUAVA(SEP-OCT)              |           |
| 79 | GIBBON, HOOLOCK | RIPE BANANA                      | 0.200     |
|    |                 | SWEET POTATO                     | 0.200     |
|    |                 | TOMATO                           | 0.300     |
|    |                 | POMEGRANATE                      | 0.150     |
|    |                 | CUCUMBER                         | 0.100     |
|    |                 | APPLE                            | 0.200     |
|    |                 | BENGAL GRAM WHOLE                | 0.200     |
|    |                 | CARROT                           | 0.100     |
|    |                 | BOILED EGG (THURSDAY)            | 1 No      |
|    |                 | RIPE GUAVA(SEP- OCT)             | 0.150     |
|    |                 | RIPE PINEAPPLE(MAY- JULY)        | 0.200     |
|    |                 | WATERMELON(APR- MAY)             | 0.200     |
|    |                 | RIPE MANGO (APR- MAY)            | 0.200     |
|    |                 | GREEN MAIZE WITH SPIKE (AUG-SEP) | 0.100     |
| 80 | GIBBON, SIAMANG | APPLE                            | 0.200     |
|    |                 | RIPE BANANA                      | 0.050     |
|    |                 | ORANGE (NOV- MAR)                | 0.100     |
|    |                 | GRAPE                            | 0.020     |
|    |                 | PEAR                             | 0.050     |
|    |                 | TOMATO                           | 0.050     |
|    |                 | CARROT                           | 0.050     |
|    |                 | MULBERRY LEAVES                  | 0.050     |
|    |                 | CAPSICUM                         | 0.050     |
|    |                 | ALMOND                           | 0.010     |
|    |                 | BEANS                            | 0.020     |
|    |                 | BEET ROOT                        | 0.050     |
|    |                 | EGG , BOILED (MONDAY, THURSDAY)  | Half Nos. |
|    |                 | CHICKEN, BOILED (WEDNESDAY)      | 0.010     |
|    |                 | SUPER WORM/ MEALWORM             | 4 Nos.    |
| 81 | HARE, INDIAN    | DUBA GRASS                       | 0.100     |

|    |  |                                  |        |
|----|--|----------------------------------|--------|
|    |  | GREEN SAG                        | 0.100  |
|    |  | PUMPKIN                          | 0.050  |
|    |  | BEAN                             | 0.050  |
|    |  | CARROT                           | 0.050  |
|    |  | APPLE                            | 0.050  |
|    |  | ORANGE (NOV-MAR)                 | 0.050  |
|    |  | GRAPE                            | 0.025  |
|    |  | BENGAL GRAM (SOAKED)             | 0.025  |
|    |  | SWEET POTATO (OCT-MAR)           | 0.100  |
|    |  | PALANGA (DEC-FEB)                | 0.100  |
| 82 | HIPPOPOTAMUS<br>ADULT, 2 ½ YRS ABOVE         | BENGAL GRAM WHOLE                | 1.500  |
|    |  |                                  | 1.500  |
|    |  | PUMPKIN                          | 0.500  |
|    |  | CARROT                           |        |
|    |  | GREEN SAG                        | 1.500  |
|    |  | MINERAL MIXTURE                  | 0.100  |
|    |  | CHOKAD (WHEATBRAN)               | 4.000  |
|    |  | COMMON SALT                      | 0.100  |
|    |  |                                  | 1.000  |
|    |  | RIPE BANANA                      | 50.000 |
|    |  | PARA GRASS                       | 2.000  |
|    |  | WATER MELON (APR-MAY)            |        |
|    | HIPPOPOTAMUS<br>SUB-ADULT<br>6MONTHS-2 ½ YRS | BENGAL GRAM WHOLE                | 0.750  |
|    |  | PUMPKIN                          | 0.750  |
|    |  | CARROT                           | 0.500  |
|    |  | GREEN SAG                        | 1.000  |
|    |  | MINERAL MIXTURE                  | 0.050  |
|    |  | CHOKAD (WHEATBRAN)               | 2.500  |
|    |  | COMMON SALT                      | 0.100  |
|    |  |                                  | 0.500  |
|    |  | RIPE BANANA                      | 20.000 |
|    |  | PARA GRASS                       | 1.000  |
|    |  | WATER MELON (APR-MAY)            |        |
| 83 | HYENA, STRIPED                               | BUFFALO MEAT (MONDAY<br>FASTING) | 2.000  |

|    |  |                                      |       |
|----|--|--------------------------------------|-------|
| 84 | JACKAL   | BUFFALO MEAT (MONDAY FASTING)        | 1.000 |
| 85 | LEOPARD, ADULT<br>(ABOVE 1 ½ YEAR)                   | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 4.000 |
|    | LEOPARD, SUB-ADULT<br>(1-1½ YEARS)                   | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 3.000 |
|    | LEOPARD, JUVENILE<br>(6MONTHS-1 YEAR)                | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 1.000 |
| 86 | LION,<br>ASIATIC/HYBRID<br>ADULT, ABOVE 2 ½ YR       | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 9.000 |
|    | LION, SUB ADULT<br>(1 YEAR – 2 ½ YEARS)              | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 6.000 |
|    | LION, JUVENILE<br>(6 MONTHS – 1 YEAR)                | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 3.000 |
|    | CUB<br>(3 MONTHS TO 6 MONTHS)                        | CHICKEN<br>(DRESSED, BONE LESS)      | 1 NO  |
| 87 | LANGUR, COMMON                                       | BENGAL GRAM WHOLE                    | 0.020 |
|    |  | LADIES FINGER                        | 0.030 |
|    |  | GROUND NUT                           | 0.050 |
|    |  | BEAN                                 | 0.100 |
|    |  | RIPE BANANA                          | 0.050 |
|    |  | GREEN PEA POD (DEC-FEB)              | 0.050 |
|    |  | SWEET POTATO (OCT-MAR)               | 0.050 |
|    |  | GREEN MANGO (APR-MAY)                | 0.050 |
|    |  | GREEN MAIZE WITH SPIKE (AUG-SEP)     | 0.050 |
|    |  | WATER MELON (APR-MAY)                | 0.050 |
| 88 | MACAQUE, RHESUS/<br>BONNET<br>ADULT (1 1/2 YR ABOVE) | BENGAL GRAM WHOLE                    | 0.050 |
|    |  | BRINJAL                              | 0.100 |
|    |  | LADIES FINGER                        | 0.050 |
|    |  | LADIES FINGER                        | 0.050 |

|    |   |                                  |       |
|----|---|----------------------------------|-------|
|    |   | GROUND NUT                       | 0.050 |
|    |   | BEAN                             | 0.250 |
|    |   | RIPE BANANA                      | 0.100 |
|    |   | SWEET POTATO (OCT-MAR)           | 0.100 |
|    |   | GREEN MAIZE WITH SPIKE (AUG-SEP) | 0.150 |
|    |   | WATER MELON (APR-MAY)            | 0.050 |
|    |   | GREEN PEA POD (DEC-FEB)          | 0.100 |
|    |   | PINE-APPLE (MAY-JUL)             | 0.050 |
|    |   | GREEN MANGO (APR-MAY)            |       |
|    | SUB-ADULT                                 | BENGAL GRAM WHOLE                | 0.025 |
|    |   | BRINJAL                          | 0.050 |
|    |   | LADIES FINGER                    | 0.025 |
|    |   | GROUND NUT                       | 0.025 |
|    |   | BEAN                             | 0.125 |
|    |   | RIPE BANANA                      | 0.025 |
|    |   | GREEN PEA POD (DEC-FEB)          | 0.050 |
|    |   | SWEET POTATO (OCT-MAR)           | 0.025 |
|    |   | GREEN MANGO (APR-MAY)            | 0.050 |
|    |   | GREEN MAIZE WITH SPIKE (AUG-SEP) | 0.050 |
|    |   | PINE-APPLE (MAY-JUL)             | 0.075 |
|    |   | WATER MELON (APR-MAY)            |       |
| 89 | MACAQUE, ASSAMESE<br>ADULT (1 ½ YR ABOVE) | BENGAL GRAM WHOLE                | 0.050 |
|    |   | LADIES FINGER                    | 0.050 |
|    |   | GROUND NUT                       | 0.050 |
|    |   | BEAN                             | 0.010 |
|    |   | MILK                             | 0.250 |
|    |   | RIPE BANANA                      | 0.150 |
|    |   | APPLE                            | 0.150 |
|    |   | POMEGRANATE                      | 0.100 |
|    |   | CARROT                           | 1 NO  |

|    |                         |                                   |                   |
|----|-------------------------|-----------------------------------|-------------------|
|    |                         | EGG, BOILED(MONDAY, THURSDAY)     | 0.100             |
|    |                         | SWEET POTATO (OCT-MAR)            | 0.100             |
|    |                         | GREEN MAIZE WITH SPIKE (AUG-SEP)  | 0.150             |
|    |                         | WATER MELON (APR-MAY)             | 0.050             |
|    |                         | GREEN PEA POD (DEC-FEB)           | 0.100             |
|    |                         | PINE-APPLE (MAY-JUL)              | 0.050             |
|    |                         | GREEN MANGO (APR-MAY)             | 0.025             |
|    |                         | AMLA (NOV-DEC)                    |                   |
| 90 | MACAQUE, STUMP TAILED   | BENGAL GRAM WHOLE                 | 0.050             |
|    |                         | LADIES FINGER                     | 0.050             |
|    |                         | GROUND NUT                        | 0.050             |
|    |                         | BEAN                              | 0.010             |
|    |                         | MILK                              | 0.250             |
|    |                         | RIPE BANANA                       | 0.150             |
|    |                         | APPLE                             | 0.150             |
|    |                         | POMEGRANATE                       | 0.100             |
|    |                         | CARROT                            | 0.100             |
|    |                         | SWEET POTATO (OCT-MAR)            | 0.100             |
|    |                         | GREEN MAIZE WITH SPIKE (AUG-SEP)  | 0.150             |
|    |                         | WATER MELON (APR-MAY)             | 0.050             |
|    |                         | GREEN PEA POD (DEC-FEB)           | 0.100             |
|    |                         | PINE-APPLE (MAY-JUL)              | 0.050             |
|    |                         | GREEN MANGO (APR-MAY)             | 0.025             |
|    |                         | AMLA (NOV-DEC)                    |                   |
| 91 | MEERKAT, SLENDER TAILED | CHICKEN MEAT                      | 0.150             |
|    |                         | MEAL WORM                         | 0.010             |
|    |                         | CARROT                            | 0.070             |
|    |                         | APPLE                             | 0.080             |
|    |                         | EGG, BOILED<br>(THURSDAY, MONDAY) | 1 No              |
|    |                         | KITTEN PELLETT                    | 0.100 (FOR GROUP) |
| 92 | MONGOOSE COMMON         | KERANDI FISH                      | 0.150             |

|                                       |  |                                  |       |
|---------------------------------------|--|----------------------------------|-------|
| 93                                    | MONKEY, PIG-TAIL                                 | BENGAL GRAM WHOLE                | 0.050 |
|                                       |  |                                  | 0.050 |
|                                       |  | GROUND NUT                       | 0.250 |
|                                       |  | RIPE BANANA                      | 0.150 |
|                                       |  | APPLE                            | 0.150 |
|                                       |  | POMEGRANATE                      | 0.100 |
|                                       |  | CARROT                           | 1 NO  |
|                                       |  | EGG, BOILED (ON THURSDAY)        | 0.100 |
|                                       |  | SWEET POTATO (OCT-MAR)           | 0.100 |
|                                       |  | GREEN MAIZE WITH SPIKE (AUG-SEP) | 0.150 |
|                                       |  | WATER MELON (APR-MAY)            | 0.050 |
|                                       |  | GREEN PEA POD (DEC-FEB)          | 0.100 |
|                                       |  | PINE-APPLE (MAY-JUL)             | 0.050 |
|                                       |  | GREEN MANGO (APR-MAY)            | 0.025 |
| AMLA (NOV-DEC)                        |  |                                  |       |
| 94                                    | MONKEY, SQUIRREL                                 | MILK                             | 0.005 |
|                                       |  | RICE                             | 0.010 |
|                                       |  | BOILED EGG                       | ½ No  |
|                                       |  | APPLE                            | 0.025 |
|                                       |  | BANANA                           | 0.050 |
|                                       |  | CUCUMBER                         | 0.050 |
|                                       |  | CARROT                           | 0.025 |
|                                       |  | POMEGRANATE                      | 0.025 |
|                                       |  | GRAPES                           | 0.025 |
|                                       |  | RIPE PAPAYA                      | 0.025 |
|                                       |  | RIPE GUAVA (SEPT-OCT)            | 0.025 |
|                                       |  | MEAL WORMS                       | 5 Nos |
|                                       |  | SWEET CORN (BOILED)              | 0.010 |
|                                       |  | BENGAL GRAM                      | 0.010 |
|                                       |  | SUNFLOWER SEEDS                  | 0.010 |
| CHICKEN MEAT BOILED<br>(ON WEDNESDAY) | 0.050  |                                  |       |
| 95                                    | TAMARIN, RED HAND /<br>BLACK TUFTED<br>MARMOSSET | CERELAC-II                       | 0.020 |
|                                       |  | BOILED EGG                       | 1/4NO |

|    |                     |                              |        |
|----|---------------------|------------------------------|--------|
|    |                     | CARROT                       | 0.010  |
|    |                     | BEAN                         | 0.010  |
|    |                     | RIPE BANANA                  | 0.020  |
|    |                     | POMEGRANATE                  | 0.010  |
|    |                     | APPLE                        | 0.020  |
|    |                     | GRAPE                        | 0.020  |
|    |                     | MEAL WORM                    | 5NO    |
|    |                     | WATER MELON (APR-MAY)        | 0.020  |
|    |                     | SUGAR CANE (JAN-MAR)         | 0.020  |
| 96 | TAMARIN, COTTON TOP | APPLE                        | 0.050  |
|    |                     | BANANA, RIPE                 | 0.020  |
|    |                     | GRAPE                        | 0.010  |
|    |                     | ALMOND                       | 0.005  |
|    |                     | SWEET POTATO                 | 0.010  |
|    |                     | WATERMELON (APR-MAY)         | 0.020  |
|    |                     | MEAL WORM                    | 5 Nos. |
|    |                     | CARROT                       | 0.010  |
|    |                     | BEET ROOT                    | 0.010  |
|    |                     | BEANS                        | 0.020  |
| 97 | NILGAI              | COMMON GRASS                 | 15.000 |
|    | ADULT, 1YR ABOVE    | DEER MASH                    | 2.500  |
|    |                     | DEER FODDER                  | 3.000  |
|    |                     | RIPE BANANA ( FOR THE GROUP) | 4.000  |
|    | SUB ADULT           | COMMON GRASS                 | 10.000 |
|    | (6 MONTHS – 1 YEAR) | DEER MASH                    | 2.500  |
|    |                     | DEER FODDER                  | 2.000  |
| 98 | PANGOLIN, INDIAN    | RED WEAVER ANT EGGS          | 0.600  |
|    |                     | BOILED EGG                   | 1 No.  |
| 99 | PORCUPINE           | BENGAL GRAM WHOLE            | 0.050  |
|    |                     | BRINJAL                      | 0.050  |
|    |                     | BEAN                         | 0.010  |
|    |                     | MAIZE GROUND                 | 0.050  |
|    |                     | MILK                         | 0.010  |
|    |                     | RIPE BANANA                  | 0.150  |

|     |                                |                                      |        |
|-----|--------------------------------|--------------------------------------|--------|
|     |                                | RIPE PUMPKIN                         | 0.050  |
|     |                                | Cabbage                              | 0.050  |
|     |                                | Carrot                               | 0.050  |
|     |                                | SWEET PATATO (OCT-MAR)               | 0.100  |
| 100 | RATEL                          | HONEY                                | 0.020  |
|     |                                | GOAT MEAT                            | 0.250  |
|     |                                | RIPE BANANA                          | 0.200  |
|     |                                | BUFFALO MEAT<br>(EXCEPT MONDAY)      | 0.300  |
| 101 | TIGER<br>ADULT, 2 ½ YR ABOVE   | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 10.000 |
|     | TIGER, SUB ADULT<br>1YR-2 ½ YR | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 6.000  |
|     | TIGER, JUVENILE<br>6MN- 1YR    | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 3.000  |
|     | TIGER, CUB<br>3MN-6MN          | CHICKEN<br>(DRESSED, BONELESS)       | 1NO    |
| 102 | WILD BOAR                      | WILD BOAR MASH                       | 1.000  |
|     |                                | RIPE PUMPKIN                         | 0.500  |
|     |                                | SWEET POTATO (OCT-MAR)               | 0.250  |
| 103 | WILD DOG                       | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 0.500  |
|     |                                | CHICKEN MEAT                         | 0.750  |
| 104 | WOLF, INDIAN                   | BUFFALO MEAT<br>(FASTING ON MONDAYS) | 0.500  |
|     |                                | CHICKEN MEAT                         | 1.000  |
| 105 | WALLABY, PARMA                 | APPLE                                | 0.050  |
|     |                                | WATERMELON (APR-MAY)                 | 0.050  |
|     |                                | GRAPES                               | 0.050  |
|     |                                | RIPE BANANA                          | 0.050  |
|     |                                | CARROTS                              | 0.050  |
|     |                                | BEANS                                | 0.050  |
|     |                                | DUBA GRASS                           | 0.100  |
|     |                                | OAT CRUSHED                          | 0.050  |

| <b>REPTILES</b> |  |  |                |
|-----------------|--|--|----------------|
| 106             | ANACONDA, YELLOW<br>ADULT                                  | DAY OLD CHICK<br>(ON MONDAY & THURSDAY)                                      | 5 NO           |
|                 | JUVENILE   | DAY OLD CHICK<br>(ON MONDAY & THURSDAY)                                      | 3 NO           |
| 107             | BOA RED SAND /<br>BOA COMMON SAND                          | WHITE MICE /RAT<br>(ON MONDAYS)  | 2NO            |
| 108             | CROCODILE, MORLETE   | ROHI FISH  | 0.500          |
| 109             | CROCODILE, NILE  | CHICKEN MEAT<br>( ON MONDAYS)  | 0.500          |
| 110             | CROCODILE, SIAMESE   | ROHI FISH  | 0.500          |
| 111             | CROCODILE, LONG<br>SNOUTED/GHARIAL<br>ADULT(5 YEARS ABOVE) | ROHI FISH<br>(FASTING ON MONDAYS)  | 1.000          |
|                 | SUB-ADULT (2- 5 YEARS)                                     | FISH FINGERLING-LIVE<br>ABOUT 6"<br>(FASTING ON MONDAYS)                     | 0.800          |
| 112             | CROCODILE, MUGGER  | ROHI FISH<br>(FASTING ON MONDAYS)  | 1.000          |
|                 | SUB-ADULT (2- 5 YEARS)                                     | KERANDI FISH<br>GADISHA  | 0.250<br>0.250 |
| 113             | CROCODILE, DWARF<br>CAIMON                                 | FISH FINGERLINGS (LIVE)<br>(ON TUESDAY, THURSDAY,<br>SATURDAY OF EVERY WEEK) | 0.250          |
| 114             | CROCODILE, SALT WATER                                      | BUFFALO MEAT<br>(FASTING ON MONDAYS)   | 1.000          |
| 115             | COBRA, KING  | RAT SNAKE (MONDAY)   | 1NO            |
| 116             | COBRA, MONOCELLATE/<br>BINOCELLATE                         | RAT (MONDAY)   | 1NO            |
|                 |  | DAY OLD CHICK (MONDAY)<br>GADISHA FISH                                       | 1NO<br>0.050   |
| 117             | IGUANA   | LEUTIA SAG   | 0.020          |

|     |  |  |                         |
|-----|--|--|-------------------------|
|     |  | PALANG SAG(DEC-FEB)  | 0.020                   |
|     |  | FENUGREEK LEAVES (DEC-FEB)                                 | 0.020                   |
|     |  | DRUMDTICK LEAVES   | 0.020                   |
|     |  | CORIANDER LEAVES   | 0.020                   |
|     |  | CARROT   | 0.020                   |
|     |  | BANANA   | 0.010                   |
|     |  | RIPE PAPAYA  | 0.010                   |
|     |  | RIPE PUMPKIN   | 0.020                   |
|     |  | BEANS  | 0.020                   |
|     |  | CAPSICUM   | 0.020                   |
|     |  | CUCUMBER   | 0.010                   |
| 118 | INDIAN CHAMELEON                             | GRASS HOPPER LIVE  | 10 NO.S                 |
| 119 | KRAIT, BANDED                                | RAT SNAKE<br>OR RAT/MICE                                   | 1 NO.<br>2NO            |
| 120 | KRAIT, COMMON INDIAN                         | RAT/MICE   | 1NO                     |
| 121 | MONITOR LIZARD,<br>COMMON                    | KERANDI FISH/ROHI FISH                                     | 0.250                   |
| 122 | MONITOR LIZARD, WATER                        | FISH FINGERLING-LIVE<br>ABOUT 6"<br>(ON SUNDAY & THURSDAY) | 0.350                   |
| 123 | PYTHON, INDIAN ROCK/<br>BURMESE ROCK , ADULT | CHICKEN (MONDAY)   | 1 NO                    |
|     | SUB ADULT                                    | GUINEA PIG/RAT (MONDAY)                                    | 2 NO                    |
| 124 | PYTHON, RETICULATED<br>ADULT                 | CHICKEN (MONDAY)   | 1 NO                    |
|     | SUB-ADULT                                    | GUINEA PIG (ON MONDAY)                                     | 2 NO                    |
| 125 | SNAKE, RAT                                   | RAT (MONDAY)   | 1 NO                    |
| 126 | VIPER RUSSEL'S                               | RAT/DAY OLD CHICK (MONDAY)                                 | 2 NO                    |
| 127 | TORTOISE, STAR INDIAN                        | GREEN SAG<br>RIPE BANANA<br>LADIES FINGER<br>JHUDANG/BEAN  | 0.015<br>0.025<br>0.030 |

|                   |  |                      |       |
|-------------------|--|----------------------|-------|
|                   |  | CUCUMBER             | 0.020 |
|                   |  | PUMPKIN              | 0.050 |
|                   |  | TAMATO               | 0.050 |
|                   |  | PALANG SAG (DEC-FEB) | 0.050 |
|                   |  |                      | 0.025 |
| 128               | TORTOISE, ASIAN BROWN  | GREEN SAG            | 0.030 |
|                   |  | RIPE BANANA          | 0.050 |
|                   |  | LADIES FINGER        | 0.060 |
|                   |  | JHUDANG/BEAN         | 0.040 |
|                   |  | CUCUMBER             | 0.100 |
|                   |  | PUMPKIN              | 0.100 |
|                   |  | TAMATO               | 0.050 |
|                   |  | PALANG SAG (DEC-FEB) | 0.050 |
| 129               | TURTLE, FRESH WATER/<br>INDIAN FLAP-SHELLED/<br>GANGES SOFT-SHELLED/<br>INDIAN TENT TURTLE                   | GREEN SAG            | 0.010 |
|                   |  | KERANDI FISH         | 0.050 |
|                   |  | CABBAGE              | 0.010 |
| 130               | TURTLE, CHITRA   | GREEN SAG            | 0.025 |
|                   |  | PUMPKIN              | 0.050 |
|                   |  | KERANDI FISH         | 0.100 |
|                   |  | CABBAGE              | 0.025 |
| <b>AMPHIBIANS</b> |  |                      |       |
| 131               | INDIAN BULL FROG/<br>GREEN POND/ INDIAN<br>SKIPPER/COMMON INDIAN<br>TREE/ ASIAN COMMON<br>TOAD/ MARBLED TOAD | GRASS HOPPER LIVE    | 1 NO. |

#### **14. Vaccination Schedule of animals:**

##### **VACCINATION SCHEDULE**

| Sl.No. | Species   | Vaccine against                         | Schedule                   |
|--------|---|---|----------------------------|
| 1      | Felids (tiger, lion, leopard, leopard cat, fishing cat, jungle cat) | Feline pan leucopenia<br>Calici Disease | Feligen-<br>CRP/felocell-3 |

|   |                                     |  |  |
|---|-------------------------------------|--|--|
|   |                                     | Rhinotracheitis  | 8, 12, 16 wk and<br>Annually   |
| 2 | Hyenas, jackals, wolf, wild dog     | Distemper, Parvo,<br>hepatitis,<br>LeptospiraParainfluenza | Nobivac- DHPPi<br>(Multivalent vaccine)<br>Annually                              |
|   |                                     | Rabies   | Annually   |
| 3 | Sloth bear and Himalayan Black bear | Distemper, Parvo,<br>hepatitis,<br>LeptospiraParainfluenza | Nobivac- DHPPi<br>(Multivalent vaccine)<br>Annually                              |
| 4 | Elephant                            | Haemorrhagic<br>septicaemia                                | Half yearly  |
|   |                                     | Tetanus  | Half Yearly  |
|   |                                     | Rabies   | Annually   |
|   |                                     | Anthrax  | Annually   |
| 5 | Gaurs                               | HS, BQ, FMD  | Raksha- Triovac<br>Annually  |
| 6 | Birds                               | New Castle disease   | During winter<br>(LaSota vaccine in<br>every two months in<br>in drinking water) |

### CHEMOPROPHYLAXIS SCHEDULE

| Sl. No. | Species | Chemoprophylaxis against | Schedule |
|---------|---------|--------------------------|----------|
|---------|---------|--------------------------|----------|

|   |   |                 |   |
|---|---|-----------------|---|
| 1 | Carnivores (Felids-tiger, lion, leopard)<br>(Canids- Wolf, Jackal, wild dog)<br>(Hyenids) | Trypanosomiasis | Triquin- (every four months)<br>December<br>April<br>August |
| 2 | Birds   | Coccidiosis     | Sulfquinoxaline /<br>Coccidiostats<br>(during monsoon)      |

### ROUTINE FECAL SAMPLE EXAMINATION & DEWORMING SCHEDULE

| Sl. No. | Type of animal   | Enclosure number   | Period (month) |
|---------|--|--|----------------|
| 1       | CARNIVORES<br>(at 4 months interval)<br>Or whenever required | 30,31,32,33 and tiger safari, lion safari<br>(tiger section)   | FEBRUARY       |
|         |  |  | JUNE           |
|         |  |  | OCTOBER        |
|         |  | 18,19,20,21,22,23,24,25,26,27<br>28,29,90,91.(tigers, lions, Jackal, leopards)<br>bear safari<br>sloth and Himalayan bears | FEBRUARY       |
|         |  |  | JUNE           |
|         |  |  | OCTOBER        |
|         |  | small cats, small mammal house, mouse deer, Indian hare, giant squirrel, nocturnal house,                                  | FEBRUARY       |
|         |  |  | JUNE           |
|         |  |  | OCTOBER        |
| 2       | HERBIVORES<br>(at 4 months interval)<br>Or whenever required | Herbivore safari, spotted deer, Elephants  | MARCH          |
|         |  |  | JULY           |
|         |  |  | NOVEMBER       |
|         |  | Rhinoceros, hippopotamus, giraffe, zebra<br>Manipuri deer, barking deer  | MARCH          |
|         |  |  | JULY           |
|         |  |  | NOVEMBER       |

|   |   |  |          |
|---|---|--|----------|
|   |   | Sambar, swamp deer, spotted deer, nilgai, hog deer, black buck, white buck, four horned antelope, primates including chimps. | MARCH    |
|   |   |  | JULY     |
|   |   |  | NOVEMBER |
| 3 | BIRDS<br>(at 4 months interval)<br>Or whenever required         | Enclosures 1 to 13, enclosures inside the children park  | FEBRUARY |
|   |   |  | JUNE     |
|   |   |  | OCTOBER  |
|   |   | emu, cassowary, aquatic bird   | FEBRUARY |
|   |   | peacock, lesser adjutant stork, open bill stork, saras crane, black swan, mandarin duck, rose ringed parakeet, brahminy kite | JUNE     |
|   |   |  | OCTOBER  |
| 4 | REPTILES (at 4 months interval)<br>Or whenever required         | All snakes<br>Star tortoise, monitor lizard  | MARCH    |
|   |   |  | JULY     |
|   |   |  | NOVEMBER |
| 5 | Indian Pangolins (at 4 months interval)<br>Or whenever required | At Pangolin conservation breeding centre   | FEBRUARY |
|   |   |  | JUNE     |
|   |   |  | OCTOBER  |

## DISINFECTION SCHEDULE

Ideal upkeep of captive animals in the zoo principally depends on general hygiene and sanitation of the enclosures, captive animals and their handlers. The following regimen of cleaning and disinfection is carried out routinely in Nandankanan Zoological Park.

- a. Daily**
- (1) Removal of fecal matter, leftover bone from carnivore enclosures, cleaning of the floors of feeding cubicles, kraal, corridor, passage and exhibit area.
  - (2) Removal of left over fodder, fecal matter from herbivore enclosures and cleaning.
  - (3) Cleaning of the feed trough and water trough etc. with scrubber.
  - (4) Cleaning of drains with diluted phenyl.
  - (5) Removal of plastic, polythene and unwanted materials from exhibit area and moats.
- b. Weekly**
- (1) Pest control measures are taken in and around feeding cubicle.
  - (2) Deweeding is carried out in and around enclosures.
  - (3) Keeping the exhibit area and moat free from debris.
  - (4) The feeding place and water trough etc. are cleaned with bleaching powder.
  - (5) Drains are treated with lime and bleaching powder.
  - (6) Feeding cubicles are cleaned with potassium permanganate.
- c. Monthly-**
- (1) Leftover bones in bone pits are lifted and the bone pits are treated with acaricide.
  - (2) Acaricide (cypermethrin etc.) is sprayed on the bodies of the big cats as well as the enclosures during vector abundance season.
  - (3) All debris in exhibit/display area are burnt on a monthly basis. Liming is carried out in and around the enclosures.
  - (4) All water storing areas are treated with water purifier i.e. Sokrena WS
- d. Bi-monthly-**
- (1) Kohrsolin is sprayed on the ground in and around the enclosures after deweeding.
  - (2) Acaricide spray (Cypermethrin etc.), simultaneously on the enclosure ground and on the body of the big cats
  - (3) All wet moat water is pumped out, desilted, lime washed and then replaced with fresh water.
- e. Half yearly-**
- (1) All feeding and drinking troughs are white washed.
  - (2) All floors, walls, roofs of feeding cells, transporting cages, netting, rods are flame sterilized (March & November every year).
- f. Annually-**
- (1) Removal of top soil up to 6" in all kraals and intensively used pacing areas and refilling with fresh sand and soil.
  - (2) All walls and roof tops, both inside and outside, are lime washed.

(3) All chain-link mesh, angles of enclosures and animal cages, sliding doors, squeeze cages etc. are painted.

### **17. Health Check-up of employees for zoonotic diseases:**

#### **Organization of Health Camp for Animal Keeper**

A three-day health camp was organized for all Nandankanan Zoo staff from 18th to 20th July 2023 by the CHC, Mendhasala, with support from CDMO, Khordha. The camp included regular health check-ups and screenings for zoonotic diseases. A total of 199 staff members benefited from this initiative.

#### **Organization of eye check-up camp for zoo staff**

A three-day eye check-up camp was organized at the conference hall of Nandankanan Zoo from 6th to 17th October 2023, with the support of Dr. Agarwal Eye Hospital, Cuttack. A total of 216 staff members benefited from the eye check-up camp.

### **18. Development Works carried out in the zoo during the year:**

#### **. Wallaby Enclosure**

The Wallaby enclosure, inaugurated on 29.12.2023, features a 340 sqm nature-immersive exhibit with species-specific naturalistic enrichments for Parma wallabies, two feeding cells, and CCTV monitoring. The glass-fronted design offers visitors a unique viewing experience.

#### **Hoolock Gibbon enclosures**

Inaugurated on 17.10.2023, two large naturalistic enclosures totalling 2882 square meters have been built for Hoolock Gibbons as part of the new zoo Master Plan. These enclosures feature abundant greenery, species-specific enrichment, eight well-ventilated feeding cells, and two back kraals for animal management. Three glass-fronted viewing decks serve as a primate interpretation centre, educating visitors about Hoolock Gibbons and other primates. Solar fencing atop the moat wall ensures safety by preventing entry of free-living monkeys. Strategic

planting and bamboo cladding enhance the natural habitat and minimize disturbances for the primates.

### **Quarantine unit for Indian Pangolin**

A new quarantine facility was established within the Pangolin Breeding Centre to accommodate rescued and wild pangolins. The facility is equipped with CCTV cameras for constant monitoring, ensuring the safety and well-being of the animals.

### **Back kraals for Small mammals.**

A small mammal back kraal has been completed to house Ratel, Giant Squirrel, and other small mammals, supporting successful breeding, particularly for Ratel. Additionally, another back kraal was developed to improve the breeding facility for Mouse Deer, as part of Nandankanan Zoo's active participation in its conservation breeding program.

### **Development and beautification of Lily pond at MLCP.**

The once weed-infested lily pond within the Multi-Level Car Parking area has been completely transformed. It now boasts floating fountains, a landscaped perimeter with lush lawn grass, visitor seating areas, and designated selfie points, offering a refreshing and aesthetically pleasing space for visitors.

### **Zoo Souvenir shop**

The souvenir shop at Nandankanan Zoological Park offers a diverse range of items, from books and brochures to clothing accessories such as caps, hats, jackets, and age-specific T-shirts. The shop also participated in the Balijatra last winter, where it garnered positive responses and showcased its popularity and appeal among visitors.

### **Renovation of administrative building at State Botanical Garden.**

The old administrative building at the State Botanical Garden has been upgraded, which includes six office chambers providing a functional and organized workspace for the newly formed Project Management Wing of Nandankanan.

### **Mini conference hall at the office of Deputy Director.**

The Deputy Director's Office now features a 28-seater mini conference room, designed for emergency meetings, review sessions, and capacity-building programs, significantly enhancing the office's functionality.

### **New staff quarters for Foresters and Forest Guards**

The inauguration of the new staff quarters for Foresters and Forest Guards marks a significant milestone in improving the living conditions of the dedicated personnel responsible for the protection and conservation of the zoo. The event, attended by esteemed dignitaries including the Hon'ble Forest Minister, MLAs, and high-ranking officials, highlights the importance placed on staff welfare. Two blocks with 12 quarters are designated for Forest Guards, while one block with 6 quarters is allocated for Foresters.

### **Construction of Conference room at State Botanical Garden**

A new state-of-the-art conference room has been added to the State Botanical Garden, providing an excellent space for workshops, training sessions, meetings, and interactions with trainees/probationers. With a capacity to accommodate up to 35 individuals, this modern facility facilitates effective group discussions, training programs, and interactive sessions, enhancing the overall educational and professional experience.

## **19. Education and Awareness programmes during the year:**

### **Introduction of Zoo Ambassador Programme**

The Nandankanan Zoo Ambassador Program is an educational initiative aimed at students from classes VII, VIII, and IX across various schools in Odisha, inviting them to become ambassadors for wildlife conservation. Students are selected through a test and provided with valuable insights into the animals at Nandankanan, conservation efforts, and the latest wildlife updates. Ambassadors also engage in community awareness activities, enhancing their involvement in conservation. This program not only rewards their efforts with certificates and benefits but also nurtures a passion for nature among adolescents, potentially paving the way for future careers in wildlife conservation. A total of 53 ambassadors have been selected through the Nandankanan Zoo Ambassador Program across schools in Odisha.

### **One day at Nandankanan programme**

One Day at Nandankanan' is an educational program designed for students eager to learn about the zoo, its diverse animals, and its conservation initiatives. The program includes visits to various exhibits and gardens within and around the zoo, offering a hands-on experience in wildlife

education. Students have the opportunity to interact with experts from Nandankanan Zoological Park, gaining insights into wildlife conservation. Additionally, the program fosters the development of essential skills such as communication, teamwork, leadership, and problem-solving. To date, 18 'One Day at Nandankanan' programs have been successfully completed.

### **Introduction of zoo volunteers programme.**

Nandankanan Zoo launched the Zoo Volunteers' Program on 14th June 2023, aiming to enhance the quality of service provided to both the zoo and its visitors, while also enriching the learning experience for the volunteers. Volunteers assist in various tasks, including managing daily zoo operations, helping with visitor management during busy times, supporting zoo education programs, preparing documents, and assisting in zoo-keeping activities. As of 31st March 2023, a total of 51 volunteers are actively working with Nandankanan Zoological Park.

### **Story Telling**

On the second day of the 69th Wildlife Week at Nandankanan, a captivating "Storytelling Session" was conducted by Prachitara Mishra, engaging students from Damana Government High School. Through her skillful narration, Mishra effectively instilled a deep sense of responsibility in the students, highlighting the crucial importance of wildlife conservation and encouraging them to become advocates for nature's protection. The session was an inspiring and interactive experience, fostering awareness and empathy for wildlife among the young participants.

### **Zoo Outreach Programme**

The Nandankanan Zoo's Education Wing is deeply committed to its Zoo Outreach Programme, reaching out to schools and colleges to promote wildlife conservation. The program features engaging classes led by Education Officers, Assistant Education Officers, Biologists, trained Zoo Volunteers, and outsourced scholars. With two classes held every month, the initiative has successfully conducted 22 programs so far, spreading awareness about the crucial importance of wildlife conservation and inspiring the younger generation to take active roles in protecting nature.

### **One-day workshop on Zoo Management of Odisha.**

A workshop on "Ex-situ Conservation: Present Status & Way Forward" was held in collaboration with the Nature and Wildlife Conservation Society of Odisha (NWCSO) to celebrate Day-4 of the 69th Wildlife Week. The event saw the participation of NWCSO members, officials from Nandankanan Zoological Park, and representatives from all Zoos of Odisha, including DFOs, ACFs, Range Officers, Foresters, Forest Guards, Research Scholars, and Zoo Volunteers. The workshop provided a platform for zoo representatives to share insights into their conservation facilities and discuss the future strategies for ex-situ conservation.

### **“AMA NANDANKANAN”-Theme song of Nandankanan**

On the 64th Foundation Day of Nandankanan Zoological Park, a theme song highlighting the park's sound management practices was released. The song serves as an artistic celebration of the zoo's commitment to excellence in wildlife conservation, animal welfare, and sustainable operations. Through its lyrics and melody, the theme song underscores the zoo's efforts in maintaining a balanced ecosystem, promoting ethical practices in animal care, and fostering environmental awareness among visitors. This initiative reflects Nandankanan's dedication to integrating music and education for the betterment of conservation efforts.

### **Different Zoo Education and Outreach activities carried out during 2023-24.**

| <b>Serial No</b> | <b>Date</b> | <b>Programme/Event</b>   | <b>No. of Participants</b> |
|------------------|-------------|--|----------------------------|
| 1.               | 14.04.2023  | Visit programme of Intermediate students from KMBB Science Secondary School, Cuttack         | 110                        |
| 2.               | 15.04.2023  | Visit programme of Intermediate students from KMBB Science Secondary School, Cuttack         | 150                        |
| 3.               | 18.04.2023  | Visit programme of students from B.Sc (Forestry) 4 <sup>th</sup> year from OUAT, Bhubaneswar | 54                         |
| 4.               | 19.04.2023  | Induction training programme of SFS officer trainees from CASFOS, Burnihat                   | 48                         |
| 5.               | 23.04.2023  | Visit programme of students and faculty from Kiddy Kids School, Jajpur                       | 25                         |

|     |            |  |      |
|-----|------------|--|------|
| 6.  | 29.04.2023 | Celebration of World Veterinary Day 2023   | 150  |
| 7.  | 29.04.2023 | Field Tour of Forest Guard trainees from Forester Training School, G. Udaygiri-Batch-I           | 48   |
| 8.  | 06.05.2023 | Field Tour of Forest Guard trainees from Forester Training School, G. Udaygiri-Batch-II          | 48   |
| 9.  | 13.05.2023 | Celebration of Endemic Bird Day 2023   | 25   |
| 10. | 17.05.2023 | Visit Programme of kid students from Kidzee School, Bhubaneswar                                  | 100  |
| 11. | 20.05.2023 | Orientation programme on Mission Life  | 50   |
| 12. | 31.05.2023 | Celebration of World Otter Day & World Parrot Day 2023   | 75   |
| 13. | 01.06.2023 | Visit of Internship programme students from CUTM, Bhubaneswar                                    | 25   |
| 14. | 05.06.2023 | Cleanliness drive on the eve of World Environment Day 2023                                       | 40   |
| 15. | 05.06.2023 | Poster Making Competition on the eve of World Environment Day 2023                               | 25   |
| 16. | 07.06.2023 | Orientation programme of Nrityanjali Institute of Eastern Art, Music, Drama & Dance, Bhubaneswar | 50   |
| 17. | 07.06.2023 | Field visit of Forest Guards trainees from NFTS, Champua- Batch-I                                | 46   |
| 18. | 17.06.2023 | Celebration of World Crocodile Day 2023  | 55   |
| 19. | 21.06.2023 | Celebration of World Giraffe Day 2023  | 25   |
| 20. | 25.06.2023 | Field visit of Forest Guards trainees from NFTS, Champua- Batch-II                               | 43   |
| 21. | 04.07.2023 | Van Mahotsav celebration   | >100 |
| 22. | 07.07.2023 | Zoo Outreach Programme at Nandankanan High School  | 140  |

|     |                                |  |      |
|-----|--------------------------------|--|------|
| 23. | 13.07.2023                     | Zoo Outreach Programme at Mother's Public School, Bhubaneswar                      | 145  |
| 24. | 21.07.2023                     | Zoo Outreach Programme at SAI International School, Bhubaneswar                    | 100  |
| 25. | 29.07.2023                     | Celebration of International Tiger Day 2023  | >150 |
| 26. | 29.07.2023                     | One Day at Nandankanan with students of Nandankanan High School                    | 30   |
| 27. | 29.07.2023                     | One Day at Nandankanan with students of Darutheng High School                      | 30   |
| 28. | 29.07.2023                     | One Day at Nandankanan with students of Vivekananda Sikshya Kendra                 | 30   |
| 29. | 29.07.2023                     | One Day at Nandankanan with students of Jhunjhunwala Bidyapitha                    | 30   |
| 30. | 04.08.2023                     | Moth Watching session at State Botanical Garden                                    | 15   |
| 31. | 10.08.2023                     | Celebration of World Lion Day 2023   | >100 |
| 32. | 12.08.2023                     | Celebration of World Elephant Day 2023   | >150 |
| 33. | 13.08.2023                     | Orientation programme of OAS officer trainees from Gopabandhu Academy, Bhubaneswar | 127  |
| 34. | 19.08.2023                     | Zoo Outreach Programme at Damana High School                                       | 120  |
| 35. | 02.09.2023                     | Celebration of International Vulture Awareness Day 2023                            | 75   |
| 36. | 07.09.2023<br>to<br>17.09.2023 | Programme on Big Cats  | >300 |
| 37. | 08.09.2023                     | Celebration of World Iguana Day  | >50  |
| 38. | 09.09.2023                     | Zoo Outreach Programme at Jhunjhunwala Bidyapitha                                  | 115  |

|     |                                |  |      |
|-----|--------------------------------|--|------|
| 39. | 12.09.2023                     | Moth Watching at Nandankanan Zoological Park   | 10   |
| 40. | 12.09.2023                     | Zoo Outreach Programme at Mundali Nodal High School                                    | 125  |
| 41. | 12.09.2023                     | Zoo Outreach Programme at Godisahi Govt. High School                                   | 110  |
| 42. | 12.09.2023                     | Zoo Outreach Programme at Sidheswar Vidyamandir  | 130  |
| 43. | 14.09.2023                     | Zoo Outreach Programme at Utkalmani Govt. High School                                  | 300  |
| 44. | 14.09.2023                     | Zoo Outreach Programme at Utkalmani Balika Uchhabidyapitha, Kendupatna                 | 120  |
| 45. | 15.09.2023                     | Visit programme of B.Sc. Agriculture students from JKBK College of Forestry, Bangalore | 25   |
| 46. | 15.09.2023                     | Zoo Outreach Programme at Govt High School, Darutheng                                  | 155  |
| 47. | 15.09.2023                     | Zoo Outreach Programme at Maharanabirabar Govt. High School, Chandaka                  | 180  |
| 48. | 16.09.2023                     | Visit programme of B.Sc. Agriculture students from JKBK College of Forestry, Bangalore | 25   |
| 49. | 17.09.2023                     | Visit programme of B.Sc. Agriculture students from JKBK College of Forestry, Bangalore | 25   |
| 50. | 21.09.2023                     | Visit Programme of SFS trainees from CASFOS, Dehradun                                  | 70   |
| 51. | 01.10.2023                     | Cleanliness drive to celebrate “Swachhata Hi Seva”                                     | 140  |
| 52. | 02.10.2023<br>to<br>08.10.2023 | 69 <sup>th</sup> Wildlife Week   | >500 |
| 53. | 02.10.2023                     | Anti-plastic drive with students of Nandankanan High School                            | 55   |
| 54. | 03.10.2023                     | Wildlife Story Telling for students of Damana High                                     | 52   |

|     |            | School  |      |
|-----|------------|---|------|
| 55. | 04.10.2023 | One Day at Nandankanan with students of Centurion University                              | 44   |
| 56. | 05.10.2023 | Workshop on “Ex-situ Conservation: Present status & way forward”                          | 75   |
| 57. | 06.10.2023 | Nature trail at Nandankanan   | 45   |
| 58. | 07.10.2023 | Wetland trail at Nandankanan  | 33   |
| 59. | 07.10.2023 | Visit programme of FG trainees from FTS, G. Udaygiri                                      | 41   |
| 60. | 08.10.2023 | Bird Watching session   | 55   |
| 61. | 08.10.2023 | Moth Watching session   | 23   |
| 62. | 28.10.2023 | Visit programme of FG trainees from FTS, G. Udaygiri                                      | 41   |
| 63, | 12.11.2023 | Celebration of National Bird Day  | 23   |
| 64. | 18.11.2023 | Visit programme of FG trainees from NFTS, Champua   | 41   |
| 65. | 18.11.2023 | One Day at Nandankanan programme from Saraswati Sishu Mandir students of Khordha district | 1000 |
| 66. | 22.11.2023 | Visit programme of B.Sc Zoology students from Dhenkanal Autonomous College                | 32   |
| 67. | 23.11.2023 | Visit programme of FRO trainees from Chandrapur Training School, Maharashtra              | 45   |
| 68. | 28.11.2023 | Visit programme of FG trainees from NFTS, Champua   | 40   |
| 69. | 29.11.2023 | One Day at Nandankanan programme for Mother’s Public School, Bhubaneswar                  | 130  |
| 70. | 03.12.2023 | Visit of Forest officials from Tripura  | 35   |
| 71. | 12.12.2023 | Zoo Ambassador Test conducted in 33 schools of Odisha                                     | 480  |
| 72. | 13.12.2023 | Zoo Ambassador Test conducted in 19 schools of Odisha                                     | 275  |
| 73. | 13.12.2023 | One Day at Nandankanan programme for students of  | 75   |

|     |            |   |     |
|-----|------------|---|-----|
|     |            | Mother's Public School, Bhubaneswar   |     |
| 74. | 15.12.2023 | One Day at Nandankanan programme for students of Mother's Public School, Bhubaneswar                              | 120 |
| 75. | 15.12.2023 | Visit programme of B.Sc (Forestry) students from College of Forestry, OUAT  | 47  |
| 76. | 19.12.2023 | One Day at Nandankanan programme for students of Mother's Public School, Pahala Branch                            | 110 |
| 77. | 20.12.2023 | One Day at Nandankanan programme for students of Mother's Public School, Bhramagiri                               | 90  |
| 78. | 23.12.2023 | One Day at Nandankanan programme for students of Mother's Public School, Pahala Branch                            | 110 |
| 79. | 01.01.2024 | Visit of members of standing committee of Parliament  | 40  |
| 80. | 06.01.2024 | Visit of B.Sc (Forestry) students from College of Forestry, OUAT for Tree Walk                                    | 44  |
| 81. | 07.01.2024 | Briefing session of Mid-winter waterfowl census 2024  | 42  |
| 82. | 07.01.2024 | One Day at Nandankanan programme for students of Mother's Public School, Pahala Branch                            | 450 |
| 83. | 10.01.2024 | Mid-winter waterfowl census 2024  | 55  |
| 84. | 18.01.2024 | Visit programme of IFS probationers from IGNFA, Dehradun  | 54  |
| 85. | 24.01.2024 | Workshop of field staff and Kumbhira Bandhu on rescue operation and monitoring of gharial and community awareness | 45  |
| 86. | 26.01.2024 | Workshop on Odisha Birders' Conclave  | 35  |
| 87. | 28.01.2024 | Visit of students from B.Sc Zoology from Kharasrota Mahavidyalaya, Jajpur   | 20  |
| 88. | 01.02.2024 | Visit of Red Cross Volunteers from different districts of   | 450 |

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|      |                                | Odisha   |      |
| 89.  | 02.02.2024                     | Celebration of World Wetland Day   | 80   |
| 90.  | 03.02.2024                     | Visit of B.Sc Zoology students from Mahamayee Mahila Mahavidyalaya , Berhampur | 38   |
| 91.  | 03.02.2024                     | Orientation programme of students from XIMB, Bhubaneswar                       | 21   |
| 92.  | 06.02.2024                     | One Day at SBG from Mother's Public School, Unit-I                             | 147  |
| 93.  | 07.02.2024                     | Visit of +3 B.A (Political Science) Hons students from Bonai College, Bonai    | 22   |
| 94.  | 08.02.2024                     | Visit of +3 B.A (Geography) Hons students from Barang College                  | 15   |
| 95.  | 09.02.2024                     | Visit of Assistant Horticulture Officer to SBG                                 | 30   |
| 96.  | 13.02.2024                     | One day at Nandankanan for students of Siddheswar Vidya Mandir, Naraj          | 55   |
| 97.  | 15.02.2024                     | Visit programme of SFS officer trainees from CASFOS, Coimbatore.               | 53   |
| 98.  | 16.02.2024<br>to<br>19.02.2024 | Great Backyard Bird Count  | 72   |
| 99.  | 17.02.2024                     | Celebration of World Pangolin Day  | >100 |
| 100. | 17.02.2024                     | Visit of B.V.Sc students from SOA, Bhubaneswar                                 | 80   |
| 101. | 18.02.2024                     | Season watch programme at SBG  | 15   |
| 102. | 18.02.2024                     | Visit of students from Nimapada college  | 32   |
| 103. | 20.02.2024                     | Visit of NSS volunteers from degree college of Odisha                          | 84   |
| 104  | 24.02.2024                     | Capacity building Training programme of staff of Nandankanan                   | 35   |

|      |                                |   |      |
|------|--------------------------------|---|------|
| 105  | 25.02.2024                     | Herping trail   | 10   |
| 106  | 03.03.2024                     | Celebration of World Wildlife Day                                       | >150 |
| 107. | 03.03.2024                     | Visit of B.Sc & M.Sc Zoology students from Phulbani Autonomous College  | 55   |
| 108. | 05.03.2024<br>to<br>07.03.2024 | Zoo Keepers' Capacity Building programme for Eastern region             | 35   |
| 109. | 08.03.2024                     | Induction training of FROs trainees from OFRC, Angul                    | 45   |
| 110. | 10.03.2024                     | Night Out at Zoo  | 20   |
| 111. | 13.03.2024                     | Refresher training programme of frontline staff of FTS, Ghatikia        | 21   |
| 112. | 13.03.2024                     | National level exposure visit of forest officials from TNFA, Coimbatore | 15   |
| 113. | 14.03.2024                     | Visit of FROs trainees from HPFA, Sundarnagar                           | 37   |
| 114. | 14.03.2024                     | Celebration of Learn about Butterflies Day                              | 40   |
| 115. | 14.03.2024                     | Visit of students from Sri Sri University to SBG                        | 30   |
| 116  | 15.03.2024                     | Visit of students from SAI International School, Patia                  | 170  |
| 117  | 16.03.2024                     | Workshop on Herping   | 35   |

## **20. Important Events and happenings:**

### **Operationalization of Mobile Veterinary Unit**

A Mobile Veterinary Unit was launched on 07.07.2023 to conduct awareness camps, provide treatment, and monitor disease in the forest fringe villages of Nandankanan Wildlife Sanctuary, Chandaka Wildlife Sanctuary, City Forest Division, and Khordha Forest Division. Led by a trained

veterinary doctor, the team includes a livestock inspector and assistant. The unit also plays a key role in the rescue and rehabilitation of animals in nearby areas.

### **Whats App Based Ticketing**

The Whats App BOT developed by Nandankanan Zoological Park is the first of its kind in any Indian zoo, offering seamless ticket booking without the need to wait in line.

### **Up-gradation of visitor roads**

The internal and main arterial roads over 4.1 km of Nandankanan have been upgraded to ensure smooth movement for visitors and Battery Operated Vehicles. This improvement enhances visitor experience and overall mobility, making it easier to access various exhibits and facilities, ultimately providing a more enjoyable experience.

### **Constitution of Rapid Respond Team**

A newly formed Rapid Response Team has been established to address and reduce man-animal conflicts. This specialized team is trained to assist in the rescue and rehabilitation of animals in and around the sanctuary, as well as in nearby wildlife divisions, ensuring prompt and effective action to mitigate conflicts and safeguard both human and animal welfare.

### **Resuming of boating facility**

The boating facility at Nandankanan Zoological Park resumed on 18th November 2023, offering visitors an enchanting paddle boating experience on Kanjia Lake

### **Ropeway connecting Nandankanan Zoological Park & State Botanical Garden.**

The long-awaited ropeway at Nandankanan was inaugurated on 17th November 2023 and opened to the public on 18th November 2023. With 12 cabins that can accommodate 72 passengers at a time, visitors can now enjoy a scenic ride across Kanjia Lake, spanning 618 meters. This exciting new addition is a Public-Private Partnership project with Damodar Ropeway & Infra Ltd, Kolkata.

### **Drinking water fountains.**

Three strategically located drinking water fountains have been installed by the Zoo authority to provide easy access to water for visitors, helping them stay hydrated at key points within the premises and enhancing their overall experience.

### **De-weeding of Kanjia Lake**

A massive de-weeding initiative was carried out to remove both floating and hyacinth weeds from Kanjia Lake. This effort has greatly enhanced the lake's aesthetic appeal and significantly improved the experience for tourists.

### **NIMS monitoring app**

The Nandankanan Integrated Monitoring System (NIMS) app is an innovative digital solution developed to streamline and enhance the management and monitoring of various operations within Nandankanan Zoological Park. With features like real-time monitoring, animal health tracking, and enclosure condition assessments, the app offers a comprehensive approach to zoo management. It also facilitates efficient visitor management, environmental monitoring, and task assignment, ensuring smooth day-to-day operations. The app generates detailed reports and analytics, providing valuable insights for decision-making, resource allocation, and strategic planning. By integrating these functions, NIMS aims to improve operational efficiency, animal welfare, and overall park management.

### **Adopt-an-Animal Programme**

The Animal Adoption Programme at Nandankanan Zoological Park encourages public involvement in the conservation of endangered species. Through this initiative, individuals, organizations, and corporations can adopt animals by contributing to their feed, housing, and healthcare costs. The program offers both offline and online adoption options through the Nandankanan website. In the 2023-2024 financial year, 106 adopters, including organizations like IPICOL, Bhubaneswar and Indiano Chrome Private Limited, Bhubaneswar, collectively pledged Rs. 39,300,100. Contributions towards animal adoption are exempt from tax under section 80G of the Income Tax Act, 1961.

### **21. Seasonal special arrangements for upkeep of animals:**

The following summer, monsoon and winter care arrangements are made at Nandankanan Zoological Park during the year.

#### **SUMMER CARE MANAGEMENT**

##### **1. Carnivore enclosures:**

- All water pools in the exhibit area and back kraals are repaired for any possible cracks and water is filled up alternatively.
- Water in the pools is kept in running condition during peak hours of the day.

- The shutter of the feeding cell is kept open throughout the day to allow the animal to take rest inside the feeding cell, if it so desires.
- Water from all moats is pumped out, followed by cleaning, disinfection and refilling (wherever possible).
- Provision of shed above the water pools has been made to prevent water from getting heated.
- Feeding cells are made straw thatched to keep the cells cool.
- Sprinklers are made available and operational in all carnivore enclosures, including Jackal, hyena, wolf, wild dog and Indian fox.

## **2. Herbivore enclosures:**

- All Sprinklers are made operational.
- Wallowing tank of sambar enclosure is cleaned and provision of running water is made in wallowing tank.
- Water accumulation is not allowed inside the enclosure.
- Water in the pools is kept in running condition during peak hours of the day.
- Left over stems of fodders accumulated in the moat area is cleaned.
- Top soil is removed and enclosure is cleaned.
- Sprinklers are made available and operational in all enclosures including giraffe.

## **3. Herbivore Safari:**

- Sufficient number of sprinklers are made available and operational at different strategic locations inside the herbivore safari
- Arrangements have been put in place for proper drainage of both the large water pools to ensure that silt does not accumulate on the floor. The water pools are cleaned and disinfected every week.
- All the water troughs are repaired, lime washed and covered with overhead bamboo tatis to avoid heating.
- Artificial sheds made of bamboo tati are provided at different locations to allow the deer take rest underneath.

## **1. Primate enclosures:**

- Provision of air coolers is made to chimpanzee and exotic primates wherever necessary.
- Benachera mats are hanged at the windows of the feeding cells in the chimpanzee enclosure.

- Roof thatching with provision of cantilever is made in the chimpanzee enclosure to provide shade on the feeding cell wall.
- Exhibit area of Assamese macaque, Capuchin, Tamarin and Squirrel monkey enclosures are covered with bamboo tati.
- Chimpanzees are not allowed into the exhibit area in case the temperature rises to more than 40°C.
- Provision of shed is ensured in the exhibit areas of all primate enclosures.

## **2. Reptile park:**

- In crocodile and water turtle enclosures, water in the pool is kept in running condition during peak hours of the day.
- Sheds are provided at all crocodile and turtle enclosures so that water does not get heated.
- Snake enclosures are covered with bamboo tati.
- Bamboo tatis have been provided on roof top of the Iguana and yellow anaconda enclosures.

## **3. Bird enclosures:**

- Provision of side wall curtains is made during day time (10 AM to 4 PM) to protect them from hot blowing wind.
- Water is sprinkled on side wall curtains, floors and roof tops by 8 AM every day.
- The grass lawn passage situated between bird enclosures (Enclosure 1 to 10) is flooded with water before 8 AM every day.
- Cinereous Vulture:- Water tank is kept filled with water. Water is sprayed over the bird and inside the enclosure in case the temperature goes beyond 40°C.
- Silver pheasant/ Golden pheasant enclosure/ring neck pheasant/lorikeet enclosures: - gunny bags/ benachera are hanged up to half of the chain link mesh and water is sprinkled over it 2-3 times a day.
- Emu and ostrich are given bath by spraying water on them during the early part of the day (i.e. before 10AM).
- Large earthen water pots are provided in all bird enclosures to keep the drinking water cool.

## **4. Bear Enclosures:**

- All bear enclosures (enclosure 15 and 16) are provided with two sheds, each thatched with straw or bamboo. Bears are kept confined in the feeding cell during 10AM to 4PM on days when the temperature goes beyond 40°C.
- Moats are cleaned, disinfected and refilled with fresh water. Water moats are topped with fresh water daily.
- Back-kraals of bear safari are provided with bamboo tati on the chain-link mesh roof top.

#### **5. General considerations:**

- All enclosures have wall hanging thermometers to record maximum/ minimum temperature of the day
- Staff of animal section remain vigilant during peak hours of the day and inform Zoo Veterinary Hospital in case any behavioural change is noticed. A special squad is constituted to remain vigilant during peak hot hours of the day.
- Anti-stress medicines, multivitamins and electrolytes are supplemented in feed/ drinking water as and when required.

### **MONSOON CARE MANAGEMENT**

1. Lime spreading, in all herbivore enclosures, is done every month.
2. Leaking roof tops of different animal enclosures, especially birds and reptiles, are properly sealed to avoid soiling of litter/substrate which can be a source of infection.
3. Old and rough drinking water pots are replaced with new and clean ones to facilitate clean water supply.
4. Water pools of the carnivore enclosures are lime washed every month.
5. To protect the animals from water borne infections, stagnant water in all water moats is removed and the moat cleaned thoroughly and treated with lime.
6. Pruning of bushes and weeds inside and surrounding the carnivore enclosures are done every fortnight to protect the animals from predators and ecto-parasite infection. To avoid tick infestation, acaricide is sprayed after every deweeding.
7. To check waterborne diseases, sensitive animals like Chimpanzee, exotic primates, Assamese macaque and other delicate small mammals and birds are provided with clean and potable drinking water every day.
8. Roofing over the feeding troughs is ensured to prevent the food items getting wet.

9. Cleanliness and hygiene measures are taken sincerely at the slaughter house and feed receiving centre. Floor washing with bleaching powder and antiseptic foot bath is ensured at feed distribution centres and slaughter houses.
10. Vegetables, fruits and greens are washed with 0.1% potassium permanganate solution prior to processing at feed distribution centre.
11. Containers, tins and carry bags used for transporting feed are properly cleaned and washed daily.
12. Potassium permanganate solution/lime foot bath at the entrance of all herbivore, carnivore and bird enclosures is strictly maintained.
13. Dumping pit of scat and excreta from carnivore enclosure are covered with earth. Bone pits are cleaned every month.

## **WINTER CARE MANAGEMENT**

### **1. Birds housed in Enclosure no 1 to 13, 81 and inside Children Park:**

- Drapes of agro net or clean gunny bag are spread around the wire mesh from outside during night time.
- Lighting with 40W electric bulbs protected with a metallic frame is provided in each enclosure and is switched on during night time for warmth.
- As the breeding season for most birds coincides with the end of winter, provision of sufficient nest boxes and other nesting facilities are made in each enclosure according to the requirement of the species after meticulous observation.

### **2. Chimpanzee and other exotic primates:**

- The windows of the feeding cell are covered with drapes during night time but at a distance so that it can't be pulled out or damaged. The existing window shutters are used during the night time.
- Medicines to improve immunity are supplemented in the diet.
- Room heaters are kept in readiness for their use in extreme cold conditions.
- When needed, plywood sheets are spread on the floor of the night shelter of chimpanzee to keep the floor warm.

### **3. Snakes:**

- Clean fresh straw wrapped in gunny bags is provided inside each enclosure
- A 40W electric bulb is provided in the den to provide warmth
- Provisions of UV bulbs, IR bulbs and room heaters have been made for reptile use.
- Provision of direct sunlight into the enclosure has been made by pruning obstructing tree branches.

#### **4. Crocodiles:**

- To allow day time basking, overhead branches of shady trees are pruned and fresh sand beds are spread in the basking zone. In extreme cold conditions, thatched sheds with straw underneath are provided in each enclosure to help crocs taking shelter at night.

#### **5. Tiger and other carnivore enclosures:**

- Stagnant/accumulated rain water is pumped out from all water moats since it may act as a source of gastrointestinal infection. Silt accumulated inside moat is removed and the moat is treated with lime and is kept dry.
- The top soil of tiger and lion enclosures/ back kraals (frequently used areas) are removed and replaced with fresh sand after sprinkling of lime.
- Lime washing of walls of feeding cells is done every winter.
- The water pools inside the enclosures/back-kraals are inspected and repaired wherever required.

#### **6. Herbivore enclosures:**

- All lake side herbivore enclosures are sprinkled with lime. Stagnant water and mud in enclosures are cleaned and replaced with fresh soil immediately.
- Top soil removal in all herbivore enclosures start during winter so that it can be completed before the arrival of the hot and humid climate

#### **7. General consideration-**

- Annual lime washing of all wall structures of feeding cells, exhibit area, back-kraals and painting of chain-link mesh, squeeze/ transportation cages, angles, iron structures is done during winter.

## **22. Research Work carried out and publications:**

## **Research:**

Demonstrating its long-term commitment to research, Nandankanan Biological Park has actively supported a range of projects focused on biodiversity conservation, wildlife management, and animal health. Collaborative efforts are prioritized to ensure the best possible outcomes. These research teams consist of in-house staff, officers, and personnel from renowned institutions such as Odisha Veterinary College, OUAT, Bhubaneswar, Centurion University, Bhubaneswar, zoo vets, collaborating scientists, and students at the graduate, Master's, and Ph.D. levels. The research initiatives are sustained by funding from the Central Zoo Authority (CZA), New Delhi, and the Wildlife Wing, Forest, Environment and Climate Change Department, Odisha. The results of these studies contribute significantly to advancing expertise in captive animal management, with many findings published in prestigious international journals, further reinforcing Nandankanan's commitment to expanding knowledge in the field.

### **Ongoing research projects**

#### **Species Recovery of Gharial (*Gavialis gangeticus*) in river Mahanadi**

Odisha is the only state of India with all three species of crocodylian; Gharial (*Gavialis gangeticus*), Mugger (*Crocodylus palustris*) and Saltwater crocodile (*Crocodylus porosus*). Mahanadi is a significant river in India, marking the southernmost distribution boundary for the Gharial. To restore Gharial populations in the Mahanadi, Wildlife Wing of Forest, Environment and Climate Change Department of Odisha initiated a project “Species Recovery of Gharial in River Mahanadi” in 2019. This initiative involves the careful release and post-release monitoring of captive-bred Gharials from Nandankanan Zoological Park. Nineteen Gharials, comprising seven males and twelve females, ranging from 1.5m to 3.85m in length and aged between 5 to 16 years, were released in stages. Prior to release, extensive surveys assessed suitable release sites based on river geo-physiography and human activities, ensuring a strategic approach to conservation efforts.

All released Gharials were tagged with transmitters; 13 with radio transmitters and 6 with satellite transmitters for post-release monitoring. Three post-graduate research scholars were engaged for post-release monitoring. The transmitters enabled precise tracking of individual Gharials, facilitating the observation of their daily activities, habitat preferences, seasonal movements,

breeding behavior and identification of threats. Conservation strategies encompassed establishing a 10-km 'NO FISHING ZONE' in Satkosia gorge, engaging 14 forest divisions along the Mahanadi for implementation of protection measures, fostering community involvement and awareness, compensating for damaged fishing nets and offering a Rs. 1000 reward for the safe retrieval of any Gharial caught in fishing net.

One of the adult female gharials moved about 120 kms downstream and passed through a nylon fishing net and got its jaws wrapped up in the torn net, but was successfully rescued through joint efforts of the Nandankanan rescue team, local forest personnel and fishermen. At present, five adult individuals are being tracked. Tragically, eight Gharials were found dead, while the loss of signal has hindered the location determination of the remaining six. Of the 8 recorded deaths, 2 Gharials succumbed to blasting, 4 were entangled in nylon nets, 1 was killed by a Mugger, and 1 died from *Clostridium haemolyticum* infection. These deaths highlight threats such as harmful fishing practices, habitat disruption and perceived interspecific conflict with Muggers.

The concerted conservation efforts, including stringent protection measures, establishment of the 'NO FISHING ZONE', extensive research and community engagement initiatives have yielded remarkable results. After a gap of 40 years, natural breeding of Gharials occurred in the Satkosia gorge sanctuary, with 28 hatchlings in May 2021, followed by 32 in May 2022, and 35 in May 2023. Provision of reward resulted in seven gharial hatchlings/yearlings caught in the fishing net being handed over by local fisherman to local field staff/technical team. The tenure of the first phase of the project was completed on 30th June, 2023. The second phase of the project got approved vide Letter No. PT1-CWLW-BUD-BUD-0004-2023/ **8735**, dated 08/08/2023. The activities undertaken included recruitment of three research scholars, survey of Mahanadi and Churasimal for reassessment of gharial habitat, anthropogenic threats, monitoring of released and wild gharials for tracking their movement, habitat use and documentation of breeding biology, awareness discussion in villages on both sides of River Mahanadi in preferred gharial habitats, engagement of Kumbhira Bandhu, awareness competitions in five schools near important gharial habitats, including an award for top performers, improvement of field camp at Sunakhania, procurement of telemetry and field equipment to facilitate the project activities and future release programme of gharials in winter, 2024.

#### **A. Internship programme:**

In July, 2022, Nandankanan launched an innovative internship program designed for graduate and postgraduate students. The primary goal of this initiative is to provide a platform for wildlife researchers to do basic research in the field of zoo management and learn new skills of ex-situ and in-situ conservation techniques at Nandankanan.

The internship program spans a duration of 30 days to 3 months, with new cohorts of interns enrolled during each quarter. In the financial year 2023-24, a total of twelve interns completed their assignments and submitted their theses. This program serves as a stepping stone for aspiring researchers, providing them with hands-on experience and fostering a deeper understanding of the intricacies of zoo management and conservation practices.

| <b>Name</b>              | <b>institution</b>                      | <b>Topic</b>   | <b>Guided by</b>                                   |
|--------------------------|---|--|--|
| Swati Sucharita Rath     | Dhenkanal Autonomous College, Dhenkanal | Non-invasive sampling of ecto and endo parasites and their surveillance        | Dr Sarat Kumar Sahu, BVO                           |
| Lucky Sahu               | Angul Autonomous College, Angul         | Phenology and Viability of flowering twig of orchids at State Botanical Garden | Mrs. Sushree Swati Mohanty<br>Range Officer, SBG-I |
| Sradhashree Pratap Singh | Angul Autonomous College, Angul         | Phenology and propagation of medicinal plants at State Botanical Garden        | Mrs. Sushree Swati Mohanty<br>Range Officer, SBG-I |
| Bijayini Pattanaik       | Angul Autonomous College, Angul         | Growth, development and flowering of seasonal plants at Mughal Garden of       | Sri Milan Kumar Panda<br>Education Officer         |

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|-----------------------|--------------------------------------|--|---|
|                       |                                      | State Botanical Garden   |   |
| Nikita Rout           | Christ college,<br>Bangalore         | Behavioural study of wolves in captivity   | Dr Rajesh Kumar Mohapatra, Biologist                  |
| Abhijit Hota          | Centurion University,<br>Bhubaneswar | Collection and analysis of different signs of Carnivores in Nandankanan  | Dr Rashmi Ranjan Swain, ACF(SM)                       |
| Saswati Dash          | Centurion University,<br>Bhubaneswar | Collection and analysis of different signs of Herbivores in Nandankanan  | Sri Milan Kumar Panda<br>Education Officer            |
| Deepika Mohanty       | Salipur Autonomous College, Cuttack  | Winter arrangements of birds in captivity  | Dr Sudipta Panda, Range Officer, Sanctuary Management |
| Padmaja Niharbala Das | BJB Autonomous College, Bhubaneswar  | Assessment of existing enrichments at animal enclosures of Nandankanan Zoological Park   | Dr Rajesh Kumar Mohapatra, Biologist                  |
| Aishwarya Bharati Kar | BJB Autonomous College, Bhubaneswar  | Behavioural evaluation of enrichment activities at Nandankanan Zoological Park   | Dr Rajesh Kumar Mohapatra, Biologist                  |
| Yashaswini Sahoo      | BJB Autonomous College, Bhubaneswar  | Preparation of ethograms for the selected animals of Nandankanan Zoological Park through literature review and field observation | Dr Rajesh Kumar Mohapatra, Biologist                  |
| Sipra Ray             | BJB Autonomous College,              | Development of methods for animal welfare assessment of Nandankanan Zoological Park  | Dr Rajesh Kumar Mohapatra, Biologist                  |

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|  | Bhubaneswar |  |  |
|--|-------------|--|--|

### **B. List of publications during 2023-24**

1. Rath, L.P., Dash, S.K., Khan, A., Mohapatra, R.K., Kumar, S., Nair, M. V., Paul, S., and Maharana, S. (2024). Monitoring the movement, habitat use and mortality of captive-bred reintroduced gharials in the Mahanadi River, India. *Aquatic Conservations: Marine and Freshwater Ecosystems*. 34 (2). e4097.
2. Wangmo, L., Jabin, G., Ghosh, A., Priyambada, P., Dalui, S., Joshi, B. D., Singh, V., Dolker, S., Mohapatra, R.K., Nair, M. V., Sharma, L., and Thakur, M. (2024). Genetic assessment of captive breeding program of Indian Pangolin: implications for conservation and management. *Molecular Biology Reports*. 51. 10.1007/s11033-023-09090-0
3. Book Chapter: Mohapatra, R.K. (2023) Solution to plastic pollution, In Murugasan, K., Panda G.K., Sahu, N. R. (Eds) *Solution to Plastic Pollution*. Centre for Environmental Studies, Forest, Environment & Climate Change Department, Government of Odisha, Bhubaneswar. pp 50-58.

### **23. Conservation Breeding Programme of the Zoo:**

Nandankanan Biological Park demonstrates a steadfast commitment to advancing research in biodiversity conservation, wildlife management, and animal health. Emphasizing collaborative efforts, the park actively engages in-house staff, zoo veterinarians, and experts from prestigious institutions such as Odisha Veterinary College, OUAT, and Centurion University, alongside graduate, Master's, and Ph.D. students. These partnerships ensure innovative and impactful outcomes in research. Sustained by funding from the Central Zoo Authority (CZA), New Delhi, and the Wildlife Wing, Forest, Environment, and Climate Change Department, Odisha, the park's research initiatives contribute significantly to enhancing expertise in captive animal management. Findings from these projects are shared through publications in esteemed international journals, highlighting Nandankanan's role in advancing global knowledge in wildlife conservation and management.

#### **Conservation Breeding Programme**

- (A) **Indian Pangolin Conservation Breeding Programme:**

Nandankanan Zoological Park houses the world's only Conservation Breeding Centre for Indian pangolins, established in 2008. Using infrared-sensitive CCTV cameras, the centre has uncovered vital insights into pangolin behavior, enabling the development of effective housing, husbandry, and conservation breeding protocols. With 16 pangolins successfully bred in captivity, the current population stands at 23 (11 males and 12 females). Recent additions include an isolation ward with three enclosures to treat infections and mitigate disease risks. Collaborative initiatives with South East Asian pangolin facilities, supported by the Central Zoo Authority, focus on refining artificial diets, health care, breeding, and release protocols to enhance conservation efforts for this endangered species.

(B) **Conservation Breeding of Long-billed vultures:**

The Vulture Conservation Breeding Centre at Nandankanan Zoological Park, established in 2011-12 with support from the Central Zoo Authority, spans 0.3 acres within seven acres of undisturbed forest. It focuses on captive management and breeding of long-billed vultures for reintroduction into the wild. The initial population of 12 vultures, procured from Gandhi Zoological Park, Gwalior, in 2018, was identified through molecular sexing techniques. The center includes a colony aviary, two nursery aviaries, and a laboratory complex equipped for biological analysis, incubation, and CCTV monitoring. Activity patterns are observed using advanced cameras. In 2024, two pairs of vultures laid eggs, which were properly incubated but found infertile after radiographic analysis. The centre continues its efforts to refine breeding protocols for conservation success.

(C) **Conservation Breeding of Indian tiger**

Nandankanan Zoological Park has been breeding tigers since 1966 and has been a participating zoo for conservation breeding of Indian tigers since 2009. There have been 380 tiger births since 1966, including 52 births under the conservation breeding programme i.e., after 2009. The zoo has sent tigers to the coordinating zoo Nehru Zoological Park, Hyderabad in 2016 and received a wild tigress from Nandanvan Zoo, Bhopal in 2009 and a zoo-bred tiger with 33% wild gene from Nehru Zoological Park, Hyderabad in 2016 to infuse new bloodline and increase heterozygosity. Presently, the zoo has 27 tigers which include 17 (9:8) normal coloured tigers, 07 (3:4) white tigers and 03(3:0) melanistic tigers, mainly as a result of the ongoing conservation breeding programme.

(D) **Conservation Breeding of Mouse deer**

Nandankanan Zoological Park has been breeding mouse deer since 1971 and has been a participating zoo in conservation breeding of mouse deer since 2009. There have been 58 mouse deer births in captivity since 1971 including 41 births under the conservation breeding programme, i.e., after 2009. The zoo sent mouse deer to the coordinating zoo Nehru Zoological Park, Hyderabad in 2013 and 2016, to Sri Chamarajendra Zoological Garden, Mysore in 2018 and received mouse deer from Nehru Zoological Park, Hyderabad in 2016 to infuse new bloodline and increase heterozygosity. Presently, the zoo has 31 mouse deer (12:9:10) and is going ahead with conservation breeding programme. Nine offspring were born during 2023-24.

**24. Animal acquisition / transfer / exchange during the year:**

**I. Enhanced animal collection.**

Animal acquisition/exchange programs conducted during 2023-2024 added, **five** new species to Nandankanan's animal collection. Additionally, **nine** species were brought for pairing, and **six** species were introduced for infusion of new bloodlines.

**A. Implementation of animal exchange programmes during 2023-24**

| Sl. No | Species received           | Sex (M: F: U) | Name of the zoo                                  | Date of Disposal |
|--------|----------------------------|---------------|--|------------------|
| 1.     | Hoolock gibbon             | 1:1:0         | Biological Park, Itanagar                        | 25.07.2023       |
| 2.     | Leopard cat                | 1:1:0         |  |                  |
| 3.     | Himalayan black bear       | 0:1:0         | Aizawl Zoological Park, Mizoram                  | 08.09.2023       |
| 4.     | Pig tailed macaque         | 1:1:0         |  |                  |
| 5.     | Hoolock gibbon             | 1:1:0         |  |                  |
| 6.     | Four horned antelope       | 2:5:0         | Sambalpur Zoo and conservation centre, Sambalpur | 05.12.2023       |
| 7.     | Sambar                     | 2:3:0         |  | 21.02.2024       |
| 8.     | Gangetic soft-shell turtle | 2:2:0         | Assam State Zoo Cum Botanical Garden, Guwahati   | 18.03.2024       |
| 9.     | Great white pelican        | 2:2:0         |  |                  |
| 10.    | Himalayan griffon vulture  | 2:2:0         |  |                  |
| Sl. No | Species given to           | Sex (M: F: U) | Name of the zoo                                  | Date of Disposal |
| 1.     | Royal Bengal Tiger         | 1:1:0         | Biological Park, Itanagar                        | 14.07.2023       |
| 2.     | Gharial                    | 1:2:0         |  |                  |
| 3.     | Royal Bengal Tiger         | 1:1:0         | Aizawl Zoological Park,                          | 27.03.2023       |

|    |           |       |  |            |
|----|-----------|-------|--|------------|
|    |           |       | Mizoram  |            |
| 4. | Blackbuck | 4:4:0 | Sambalpur Zoo and conservation centre, Sambalpur | 04.12.2023 |
| 5. | Hog deer  | 4:4:0 |  | 20.02.2024 |

### B. Acquisition of exotic animals during 2023-24

| Sl. No. | Species Given         | Sex (M: F: U) | Date of acquisition |
|---------|-----------------------|---------------|---------------------|
| 1.      | Golden handed tamarin | 1:1:0         | 31.08.2023          |
| 2.      | Squirrel monkey       | 1:1:0         | 31.08.2023          |
| 3.      | Cassowary             | 1:1:0         | 25.10.2023          |
| 4.      | Ostrich               | 1:1:0         | 21.09.2023          |
| 5.      | Livingstone turaco    | 1:2:0         | 22.12.2023          |
| 6.      | Parma wallaby         | 1:1:0         | 22.12.2023          |

### 25. Rescue and Rehabilitation of wild animals carried out by the Zoo:

| Sl.No.               | Date of Received at Nandankanan | Species with number of animals rescued with their sex (M: F:U:T) | Received from                 | Date of Submission of Report to the CWLW / CZA                    | Action taken                                      |   |
|----------------------|---------------------------------|--|-------------------------------|---|---|---|
|                      |                                 |  |                               |   | Date and Place of rehabilitation in their habitat | Reasons for housing in the zoo, if not released in their habitat  |
| Mammals (Sch I & II) |                                 |  |                               |   |   |   |
| 1.                   | 10-06-2023                      | Four horned Antelope   | DFO, Phulbani Forest Division | 3204 Dated.09.06.2023 of DFO, Phulbani Forest Division communicat |   | Rescued hand reared individual. Rehabilitation to wild attempt failed as it coming back to human habitation. Unsuitable for |

|                    |            |   |                                 |   |  |   |
|--------------------|------------|---|---------------------------------|---|--|---|
|                    |            |   |                                 | ed to PCCF (WL)   |  | release in to nature due to prolonged human association. May be allowed to be kept in the zoo for long term care and display. |
|                    | 01-09-2023 | Spotted Dear calf                             | DFO, City Forest Division, BBSR | 6660 dated-01-09-2023 of City Division communicated to DD, NKZP               |  | It is now under hand rearing. It will be released into nature after six months following standard protocol.                   |
|                    | 10-10-2023 | Common Palm civet                             | DFO, City Forest Division, BBSR | 7536 dated-10-10-2023 of City Division communicated to DD, NKZP               |  | It is now under hand rearing. It will be released into nature after six months following standard protocol.                   |
|                    | 12-10-2023 | Common Palm civet                             | DFO, City Forest Division, BBSR | 7691 dated-12-10-2023 of City Division communicated to DD, NKZP               |  | It is now under hand rearing. It will be released into nature after six months following standard protocol.                   |
| Birds (Sch I & II) |            |   |                                 |   |  |   |
|                    | 14-06-2023 | Common Hill Myna ( <i>Gracula religiosa</i> ) | DFO, Karanjia, Division         | 3121/4F Dated.12.06.2023 of DFO, Karanjia, Division communicated to PCCF (WL) |  |   |
|                    | 08-08-2023 | Common Hill Myna ( <i>Gracula religiosa</i> ) | DFO,Roulkela, Division          | Memo no.-7143 dt-14.08.23 of City division communicated to DD,NKZP            |  |   |
|                    | 14-08-2023 | Large egret ( <i>Ardea alba</i> )             | DFO, City Forest Division, BBSR | Memo no.-7143 dt-14.08.23 of City division                                    |  |   |

|                       |            |  |  |   |  |  |
|-----------------------|------------|--|--|---|--|--|
|                       |            |  |  | communicated to DD,NKZP   |  |  |
|                       | 14-08-2023 | Darter ( <i>Plotus anhinga</i> )                 | DFO, City Forest Division, BBSR            | 3976 Dated.15.08.2023 of DFO, Karanjia, Division communicated to PCCF (WL)                        |  |  |
|                       | 16-08-2023 | Common Hill Myna ( <i>Gracula religiosa</i> )    | DFO, Karanjia, Division                    | 3976 Dated.15.08.2023 of DFO, Karanjia, Division communicated to PCCF (WL)                        |  |  |
|                       | 25-02-2024 | White-rumped Vulture ( <i>Gyps bengalensis</i> ) | DFO, Karanjia                              | memo no. 854 dated 25-02-2024 of DFO, Karanjia communicated to PCCF (WL)                          |  | Serious dullness observed, treated by zoo vets.  |
| Reptiles (Sch I & II) |            |  |  |   |  |  |
|                       | 25-04-2023 | Python   | DFO, Keonjhar Wildlife Division, Anandapur | 1788/4WL Dated.25.04.2023 of DFO, Keonjhar Wildlife Division, Anandapur communicated to PCCF (WL) |  | Not suitable for release into nature as it is under treatment for fractured mandible and provided with assisted feeding. May be allowed to be kept in the zoo for long term care. It shall be released, once it starts taking feed on its own. |
|                       | 24-07-2023 | Elongated tortoise                               | DFO, Nayagarh Division                     | 5563 Dated.19.07.2023 of DFO, Nayagarh Division   |  | Seized specimen without any confirmed native habitat. Unsuitable for release, may be   |

|  |            |                   |                                 |  |  |  |
|--|------------|-------------------|---------------------------------|--|--|--|
|  |            |                   |                                 | communicated to PCCF (WL)  |  | allowed to be kept at zoo for display.   |
|  | 19-08-2023 | Gharial Hatchling | DFO, City Forest Division, BBSR | 6364 date-19-8-2023 of City Division communicated to DD, NKZP                    |  | Unsuitable for release to nature in this season due to inundation in river Mahanadi. It is kept off exhibit in the zoo for conservation breeding programme and will be released to nature once it becomes 1 m. or 3 years in age whichever is earlier. |
|  | 13-10-2023 | Gharial           | DFO, Balasore WL Division       | Memo no. 660 dt-13.10.23 of Balasore division communicated to RO, Jaleswar Range |  | It is now under observation for proper feed acceptance. It will be released into nature after six months following standard protocol.  |

## 26. Annual Inventory of animals:

ANNUAL ANIMAL INVENTORY (FROM 1ST APRIL-23 to 31ST MAR -24)

| Sl. No | SCH-I, II, III & IV (Wildlife Protection Act) |                                    |     | During the Month        |    |    |     |        |   |    |              |   |   |           |   |   |        |   |   |                            |   |    |    |
|--------|---|------------------------------------|-----|-------------------------|----|----|-----|--------|---|----|--------------|---|---|-----------|---|---|--------|---|---|----------------------------|---|----|----|
|        | Species                                       | Scientific name                    | SCH | Stock as on 01 .04.2023 |    |    |     | Births |   |    | Acquisitions |   |   | Disposals |   |   | Deaths |   |   | Stock as on Dt- 31.03.2024 |   |    |    |
|        |   |                                    |     | M                       | F  | U  | T   | M      | F | U  | M            | F | U | M         | F | U | M      | F | U | M                          | F | U  | T  |
|        | <b>SCH-I , SCH-II BIRDS</b>                   |                                    |     | -                       |    |    |     |        |   |    |              |   |   |           |   |   |        |   |   |                            |   |    |    |
| 1      | A. PEAFOWL, INDIAN                            | <i>Pavo cristatus</i>              | I   | 3                       | 3  | 17 | 23  | 0      | 0 | 2  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 0  |
|        | B. PEAFOWL, INDIAN WHITE                      | <i>Pavo cristatus</i>              | I   | 2                       | 1  | 1  | 4   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 0  |
| 2      | CRANE SARUS                                   | <i>Grus antigone</i>               | I   | 1                       | 0  | 0  | 1   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 0  |
| 3      | DOVE, EMERALD                                 | <i>Chalcophaps indica</i>          | II  | 2                       | 1  | 0  | 3   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 1 | 0                          | 0 | 1  | 0  |
| 4      | DOVE, SPOTTED                                 | <i>Spilopelia chinensis</i>        | II  | 1                       | 1  | 7  | 9   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 1  | 7  |
| 5      | EGRET, CATTEL                                 | <i>Bubulcus ibis</i>               | II  | 0                       | 1  | 5  | 6   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 1  |
| 6      | EGRET, LARGE                                  | <i>Cosmerodius albus</i>           | II  | 0                       | 0  | 1  | 1   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 1  |
| 7      | EGRET, LITTLE                                 | <i>Egretta garzetta</i>            | II  | 0                       | 0  | 8  | 8   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 8  |
| 8      | EGRET, MEDIAN                                 | <i>Egretta intermedia</i>          | II  | 0                       | 0  | 1  | 1   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 1  |
| 9      | HERON, GREY                                   | <i>Ardea cinerea</i>               | II  | 3                       | 6  | 0  | 9   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 1 | 0                          | 0 | 2  | 6  |
| 10     | HERON, NIGHT                                  | <i>Nycticorax nycticorax</i>       | II  | 33                      | 36 | 42 | 111 | 0      | 0 | 21 | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 33 | 36 |
| 11     | HORNBILL GREY                                 | <i>Ocyrceros birostris</i>         | II  | 1                       | 0  | 0  | 1   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 1  | 0  |
| 12     | IBIS, ORIENTAL WHITE                          | <i>Threskiornis melanocephalus</i> | II  | 50                      | 81 | 64 | 195 | 0      | 0 | 20 | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 50 | 81 |
| 13     | KITE, BLACK                                   | <i>Milvus migrans</i>              | II  | 3                       | 3  | 5  | 11  | 0      | 0 | 1  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 3  | 3  |
| 14     | KITE, BRAMHINY                                | <i>Haliastur indus</i>             | I   | 1                       | 0  | 0  | 1   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 1  | 0  |
| 15     | KOEL  | <i>Eudynamys scolopacea</i>        | II  | 1                       | 1  | 0  | 2   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 1  | 1  |
| 16     | MUNIA, BLACKHEADED                            | <i>Lonchura malacca</i>            | II  | 0                       | 1  | 0  | 1   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 1  |
| 17     | MUNIA, RED                                    | <i>Estrilda amandava</i>           | II  | 0                       | 0  | 1  | 1   | 0      | 0 | 0  | 0            | 0 | 0 | 0         | 0 | 0 | 0      | 0 | 0 | 0                          | 0 | 0  | 1  |

|    |                                     |   |    |            |            |           |            |          |          |           |          |          |          |          |          |          |          |          |            |            |            |            |   |
|----|-------------------------------------|---|----|------------|------------|-----------|------------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|------------|------------|------------|---|
| 18 | MUNIA, SPOTTED /<br>NUTMEG MANNIKIN | <i>Lonchura punctulata</i>                | II | 1          | 0          | 0         | 1          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0          | 1          | 0          | 0          | 1 |
| 19 | MYNAH HILL                          | <i>Gracula religiosa</i>                  | I  | 0          | 0          | 1         | 1          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0          | 0          | 0          | 1          | 1 |
| 20 | OWL, BARN                           | <i>Tyto alba</i>                          | I  | 2          | 1          | 4         | 7          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 3          | 2          | 1          | 1          | 4 |
| 21 | OWL, BROWN FISH                     | <i>Bubo zeylonesis</i>                    | I  | 1          | 1          | 0         | 2          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0          | 1          | 1          | 0          | 2 |
| 22 | OWL, ORIENTAL<br>SCOPS              | <i>Otus sunia</i>                         | II | 0          | 0          | 1         | 1          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0          | 0          | 0          | 1          | 1 |
| 23 | PARAKEET,<br>ALEXANDRINE            | <i>Psittacula eupatria</i>                | II | 7          | 7          | 3         | 17         | 0        | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 7          | 7          | 4          | 18         |   |
| 24 | PARAKEET, BLOSSOM<br>HEADED         | <i>Psittacula<br/>cyanocephala</i>        | II | 1          | 1          | 3         | 5          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1          | 1          | 3          | 5          |   |
| 25 | PARAKEET, ROSE<br>RING              | <i>Psittacula krameri<br/>manillensis</i> | II | 7          | 15         | 0         | 22         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0        | 6          | 15         | 0          | 21         |   |
| 26 | PELICAN, GREY/SPOT<br>BILLED        | <i>Pelecanus philippensis</i>             | II | 4          | 4          | 17        | 25         | 0        | 0        | 6         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 4          | 4          | 23         | 31         |   |
| 27 | PELICAN,<br>ROSY/WHITE              | <i>Pelecanus onocrotalus</i>              | II | 0          | 0          | 3         | 3          | 0        | 0        | 0         | 2        | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 2          | 2          | 3          | 7          |   |
| 28 | RED JUNGLE FOWL                     | <i>Gallus gallus</i>                      | II | 2          | 2          | 3         | 7          | 1        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 0        | 3          | 0          | 3          | 6          |   |
| 29 | SHIKRA                              | <i>Accipiter badius</i>                   | I  | 0          | 0          | 2         | 2          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0          | 0          | 2          | 2          |   |
| 30 | STORK, LESSER<br>ADJUTANT           | <i>Leptoptilos javanicus</i>              | I  | 0          | 0          | 2         | 2          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0          | 0          | 2          | 2          |   |
| 31 | STORK, OPEN BILLED                  | <i>Anastomus oscitans</i>                 | II | 1          | 1          | 9         | 11         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1          | 1          | 9          | 11         |   |
| 32 | STORK, PAINTED                      | <i>Mycteria leucocephala</i>              | II | 6          | 6          | 28        | 40         | 0        | 0        | 17        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 6          | 6          | 45         | 57         |   |
| 33 | VULTURE CINEREOUS                   | <i>Aegypius monachus</i>                  | I  | 0          | 0          | 2         | 2          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0          | 0          | 2          | 2          |   |
| 34 | VULTURE, LONG<br>BILLED             | <i>Gyps indicus</i>                       | I  | 1          | 2          | 8         | 11         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1        | 1          | 1          | 7          | 9          |   |
| 35 | VULTURE, WHITE<br>BACKED            | <i>Gyps bengalensis</i>                   | I  | 0          | 0          | 1         | 1          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0          | 0          | 0          | 0          |   |
| 36 | VULTURE,HIMALAYA<br>N GRIFFON       | <i>Gyps himalayensis</i>                  | I  | 0          | 0          | 0         | 0          | 0        | 0        | 0         | 2        | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 2          | 2          | 0          | 4          |   |
|    | <b>SCH-I &amp;II Birds - TOTAL</b>  |   |    | <b>134</b> | <b>175</b> | <b>23</b> | <b>548</b> | <b>1</b> | <b>0</b> | <b>68</b> | <b>4</b> | <b>4</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>3</b> | <b>4</b> | <b>4</b> | <b>136</b> | <b>176</b> | <b>302</b> | <b>614</b> |   |

|                        |                                   | 9                                 |    |     |     |    |     |   |   |    |   |   |   |   |   |   |   |   |     |     |    |     |    |
|------------------------|-----------------------------------|-----------------------------------|----|-----|-----|----|-----|---|---|----|---|---|---|---|---|---|---|---|-----|-----|----|-----|----|
| SCH-I , SCH-II MAMMALS |                                   |                                   |    |     |     |    |     |   |   |    |   |   |   |   |   |   |   |   |     |     |    |     |    |
| Sl. No                 | Species                           | Scientific name                   | M  | F   | U   | T  | M   | F | U | M  | F | U | M | F | U | M | F | U | M   | F   | U  | T   |    |
| 1                      | ANTELOPE, FOUR HORNED/ CHOWSINGHA | <i>Tetraceros quadricornis</i>    | I  | 1   | 1   | 1  | 3   | 0 | 0 | 2  | 2 | 5 | 0 | 0 | 0 | 0 | 2 | 0 | 3   | 4   | 3  | 10  |    |
| 2                      | BAT, GIANT FRUIT                  | <i>Pteropus giganteus</i>         | II | 0   | 1   | 0  | 1   | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0   | 1   | 0  | 1   |    |
| 3                      | BEAR, HIMALAYAN BLACK             | <i>Selenarctos thibetanus</i>     | I  | 2   | 3   | 0  | 5   | 0 | 0 | 0  | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2   | 4   | 0  | 6   |    |
| 4                      | BEAR, SLOTH                       | <i>Melursus ursinus</i>           | I  | 3   | 6   | 3  | 12  | 1 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4   | 6   | 3  | 13  |    |
| 5                      | BLACKBUCK / KRISHNA MRIG          | <i>Antelope cervicapra</i>        | I  | 16  | 23  | 43 | 82  | 0 | 0 | 12 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 1 | 0   | 32  | 38 | 15  | 85 |
| 6                      | CAT, JUNGLE                       | <i>Felis chaus</i>                | I  | 3   | 2   | 4  | 9   | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 2   | 4  | 9   |    |
| 7                      | CAT, LEOPARD                      | <i>Prionailurus bengalensis</i>   | I  | 0   | 0   | 0  | 0   | 0 | 0 | 2  | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 1   | 2  | 4   |    |
| 8                      | CHINKARA                          | <i>Gazella bennetti</i>           | I  | 1   | 0   | 0  | 1   | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0  | 1   |    |
| 9                      | CIVET, COMMON PALM / CAT TODDY    | <i>Paradoxurus hermaphroditus</i> | I  | 3   | 3   | 15 | 21  | 0 | 0 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3   | 3   | 17 | 23  |    |
| 10                     | CIVET, SMALL INDIAN               | <i>Viverricula indica</i>         | I  | 1   | 0   | 0  | 1   | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1   | 0   | 0  | 1   |    |
| 11                     | DEER, MOUSE                       | <i>Tragulus memmina</i>           | I  | 12  | 9   | 9  | 30  | 0 | 0 | 8  | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 0 | 12  | 11  | 11 | 34  |    |
| 12                     | DEER, BARKING-MUNTJAC (KAKKAR)    | <i>Muntiacus muntjak</i>          | I  | 22  | 40  | 8  | 70  | 0 | 0 | 3  | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 21  | 40  | 11 | 72  |    |
| 13                     | DEER, BROW ANTLERED / SANGAI      | <i>Cervus eldi</i>                | I  | 8   | 11  | 0  | 19  | 0 | 0 | 6  | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 6   | 10  | 6  | 22  |    |
| 14                     | DEER, HOG                         | <i>Axis porcinus</i>              | I  | 22  | 20  | 20 | 62  | 0 | 0 | 6  | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 3 | 0   | 18  | 32 | 7   | 57 |
| 15                     | DEER, SAMBAR                      | <i>Cervus unicolor</i>            | I  | 3   | 8   | 2  | 13  | 0 | 0 | 5  | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8   | 10  | 3  | 21  |    |
| 16                     | A. DEER, SPOTTED / CHITAL(ZOO)    | <i>Axis axis</i>                  | II | 360 | 395 | 29 | 784 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 360 | 395 | 78 | 833 |    |
|                        | B. DEER, SPOTTED/CHITAL (RBD)     | <i>Axis axis</i>                  | II | 353 | 210 | 0  | 563 | 9 | 8 | 0  | 0 | 0 | 0 | 0 | 0 | 5 | 7 | 0 | 357 | 211 | 0  | 568 |    |

|    |                               |                                |    |   |   |    |    |   |   |    |   |   |   |   |   |   |   |   |   |    |   |    |    |
|----|-------------------------------|--------------------------------|----|---|---|----|----|---|---|----|---|---|---|---|---|---|---|---|---|----|---|----|----|
| 17 | DEER, SWAMP / BRASINGHA       | <i>Cervus duvauceli</i>        | I  | 4 | 4 | 5  | 13 | 0 | 0 | 4  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4  | 7 | 4  | 15 |
| 18 | ELEPHANT, INDIAN              | <i>Elephas maximus</i>         | I  | 0 | 2 | 0  | 2  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 2 | 0  | 2  |
| 19 | FOX, INDIAN                   | <i>Vulpes bengalensis</i>      | I  | 1 | 3 | 6  | 10 | 0 | 0 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 3  | 3 | 3  | 9  |
| 20 | GAUR                          | <i>Bos Gaurus</i>              | I  | 3 | 3 | 0  | 6  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 3 | 0  | 6  |
| 21 | GIBBON, HOOLOCK               | <i>Hoolock hoolock</i>         | I  | 0 | 0 | 0  | 0  | 0 | 0 | 0  | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 2 | 0  | 4  |
| 22 | HARE, INDIAN                  | <i>Lepus nigricollis</i>       | II | 1 | 1 | 2  | 4  | 0 | 0 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0  | 1 | 2  | 3  |
| 23 | HYAENA, STRIPED               | <i>Hyaena hyaena</i>           | I  | 2 | 4 | 0  | 6  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1  | 4 | 0  | 5  |
| 24 | JACKAL                        | <i>Canis aureus</i>            | I  | 3 | 7 | 16 | 26 | 0 | 0 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 7 | 30 | 40 |
| 25 | LEOPARD / PANTHER             | <i>Panthera pardus</i>         | I  | 1 | 3 | 0  | 4  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 3 | 0  | 4  |
| 26 | LION, ASIATIC                 | <i>Panthera leo persica</i>    | I  | 9 | 6 | 0  | 15 | 3 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 11 | 6 | 0  | 17 |
| 27 | MACAQUE, ASSAMESE             | <i>Macaca assamensis</i>       | I  | 2 | 3 | 5  | 10 | 0 | 0 | 2  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 3 | 7  | 12 |
| 28 | MACAQUE, BONNET               | <i>Macaca radiata</i>          | I  | 1 | 6 | 0  | 7  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1  | 4 | 0  | 5  |
| 29 | MACAQUE, RHESUS               | <i>Macaca mulatta</i>          | II | 4 | 4 | 0  | 8  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4  | 4 | 0  | 8  |
| 30 | MACAQUE, STUMP TAILED         | <i>Macaca arctoides</i>        | I  | 3 | 3 | 3  | 9  | 0 | 0 | 1  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2  | 3 | 4  | 9  |
| 31 | MACAQUE, PIG TAILED           | <i>Macaca nemestrina</i>       | I  | 0 | 0 | 0  | 0  | 0 | 0 | 0  | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1 | 0  | 2  |
| 32 | MANGOSE, COMMON               | <i>Herpestes edwardsi</i>      | I  | 2 | 2 | 4  | 8  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 2 | 4  | 8  |
| 33 | NILGAI-BLUE BULL              | <i>Boselaphus tragocamelus</i> | II | 3 | 9 | 2  | 14 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 0 | 0  | 5 | 2  | 7  |
| 34 | PANGOLIN, INDIAN              | <i>Manis crassicaudata</i>     | I  | 4 | 5 | 2  | 11 | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3  | 4 | 2  | 9  |
| 35 | PIG WILD/WILD BOAR            | <i>Sus scrofa</i>              | II | 2 | 1 | 1  | 4  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2  | 1 | 1  | 4  |
| 36 | PORCUPINE, INDIAN             | <i>Hystrix indica</i>          | I  | 1 | 0 | 1  | 2  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 1  | 2  |
| 37 | RATEL                         | <i>Mellivora capensis</i>      | I  | 1 | 2 | 0  | 3  | 0 | 0 | 3  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1  | 1 | 3  | 5  |
| 38 | SQUIRREL, GIANT               | <i>Ratufa indica</i>           | I  | 1 | 0 | 0  | 1  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0 | 0  | 1  |
| 39 | A. TIGER, BENGAL              | <i>Panthera tigris tigris</i>  | I  | 9 | 5 | 6  | 20 | 0 | 0 | 0  | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 9  | 8 | 0  | 17 |
|    | B. TIGER, BENGAL (MELANISTIC) | <i>Panthera tigris tigris</i>  | I  | 3 | 0 | 0  | 3  | 0 | 0 | 0  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 0 | 0  | 3  |

|                                       |                                   |                                  |    |                                |            |            |             |               |          |            |                     |           |          |                  |          |          |               |           |          |                                   |            |            |             |
|---------------------------------------|-----------------------------------|----------------------------------|----|--------------------------------|------------|------------|-------------|---------------|----------|------------|---------------------|-----------|----------|------------------|----------|----------|---------------|-----------|----------|-----------------------------------|------------|------------|-------------|
|                                       | C. TIGER, BENGAL (WHITE)          | <i>Panthera tigris tigris</i>    | I  | 2                              | 4          | 0          | 6           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 3                                 | 4          | 0          | 7           |
| 40                                    | WILD DOG, AISATIC                 | <i>Cuon alpinus</i>              | I  | 1                              | 1          | 0          | 2           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 1          | 0          | 2           |
| 41                                    | WOLF, INDIAN GREY                 | <i>Canis lupus pallipes</i>      | I  | 3                              | 3          | 2          | 8           | 0             | 0        | 7          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 3                                 | 3          | 9          | 15          |
| <b>SCH-I &amp; II Mammals - TOTAL</b> |                                   |                                  |    | <b>876</b>                     | <b>813</b> | <b>189</b> | <b>1878</b> | <b>13</b>     | <b>8</b> | <b>128</b> | <b>7</b>            | <b>12</b> | <b>0</b> | <b>9</b>         | <b>9</b> | <b>0</b> | <b>20</b>     | <b>27</b> | <b>0</b> | <b>899</b>                        | <b>850</b> | <b>232</b> | <b>1981</b> |
| <b>SCH-I &amp; SCH-II REPTILES</b>    |                                   |                                  | -  | <b>Stock as on 01 .04.2023</b> |            |            |             | <b>Births</b> |          |            | <b>Acquisitions</b> |           |          | <b>Disposals</b> |          |          | <b>Deaths</b> |           |          | <b>Stock as on Dt- 31.03.2024</b> |            |            |             |
|                                       | Species                           | Scientific name                  |    | M                              | F          | U          | T           | M             | F        | U          | M                   | F         | U        | M                | F        | U        | M             | F         | U        | M                                 | F          | U          | T           |
| 1                                     | BOA, COMMON SAND                  | <i>Eryx johnii</i>               | I  | 1                              | 2          | 0          | 3           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 2          | 0          | 3           |
| 2                                     | BOA, RED SAND                     | <i>Eryx conicus</i>              | II | 1                              | 1          | 0          | 2           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 1          | 0          | 2           |
| 3                                     | CHAMELEON, INDIAN                 | <i>Chameleon zeylanicus</i>      | I  | 0                              | 0          | 2          | 2           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 0                                 | 0          | 2          | 2           |
| 4                                     | COBRA, BINOCELLATE                | <i>Naja naja</i>                 | I  | 1                              | 1          | 4          | 6           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 1          | 4          | 6           |
| 5                                     | COBRA, KING                       | <i>Ophiophagus hannah</i>        | I  | 1                              | 0          | 0          | 1           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 0          | 0          | 1           |
| 6                                     | COBRA, MONOCELLATE                | <i>Naja naja kouthia</i>         | I  | 1                              | 1          | 10         | 12          | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 1          | 10         | 12          |
| 7                                     | CROCODILE, MUGGER                 | <i>Crocodylus palustris</i>      | I  | 4                              | 6          | 22         | 32          | 0             | 0        | 20         | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 4                                 | 6          | 42         | 52          |
| 8                                     | CROCODILE, LONG SNOUTED / GHARIAL | <i>Gavialis gangeticus</i>       | I  | 20                             | 79         | 9          | 108         | 0             | 0        | 0          | 0                   | 0         | 0        | 1                | 2        | 0        | 0             | 0         | 0        | 19                                | 77         | 9          | 105         |
| 9                                     | CROCODILE, SALT WATER             | <i>Crocodylus porosus</i>        | I  | 0                              | 1          | 0          | 1           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 0                                 | 1          | 0          | 1           |
| 10                                    | KRAIT, BANDED                     | <i>Bungarus fasciatus</i>        | II | 0                              | 0          | 4          | 4           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 0                                 | 0          | 4          | 4           |
| 11                                    | KRAIT, COMMON INDIAN              | <i>Bungarus caeruleus</i>        | II | 0                              | 0          | 2          | 2           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 0                                 | 0          | 2          | 2           |
| 12                                    | MONITOR LIZARD, COMMON INDIAN     | <i>Varanus bengalensis</i>       | I  | 1                              | 1          | 3          | 5           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 1          | 3          | 5           |
| 13                                    | MONITOR LIZARD, WATER             | <i>Varanus salvator</i>          | I  | 1                              | 1          | 5          | 7           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 1        | 1                                 | 1          | 4          | 6           |
| 14                                    | PYTHON, BURMESE ROCK              | <i>Python molurus bivistatus</i> | I  | 1                              | 1          | 0          | 2           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 1                                 | 1          | 0          | 2           |
| 15                                    | PYTHON, INDIAN ROCK               | <i>Python molurus molurus</i>    | I  | 2                              | 2          | 1          | 5           | 0             | 0        | 0          | 0                   | 0         | 0        | 0                | 0        | 0        | 0             | 0         | 0        | 2                                 | 2          | 1          | 5           |

|   |   |                                   |      |           |            |           |            |          |          |           |          |          |          |          |          |          |          |          |          |           |            |           |            |
|---|---|-----------------------------------|------|-----------|------------|-----------|------------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|------------|-----------|------------|
| 16  | PYTHON, RETICULATED                     | <i>Python reticulatus</i>         | I    | 1         | 1          | 0         | 2          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1         | 1          | 0         | 2          |
| 17  | SNAKE, RAT                              | <i>Ptyas mucosus</i>              | I    | 2         | 2          | 8         | 12         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2         | 2          | 8         | 12         |
| 18  | TORTOISE, ASIAN BROWN                   | <i>Manouria emys</i>              | I    | 3         | 3          | 0         | 6          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 3         | 3          | 0         | 6          |
| 19  | TORTOISE, STAR INDIAN                   | <i>Geochelone elegans</i>         | I    | 7         | 5          | 2         | 14         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 7         | 5          | 2         | 14         |
| 20  | TURTEL, INDIAN TENT                     | <i>Pangshura tentoria</i>         | I    | 0         | 0          | 3         | 3          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0          | 3         | 3          |
| 21  | TURTLE, CHITRA                          | <i>Chitra indica</i>              | I    | 0         | 0          | 3         | 3          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0          | 3         | 3          |
| 22  | TURTLE, FRESH WATER / INDIAN FLAP-SHELL | <i>Lissemys punctata punctata</i> | I    | 28        | 36         | 0         | 64         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 28        | 36         | 0         | 64         |
| 23  | TURTLE, GANGES SOFT SHELL               | <i>Trionyx gangeticus</i>         | I    | 0         | 0          | 1         | 1          | 0        | 0        | 0         | 2        | 2        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2         | 2          | 1         | 5          |
| 24  | VIPER, RUSSEL'S                         | <i>Vipera ruselli</i>             | I    | 1         | 0          | 0         | 1          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1         | 0          | 0         | 1          |
| <b>SCH-I &amp; II Reptiles - TOTAL</b>      |   |                                   |      | <b>76</b> | <b>143</b> | <b>79</b> | <b>298</b> | <b>0</b> | <b>0</b> | <b>20</b> | <b>2</b> | <b>2</b> | <b>0</b> | <b>1</b> | <b>2</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>77</b> | <b>143</b> | <b>98</b> | <b>318</b> |
| <b>SCH-IV (APPENDIX) &amp; EXOTIC BIRDS</b> |   |                                   |      |           |            |           |            |          |          |           |          |          |          |          |          |          |          |          |          |           |            |           |            |
| 1   | BUDGERIGAR                              | <i>Melopsittacus undulatus</i>    | E    | 163       | 267        | 113       | 543        | 0        | 0        | 15        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 163       | 267        | 128       | 558        |
| 2   | COCKATIEL, WHITE/ CINAMON PEARS PIED    | <i>Nymphicus hollandicus</i>      | E    | 16        | 23         | 52        | 91         | 0        | 0        | 3         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 16        | 23         | 55        | 94         |
| 3   | COCKATOO, LESSER SULPHUR CRESTED        | <i>Cacatua sulphurea</i>          | A-I  | 0         | 1          | 0         | 1          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1          | 0         | 1          |
| 4   | COCKATOO, UMBRELLA SULPHUR CRESTED      | <i>Cacatua sulphurea</i>          | A-I  | 1         | 0          | 0         | 1          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1         | 0          | 0         | 1          |
| 5   | CONNURE, BROWN THROATED                 | <i>Eupsittula pertinax</i>        | A-II | 0         | 1          | 1         | 2          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1          | 1         | 2          |
| 6   | CONNURE, JANDAYA                        | <i>Aratinga jandaya</i>           | A-II | 1         | 2          | 17        | 20         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 1         | 2          | 15        | 18         |
| 7   | CONURE, SUN                             | <i>Aratinga solstitialis</i>      | A-II | 4         | 4          | 20        | 28         | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 7        | 4         | 4          | 13        | 21         |
| 8   | CONURE, PINE APPLE                      | <i>Pyrrhura molinae</i>           | A-   | 3         | 6          | 0         | 9          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2        | 0        | 3         | 4          | 0         | 7          |

|    |                           |  |      |    |    |    |     |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |     |   |
|----|---------------------------|--|------|----|----|----|-----|---|---|---|---|---|---|---|---|---|---|---|---|----|----|----|-----|---|
|    |                           | <i>molinae</i>                               | II   |    |    |    |     |   |   |   |   |   |   |   |   |   |   |   |   |    |    |    |     |   |
| 9  | CONURE, YELLOW SIDED      | <i>Pyrrhura molinae sordida</i>              | A-II | 8  | 7  | 0  | 15  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7  | 7  | 0  | 14  |   |
| 10 | DOVE, BARBARY             | <i>Streptopelia risoria</i>                  | E    | 1  | 0  | 0  | 1   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 0  | 0  | 1   |   |
| 11 | DOVE, DIAMOND             | <i>Geopelia cuneata</i>                      | E    | 1  | 1  | 0  | 2   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 0  | 2   |   |
| 12 | DOVE, LAUGHING            | <i>Spilopelia senegalnesis</i>               | E    | 1  | 1  | 0  | 2   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 0  | 2   |   |
| 13 | DOVE, RING NECKED         | <i>Streptopelia capicola</i>                 | E    | 1  | 1  | 0  | 2   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0  | 0  | 1  | 0   | 1 |
| 14 | DUCK, MANDARIN            | <i>Aix galericulata</i>                      | E    | 4  | 3  | 2  | 9   | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4  | 3  | 4  | 11  |   |
| 15 | EMU                       | <i>Dromaius novaehollandiae</i>              | E    | 1  | 3  | 7  | 11  | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 3  | 9  | 13  |   |
| 16 | FINCH, BENGALnese/SOCIETY | <i>Lonchura striata</i>                      | E    | 6  | 11 | 7  | 24  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6  | 11 | 7  | 24  |   |
| 17 | FINCH, LONG TAILED        | <i>Poephila cincta</i>                       | A-II | 1  | 1  | 0  | 2   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 0  | 2   |   |
| 18 | FINCH, STAR               | <i>Poephila ruficauda</i>                    | E    | 0  | 1  | 0  | 1   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 1  | 0  | 1   |   |
| 19 | FINCH, ZEBRA              | <i>Poephila guttata</i>                      | E    | 66 | 76 | 78 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 | 76 | 78 | 220 |   |
| 20 | LORIKEET, BLUE FACED      | <i>Trichoglossus haematodus enetermedius</i> | A-II | 1  | 1  | 0  | 2   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 0  | 2   |   |
| 21 | LORIKEET, SWAINSON'S      | <i>Trichoglossus haematodus moluccanus</i>   | A-II | 0  | 0  | 2  | 2   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 2  | 2   |   |
| 22 | LORRY, YELLOW BACKED      | <i>Lorius garrulus flavopalliatu</i>         | A-II | 0  | 0  | 1  | 1   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0  | 0  | 1  | 1   |   |
| 23 | LOVE BIRD, FISCHERS       | <i>Agapornis fischeri</i>                    | A-II | 11 | 10 | 13 | 34  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 11 | 10 | 10 | 31  |   |
| 24 | LOVE BIRD, PEACH-FACED    | <i>Agapornis roseicollis</i>                 | A-II | 4  | 6  | 2  | 12  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4  | 6  | 2  | 12  |   |
| 25 | LOVE BIRD, MASKED         | <i>Agapornis personatus</i>                  | A-II | 1  | 2  | 1  | 4   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 2  | 1  | 4   |   |
| 26 | MACAW, GREEN WINGED       | <i>Ara chloroptera</i>                       | A-II | 1  | 1  | 0  | 2   | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1  | 1  | 0  | 2   |   |
| 27 | OSTRICH                   | <i>Struthio camelus</i>                      | A-   | 2  | 0  | 0  | 2   | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3  | 3  | 0  | 6   |   |

|   |  |                                   |      |            |            |            |             |          |          |           |          |          |          |          |          |          |          |          |           |            |            |            |             |    |
|---|--|-----------------------------------|------|------------|------------|------------|-------------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|------------|------------|------------|-------------|----|
|   |  |                                   | II   |            |            |            |             |          |          |           |          |          |          |          |          |          |          |          |           |            |            |            |             |    |
| 28  | PARROT, AFRICAN GREY                       | <i>Psittacus erithacus</i>        | A-II | 1          | 1          | 0          | 2           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1          | 1          | 0          | 2           |    |
| 29  | PHEASANT, GOLDEN                           | <i>Chrysolophus pictus</i>        | E    | 3          | 14         | 4          | 21          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 3          | 14         | 4          | 21          |    |
| 30  | PHEASANT, LADY AMHERST'S                   | <i>Chrysolophus amherstiae</i>    | E    | 1          | 2          | 8          | 11          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1         | 0          | 1          | 1          | 8           | 10 |
| 31  | PHEASANT, REEV'S                           | <i>Syrnaticus reevesii</i>        | A-II | 0          | 0          | 3          | 3           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0         | 0          | 1          | 1          | 0           | 2  |
| 32  | PHEASANT, SILVER                           | <i>Lophura nycthemera</i>         | E    | 8          | 12         | 6          | 26          | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 3         | 0          | 8          | 9          | 6           | 23 |
| 33  | PHEASANT, YELLOW GOLDEN                    | <i>Chrysolophus pictus mut.</i>   | E    | 0          | 0          | 1          | 1           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0          | 0          | 1          | 1           |    |
| 34  | ROSELLA, EASTERN                           | <i>Platycercus eximius</i>        | A-II | 1          | 1          | 1          | 3           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1          | 1          | 1          | 3           |    |
| 35  | SPARROW, JAVA                              | <i>Padda oryzivora</i>            | E    | 11         | 23         | 89         | 123         | 0        | 0        | 5         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 11         | 23         | 94         | 128         |    |
| 36  | SWAN, BLACK                                | <i>Cygnus atratus</i>             | E    | 3          | 3          | 0          | 6           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 1         | 0          | 2          | 2          | 0           | 4  |
| 37  | PARROT, MEYER'S                            | <i>Poicephalus meyeri</i>         | A-II | 1          | 2          | 0          | 3           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1          | 2          | 0          | 3           |    |
| 38  | PARROT, RED BELLIED                        | <i>Pionus sordidus</i>            | A-II | 2          | 3          | 0          | 5           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 2          | 3          | 0          | 5           |    |
| 39  | PARAKEET, RINGED NECKED A. Lutino Mutation | <i>Psittacula krameri krameri</i> | E    | 2          | 2          | 6          | 10          | 0        | 0        | 6         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 2          | 2          | 12         | 16          |    |
|   | B. Albino Mutation                         | <i>Psittacula krameri krameri</i> | E    | 2          | 2          | 3          | 7           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1         | 2          | 2          | 2          | 6           |    |
| 40  | TURACO, VIOLET                             | <i>Musophaga violacca</i>         | A-II | 0          | 0          | 4          | 4           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0          | 0          | 4          | 4           |    |
| 41  | TURACO, LIVING STONE'S                     | <i>Turaco living stonii</i>       | A-II | 1          | 0          | 0          | 1           | 0        | 0        | 0         | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 2          | 1          | 0          | 3           |    |
| 42  | CASSOWARY                                  | <i>Casuarius casuarius</i>        | E    | 0          | 0          | 0          | 0           | 0        | 0        | 0         | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1          | 1          | 0          | 2           |    |
| <b>TOTAL SCH-IV (APPENDIX) &amp; EXOTIC BIRDS</b> |  |                                   |      | <b>334</b> | <b>494</b> | <b>441</b> | <b>1269</b> | <b>0</b> | <b>0</b> | <b>33</b> | <b>3</b> | <b>5</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>4</b> | <b>7</b> | <b>13</b> | <b>335</b> | <b>493</b> | <b>458</b> | <b>1286</b> |    |
| <b>SCH-IV (APPENDIX) &amp; EXOTIC MAMMALS</b>     |  |                                   |      |            |            |            |             |          |          |           |          |          |          |          |          |          |          |          |           |            |            |            |             |    |
| 1   | BABOON,                                    | <i>Papio hamadryas</i>            | A-   | 1          | 1          | 0          | 2           | 0        | 0        | 0         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1          | 1          | 0          | 2           |    |

|   |                         |                                |      |           |           |          |           |          |          |          |          |          |          |          |          |          |          |          |           |           |          |           |    |
|---|-------------------------|--------------------------------|------|-----------|-----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|----------|-----------|----|
|   | HAMADRYAS               |                                | II   |           |           |          |           |          |          |          |          |          |          |          |          |          |          |          |           |           |          |           |    |
| 2   | CAPUCHIN, TUFTED        | <i>Sapajus apella</i>          | A-II | 0         | 1         | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0         | 1        | 0         | 1  |
| 3   | CHIMPANZEE              | <i>Pan troglodytes</i>         | A-I  | 2         | 5         | 0        | 7         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 2         | 5        | 0         | 7  |
| 4   | COMMON SQUIRREL MONKEY  | <i>Saimiri sciureus</i>        | A-II | 1         | 1         | 0        | 2         | 0        | 0        | 1        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 1        | 2         | 2         | 0        | 4         |    |
| 5   | GIRAFFE                 | <i>Giraffa camelopardalis</i>  | A-II | 0         | 1         | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0         | 1        | 0         | 1  |
| 6   | HIPPOPOTAMUS            | <i>Hippopotamus amphibius</i>  | A-II | 4         | 5         | 2        | 11        | 0        | 0        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 0         | 4         | 6        | 1         | 11 |
| 7   | LION, AFRICAN           | <i>Panthera leo</i>            | A-II | 0         | 1         | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0         | 0         | 0        | 0         | 0  |
| 8   | LION, HYBRID            | <i>Panthera leo</i>            | A-II | 4         | 3         | 0        | 7         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 4         | 3        | 0         | 7  |
| 9   | MARMOSET, BLACK-TUFTED  | <i>Callithrix penicillata</i>  | A-II | 3         | 1         | 3        | 7         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 3         | 1        | 3         | 7  |
| 10  | MEERKAT, SLENDER TAILED | <i>Suricata Suricatta</i>      | E    | 1         | 2         | 0        | 3         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1         | 2        | 0         | 3  |
| 11  | TAMARIN, RED-HANDED     | <i>Saguinus midas</i>          | A-II | 0         | 1         | 0        | 1         | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1         | 2        | 0         | 3  |
| 12  | PARMA WALLABY           | <i>Notamacropus parma</i>      | E    | 0         | 0         | 0        | 0         | 0        | 0        | 0        | 1        | 1        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1         | 1        | 0         | 2  |
| <b>TOTAL SCH-IV (APPENDIX) &amp; EXOTIC MAMMALS</b> |                         |                                |      | <b>16</b> | <b>22</b> | <b>5</b> | <b>43</b> | <b>0</b> | <b>0</b> | <b>2</b> | <b>3</b> | <b>3</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>1</b> | <b>1</b> | <b>1</b> | <b>19</b> | <b>25</b> | <b>4</b> | <b>48</b> |    |
| <b>SCH-IV (APPENDIX) &amp; EXOTIC REPTILES</b>      |                         |                                |      |           |           |          |           |          |          |          |          |          |          |          |          |          |          |          |           |           |          |           |    |
| 1   | CROCODILE, MORELET'S    | <i>Crocodylus moreletii</i>    | A-I  | 0         | 2         | 0        | 2         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0         | 2        | 0         | 2  |
| 2   | CROCODILE, SIAMESE      | <i>Crocodylus siamensis</i>    | A-I  | 3         | 12        | 3        | 18        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 1        | 0        | 3         | 11        | 3        | 17        |    |
| 3   | CUVIERS DWARF CAIMAN    | <i>Paleosuchus Palpebrosus</i> | A-II | 2         | 3         | 0        | 5         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 2         | 3         | 0        | 5         |    |
| 4   | A. IGUANA, GREEN        | <i>Iguana iguana</i>           | A-II | 0         | 2         | 0        | 2         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 2         | 0        | 2         |    |
|   | B. IGUANA, RED          | <i>Iguana iguana</i>           | A-II | 0         | 1         | 0        | 1         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 1         | 0        | 1         |    |
| 5   | CROCODILE, NILE         | <i>Crocodylus niloticus</i>    | A-I  | 0         | 0         | 3        | 3         | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0        | 0         | 0         | 3        | 3         |    |

|  |                          |                                   |      |                                |             |            |             |                |          |            |                     |           |          |                  |           |                |               |           |                                   |                                   |             |             |             |
|--|--------------------------|-----------------------------------|------|--------------------------------|-------------|------------|-------------|----------------|----------|------------|---------------------|-----------|----------|------------------|-----------|----------------|---------------|-----------|-----------------------------------|-----------------------------------|-------------|-------------|-------------|
| 6  | ANACONDA, YELLOW         | <i>Eunectes notaeus</i>           | A-II | 0                              | 0           | 12         | 12          | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 3                                 | 2                                 | 2           | 5           | 9           |
| <b>TOTAL SCH-IV (APPENDIX) &amp; EXOTIC REPTILES</b> |                          |                                   |      | <b>5</b>                       | <b>20</b>   | <b>18</b>  | <b>43</b>   | <b>0</b>       | <b>0</b> | <b>0</b>   | <b>0</b>            | <b>0</b>  | <b>0</b> | <b>0</b>         | <b>0</b>  | <b>0</b>       | <b>0</b>      | <b>1</b>  | <b>3</b>                          | <b>7</b>                          | <b>21</b>   | <b>11</b>   | <b>39</b>   |
|  |                          |                                   |      | <b>Stock as on 01 .04.2023</b> |             |            |             | <b>Births</b>  |          |            | <b>Acquisitions</b> |           |          | <b>Disposals</b> |           |                | <b>Deaths</b> |           |                                   | <b>Stock as on Dt- 31.03.2024</b> |             |             |             |
|  | <b>AMPHIBIANS</b>        |                                   |      |                                |             |            |             |                |          |            |                     |           |          |                  |           |                |               |           |                                   |                                   |             |             |             |
| 1  | FROG, INDIAN BULL        | <i>Hoplobatrachus tigerinus</i>   | IV   | 0                              | 0           | 3          | 3           | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 0                                 | 0                                 | 0           | 3           | 3           |
| 2  | FROG, GREEN POND         | <i>Euphlyctis hexadactyla</i>     | IV   | 0                              | 0           | 3          | 3           | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 0                                 | 0                                 | 0           | 3           | 3           |
| 3  | FROG, INDIAN SKIPPER     | <i>Euphlyctis cyanophlyctis</i>   | IV   | 0                              | 0           | 5          | 5           | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 0                                 | 0                                 | 0           | 5           | 5           |
| 4  | FROG, COMMON INDIAN TREE | <i>Polypedates maculatus</i>      | IV   | 0                              | 0           | 3          | 3           | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 0                                 | 0                                 | 0           | 3           | 3           |
| 5  | TOAD, ASIAN COMMON       | <i>Duttaphrynus melanostictus</i> | IV   | 0                              | 0           | 5          | 5           | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 0                                 | 0                                 | 0           | 5           | 5           |
| 6  | TOAD, MARBLED            | <i>Bufo stamaticus</i>            | IV   | 0                              | 0           | 2          | 2           | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 0                                 | 0                                 | 0           | 2           | 2           |
|  | <b>TOTAL AMPHIBIANS</b>  | -                                 | -    | <b>0</b>                       | <b>0</b>    | <b>21</b>  | <b>21</b>   | <b>0</b>       | <b>0</b> | <b>0</b>   | <b>0</b>            | <b>0</b>  | <b>0</b> | <b>0</b>         | <b>0</b>  | <b>0</b>       | <b>0</b>      | <b>0</b>  | <b>0</b>                          | <b>0</b>                          | <b>0</b>    | <b>21</b>   | <b>21</b>   |
|  |                          |                                   |      | <b>Stock as on 01 .04.2023</b> |             |            |             |                |          |            |                     |           |          |                  |           |                |               |           | <b>Stock as on Dt- 31.03.2024</b> |                                   |             |             |             |
|  |                          |                                   |      | <b>M</b>                       | <b>F</b>    | <b>U</b>   | <b>T</b>    | <b>M</b>       | <b>F</b> | <b>U</b>   | <b>M</b>            | <b>F</b>  | <b>U</b> | <b>M</b>         | <b>F</b>  | <b>U</b>       | <b>M</b>      | <b>F</b>  | <b>U</b>                          | <b>M</b>                          | <b>F</b>    | <b>U</b>    | <b>T</b>    |
|  | Birds                    |                                   |      | 468                            | 669         | 680        | 1817        | 1              | 0        | 101        | 7                   | 9         | 0        | 0                | 0         | 0              | 7             | 11        | 17                                | 471                               | 669         | 760         | 1900        |
|  | Mammal                   |                                   |      | 892                            | 835         | 194        | 1921        | 13             | 8        | 130        | 10                  | 15        | 0        | 9                | 9         | 0              | 21            | 28        | 1                                 | 918                               | 875         | 236         | 2029        |
|  | Reptiles                 |                                   |      | 81                             | 163         | 97         | 341         | 0              | 0        | 20         | 2                   | 2         | 0        | 1                | 2         | 0              | 0             | 1         | 4                                 | 84                                | 164         | 109         | 357         |
|  | Amphibians               |                                   |      | 0                              | 0           | 21         | 21          | 0              | 0        | 0          | 0                   | 0         | 0        | 0                | 0         | 0              | 0             | 0         | 0                                 | 0                                 | 0           | 21          | 21          |
|  | <b>TOTAL</b>             |                                   |      | <b>1441</b>                    | <b>1667</b> | <b>992</b> | <b>4100</b> | <b>14</b>      | <b>8</b> | <b>251</b> | <b>19</b>           | <b>26</b> | <b>0</b> | <b>10</b>        | <b>11</b> | <b>0</b>       | <b>28</b>     | <b>40</b> | <b>22</b>                         | <b>1473</b>                       | <b>1708</b> | <b>1126</b> | <b>4307</b> |
|  |                          |                                   |      | No. of Individuals             |             |            |             | No. of species |          |            |                     |           |          |                  |           | No. of species |               |           | No. of Individuals                |                                   |             |             |             |

|                            |  |                  |                  |                 |                  |  |                 |  |  |  |  |  |  |  |                 |  |                  |                  |                  |                  |
|----------------------------|--|------------------|------------------|-----------------|------------------|--|-----------------|--|--|--|--|--|--|--|-----------------|--|------------------|------------------|------------------|------------------|
| BIRDS - SCH I & II         |  | 134              | 175              | 23<br>9         | 548              |  | 35              |  |  |  |  |  |  |  | 35              |  | 136              | 176              | 302              | 614              |
| SCH-IV (APPENDIX) & EXOTIC |  | 334              | 494              | 44<br>1         | 126<br>9         |  | 41              |  |  |  |  |  |  |  | 42              |  | 335              | 493              | 458              | 128<br>6         |
| MAMMAL - SCH I & II        |  | 876              | 813              | 18<br>9         | 187<br>8         |  | 38              |  |  |  |  |  |  |  | 41              |  | 899              | 850              | 232              | 198<br>1         |
| SCH-IV (APPENDIX) & EXOTIC |  | 16               | 22               | 5               | 43               |  | 11              |  |  |  |  |  |  |  | 11              |  | 19               | 25               | 4                | 48               |
| REPTILE - SCH I & II       |  | 76               | 143              | 79              | 298              |  | 24              |  |  |  |  |  |  |  | 24              |  | 77               | 143              | 98               | 318              |
| SCH-IV (APPENDIX) & EXOTIC |  | 5                | 20               | 18              | 43               |  | 6               |  |  |  |  |  |  |  | 6               |  | 7                | 21               | 11               | 39               |
| AMPHIBIANS SCH I & II      |  | 0                | 0                | 0               | 0                |  | 0               |  |  |  |  |  |  |  | 0               |  | 0                | 0                | 0                | 0                |
| SCH IV                     |  | 0                | 0                | 21              | 21               |  | 6               |  |  |  |  |  |  |  | 6               |  | 0                | 0                | 21               | 21               |
| <b>TOTAL</b>               |  | <b>144<br/>1</b> | <b>166<br/>7</b> | <b>99<br/>2</b> | <b>410<br/>0</b> |  | <b>16<br/>1</b> |  |  |  |  |  |  |  | <b>16<br/>5</b> |  | <b>147<br/>3</b> | <b>170<br/>8</b> | <b>112<br/>6</b> | <b>430<br/>7</b> |

## **27. Mortality of animals:**

### **ANNUAL REPORT ON DEATH OF CAPTIVE ANIMALS AT NANDANKANAN ZOOLOGICAL PARK (FROM 01.04.2023 TO 31.03.2024)**

| <b>SL.NO</b> | <b>DATE</b> | <b>ANIMAL</b> | <b>AGE</b> | <b>SEX</b> | <b>CAUSE OF DEATH</b> |
|--------------|-------------|---------------|------------|------------|-----------------------|
|--------------|-------------|---------------|------------|------------|-----------------------|

#### **MAMMALS**

|    |          |                      |                |   |   |
|----|----------|----------------------|----------------|---|---|
| 1  | 02.04.23 | Spotted Deer         | Adult          | M | Infighting  |
| 2  | 05.04.23 | Spotted Deer         | Adult          | F | Pneumonia   |
| 3  | 13.04.23 | Four Horned Antelope | About 2 yrs    | F | Shock   |
| 4  | 19.04.23 | Striped Hyena        | About 17 yrs   | M | Tumour at the right maxilla associated with old age   |
| 5  | 25.04.23 | Manipur Deer         | About 3 year   | M | Haemorrhagic myositis with fibrinous pneumonia        |
| 6  | 25.04.23 | Manipur Deer         | About 3 year   | M | Haemorrhagic myositis                                 |
| 7  | 10.05.23 | Spotted Deer         | Adult          | F | Infighting injury                                     |
| 8  | 12.05.23 | Hog Deer             | Adult          | F | Internal injury and associated shock                  |
| 9  | 14.05.23 | Swamp Deer           | Adult          | F | Nasal Tumour  |
| 10 | 26.05.23 | Black Buck           | Adult          | F | Dystocia and associated shock                         |
| 11 | 06.06.23 | Spotted Deer         | Adult          | F | Debility and old age                                  |
| 12 | 16.06.23 | Stump Tailed Macaque | Adult          | M | Infighting injury and shock                           |
| 13 | 24.06.23 | Indian Pangolin      | About 6 years  | M | Enteritis and pneumonia                               |
| 14 | 25.06.23 | Indian Pangolin      | About 24 years | F | Ulcerative and proliferative gastritis with enteritis |

|    |          |                 |                |   |   |
|----|----------|-----------------|----------------|---|---|
| 15 | 30.06.23 | Spotted Deer    | Adult          | M | Infighting                              |
| 16 | 12.07.23 | Spotted Deer    | Adult          | M | Infighting                              |
| 17 | 03.08.23 | Spotted Deer    | Adult          | F | Pneumonia                               |
| 18 | 06.08.23 | Nilgai          | Adult          | F | Tumour attached to liver & kidney       |
| 19 | 12.08.23 | Barking Deer    | Adult          | M | Pneumonia                               |
| 20 | 13.08.23 | Hog Deer        | Adult          | F | Suppurative pneumonia                   |
| 21 | 25.08.23 | Asiatic Lion    | 9 months       | M | Meningitis, muscular weakness & anaemia |
| 22 | 01.09.23 | Spotted Deer    | Adult          | M | Infighting Injuries                     |
| 23 | 01.09.23 | Spotted Deer    | Adult          | F | Debility & old age                      |
| 24 | 15.09.23 | Nilgai          | Adult          | F | Tuberculosis                            |
| 25 | 27.09.23 | Nilgai          | Adult          | M | Tuberculosis                            |
| 26 | 05.10.23 | Ratel           | About 20 years | F | Hepatitis associated with old age       |
| 27 | 09.10.23 | Indian Hare     | Adult          | F | Enteritis                               |
| 28 | 09.11.23 | African Lioness | About 17 years | F | Acute Pneumonia associated with old age |
| 29 | 20.11.23 | Mouse Deer      | Adult          | M | Pneumonia & Enteritis                   |
| 30 | 20.11.23 | Mouse Deer      | Adult          | F | Pneumonia & Enteritis                   |
| 31 | 21.11.23 | Mouse Deer      | Adult          | F | Pneumonia & Enteritis                   |
| 32 | 25.11.23 | Spotted Deer    | Adult          | M | Tuberculosis                            |
| 33 | 25.11.23 | Spotted Deer    | Adult          | F | Tuberculosis                            |
| 34 | 30.11.23 | Hippopotamus    | About 2 years  | M | Gastric Ulcer                           |
| 35 | 02.12.23 | Swamp Deer      | Adult          | M | Infighting                              |

|    |          |                      |              |   |   |
|----|----------|----------------------|--------------|---|---|
| 36 | 03.12.23 | Hog Deer             | Adult        | F | Infighting                                      |
| 37 | 16.12.23 | Spotted Deer         | Adult        | F | Pneumonia                                       |
| 38 | 13.01.24 | Mouse Deer           | About 1 year | F | Impaction of rumen and caecum                   |
| 39 | 15.01.24 | Indian Fox           | Adult        | M | Infighting Injury leading to septicaemia        |
| 40 | 17.01.24 | Nilgai               | Adult        | F | Tuberculosis associated with old age            |
| 41 | 22.01.24 | Indian Fox           | Adult        | M | Infighting Injury leading to septicaemia        |
| 42 | 29.01.24 | Manipuri Deer        | Adult        | F | Tumour involving kidney                         |
| 43 | 30.01.24 | Nilgai               | Adult        | F | Tuberculosis                                    |
| 44 | 21.02.24 | Bonnet Monkey        | Adult        | M | Tuberculosis                                    |
| 45 | 23.02.24 | Indian Hare          | Adult        | M | Abscess at right maxilla leading to septicaemia |
| 46 | 23.02.24 | Nilgai               | Adult        | M | Senility  |
| 47 | 05.03.24 | Four Horned Antelope | Adult        | F | Inanition and debility                          |
| 48 | 08.03.24 | Nilgai               | Adult        | M | Infighting injury                               |
| 49 | 23.03.24 | Bonnet Monkey        | Adult        | F | Tuberculosis                                    |
| 50 | 26.03.24 | Squirrel Monkey      | 9 days       | M | Trampling and internal haemorrhage              |

### **BIRDS**

|   |          |                      |       |   |                         |
|---|----------|----------------------|-------|---|-------------------------|
| 1 | 05.04.23 | White Backed Vulture | Adult | M | Hepatitis and nephritis |
| 2 | 20.04.23 | Sun Conure           | Adult | F | Salpingitis             |

|    |          |                     |               |   |   |  |
|----|----------|---------------------|---------------|---|---|--|
| 3  | 20.04.23 | Sun Conure          | About 3 month | 3 | M | Enteritis  |
| 4  | 20.04.23 | Sun Conure          | About 3 month | 3 | M | Enteritis  |
| 5  | 29.04.23 | Sun Conure          | About 3 month | 3 | F | Enteritis  |
| 6  | 12.05.23 | Sun Conure          | About 2 year  |   | F | Injury to the limb and haemorrhage               |
| 7  | 28.05.23 | Long Billed Vulture | Adult         |   | F | Hepatitis, nephritis and enteritis               |
| 8  | 07.06.23 | Love Bird           | Adult         |   | M | Hepatitis and enteritis                          |
| 9  | 16.06.23 | Red Jungle Fowl     | Adult         |   | F | Infighting injury                                |
| 10 | 16.06.23 | Red Jungle Fowl     | Adult         |   | F | Infighting injury                                |
| 11 | 30.06.23 | Yellow Sided Conure | About 2 year  |   | M | Internal haemorrhage                             |
| 12 | 17.07.23 | Sun Conure          | Adult         |   | F | Haemorrhage into thoracic cavity                 |
| 13 | 25.07.23 | Jandaya Conure      | About 3 month | 3 | F | Enteritis  |
| 14 | 25.07.23 | Jandaya Conure      | About 3 month | 3 | M | Enteritis  |
| 15 | 27.07.23 | Long Billed Vulture | Adult         |   | M | Enteritis, necrotic hepatitis and air.sacculitis |
| 16 | 02.08.23 | Love Bird           | Adult         |   | M | Senility   |
| 17 | 30.08.23 | Sun Conure          | Adult         |   | F | Hepatitis & nephritis                            |
| 18 | 14.09.23 | Silver Pheasant     | Adult         |   | F | Predator bite                                    |

|    |          |                               |       |   |                          |
|----|----------|-------------------------------|-------|---|--------------------------|
| 19 | 24.09.23 | Black Swan                    | Adult | M | Fowl cholera             |
| 20 | 28.09.23 | Reeve's Pheasant              | Adult | M | Debility & Anaemia       |
| 21 | 22.10.23 | Rose Ringed Parakeet          | Adult | M | Infighting injury        |
| 22 | 22.11.23 | Black Swan                    | Adult | M | Peritonitis with old age |
| 23 | 30.11.23 | Ring Necked Parakeet (Albino) | Adult | M | Enteritis                |
| 24 | 07.12.23 | Pineapple Conure              | Adult | F | Hepatitis                |
| 25 | 07.12.23 | Fischer's Love Bird           | Adult | F | Enteritis                |
| 26 | 03.01.24 | Grey Heron                    | Adult | M | Hepatitis                |
| 27 | 15.01.24 | Ring Necked Dove              | Adult | M | Hepatitis & Enteritis    |
| 28 | 23.01.24 | Pineapple Conure              | Adult | F | Internal haemorrhage     |
| 29 | 27.01.24 | Emerald Dove                  | Adult | M | Enteritis                |
| 30 | 29.02.24 | Silver Pheasant               | Adult | F | Pneumonia                |
| 31 | 08.03.24 | Lady Amherst's Pheasant       | Adult | F | Hepatitis and enteritis  |
| 32 | 12.03.24 | Barn Owl                      | Adult | M | New Castle Disease       |
| 33 | 12.03.24 | Barn Owl                      | Adult | M | New Castle Disease       |
| 34 | 12.03.24 | Barn Owl                      | Adult | F | New Castle Disease       |
| 35 | 26.03.24 | Silver Pheasant               | Adult | F | Traumatic injury         |

## REPTILES

|   |          |                         |                    |   |  |
|---|----------|-------------------------|--------------------|---|--|
| 1 | 07.04.23 | Yellow Anaconda         | About 8 mn         | M | Haemorrhagic Enteritis                       |
| 2 | 02.09.23 | Water Monitor<br>Lizard | Adult              | F | Salpingitis                                  |
| 3 | 05.11.23 | Siamese<br>Crocodile    | About 12 years     | F | Peritonitis                                  |
| 4 | 04.12.23 | Yellow Anaconda         | 1 year 4<br>months | F | Intestinal impaction & necrotic<br>enteritis |
| 5 | 05.12.23 | Yellow Anaconda         | 1 year 4<br>months | M | Intestinal impaction & necrotic<br>enteritis |

#### ABSTRACT

| Mammals | Birds | Reptiles | Total |
|---------|-------|----------|-------|
| 50      | 35    | 05       | 90    |

**28. Compliance with conditions stipulated by the Central Zoo Authority:**

| Sl.No. | Norm under RZR, 2009    | Condition Stipulated  | Time period to comply             | Since when pending | Compliance report  |
|--------|-------------------------|---|-----------------------------------|--------------------|--|
|        | 1. General requirements |   |                                   |                    |  |
| 1.     | 10.1(4)& 10.1(9)        | Security at gate required to be made more vigilant to check the entrance of stray dogs.   | Immediately                       | 31/12/2020         | Complied   |
| 2.     | 10.1(5)                 | <p>a. There is a thoroughfare inside the zoo which connects two adjacent villages namely Raghunathpur and Daruthenga. This is a security hazard as the villagers entry the campus without ticket. This issue should be amicably settled.</p> <p>b. The road leading to State Botanical Garden is passing in front of the zoo gate and creating congestion and problem to visitor's entry into the zoo. Hence, It should be closed for the public use and alternate arrangement should be made for construction of separate approach road to State Botanical Garden.</p> | <p>Six months</p> <p>One year</p> | 31/12/2020         | <p>Action is being taken to record the vehicle details using the thoroughfare at the entry and exit gate. Provision for stopping the thoroughfare has been made in the Master plan.</p> <p>Complied by construction of separate approach road.</p> |
| 3.     | 10.1(7)                 | The solid wastes should be disposed off at the earmarked place within the   | One year                          | 31/12/2020         | Solid waste is being disposed off at an earmarked place.   |

|    |                                      |   |              |            |   |
|----|--------------------------------------|---|--------------|------------|---|
|    |                                      | campus. In order to dispose off liquid waste the authority should go for STP. The waste material (solid or liquid) should never be released in the Kanjia lake.   |              |            | Collaboration has been made with Bhubaneswar Municipal Corporation to remove and dispose the said waste at BMC dumping site on weekly basis. Provision of STP has been made in Master Plan for implementation in the subsequent years in phase wise manner. |
|    | 2. Administrative & Staffing Pattern |   |              |            |   |
| 4. | 10.2(1)                              | The Deputy Director should be delegated adequate financial and administrative power to run the zoo smoothly. The authority should expedite the proposal to construct the administrative building including the chamber of the Director inside the zoo campus. | Six months   | 31/12/2020 | The Deputy Director has an independent office with full DDO powers. Plan to construct a new administrative block with office of the Director has been made in the master plan.  |
| 5. | 10.2(2)                              | Full time Curator having Master's Degree in Wildlife Science/Zoology should be recruited.   | One year     | 31/12/2020 | Under active consideration. Present Curator having a decade long association in Zoo Management is quite competent.  |
|    | 3. Development and Planning          |   |              |            |   |
| 6. | 10.3(1)                              | a. The duration of present Master Plan will end on  | Three months | 31/12/2020 | Master Plan got approved by Central Zoo   |

|    |   |   |            |            |  |
|----|---|---|------------|------------|--|
|    |   | 31.03.2020. New Master Plan must be prepared and submitted to CZA for approval<br><br>b. The incomplete service road to distribute food must be completed | Six months |            | Authority, New Delhi on 18 December, 2023.<br><br>Service road development is being carried out in phase wise manner. Service road in back side of the tiger enclosures, safaris, North-east Panaroma has been completed. The remaining road current and subsequent financial years as planned in the Master Plan. |
| 7. | 10.3(5)   | The quarantine ward should be constructed at earliest.  | Six months | 31/12/2020 | Quarantine ward for carnivores is completed and made operational. The quarantine for birds is under construction. The quarantine ward for herbivores, reptiles and has been planned and will be constructed as per Master plan in coming years.  |
|    | 4. Animal Housing, Display of Animals & Animal Enclosures |   |            |            |  |
| 8. | 10.4(2)   | There are a number of enclosures where the space is still inadequate as per CZA norms e.g. cobras, banded krait,  | One year   | 31/12/2020 | The said enclosures have been renovated to provide more space to the exhibited snakes species.   |

|     |                 |   |            |            |   |
|-----|-----------------|---|------------|------------|---|
|     |                 | vipers, boa etc. The authority should take action to increase the size of the enclosure.  |            |            | Detail plan for construction of new enclosure and modification of existing enclosure for the snakes and other reptiles in the reptile park as per CZA norms.  |
| 9.  | 10.4(2)         | The enrichment of the enclosures of rhesus monkey and bonnet monkey and Hamadryads baboon should be increased.  | Six months | 31/12/2020 | Complied. The existing small, old enclosures have been renovated to large enclosures with adequate enrichment.  |
| 10. | 10.4(3),(4)&(5) | Renovation of EN 45 series of Reptile Park and bird enclosure EN 3ABC, 7ABC, 8ABC, 4 and 6 to provide appropriate space for movement and expression of natural behaviour and to maintain safe distance. | One year   | 31/12/2020 | Complied for EN 45 series of Reptile Park by renovation of enclosures. Provision made in the new Master Plan for to keep small passerines in EN 3ABC and renovate 7ABC, 8ABC, 4 and 6 with adequate space and enrichment complying CZA guidelines |
| 11. | 10.4(6)         | A number of trees and plants have uprooted and fallen due to cyclone 'PHANI' in all the safaris. As a result, they are hindering the animal sighting.   | Six months | 31/12/2020 | Complied. 1000 tall tree plantation carried out replacing the dead uprooted trees. Live uprooted trees have been pruned at strategic locations for better animal sighting in safaris.   |

|                                     |          |  |                             |            |   |
|-------------------------------------|----------|--|-----------------------------|------------|---|
| 12.                                 | 10.4(8)  | Extension of Bear Safari, Tiger safari and Herbivore safari need to be done as per CZA norms. The present area is 4.1ha.   | One year                    | 31/12/2020 | All the Safaris will be shifted to Chudang area in the new Master Plan, converting the existing safaris to rewilding zones. Therefore, the safaris have not been considered for further extension.        |
| 13.                                 | 10.4(9)  | a. There are number of enclosures where height of stand-off barrier is not as per CZA norms. It should be reduced in phase manner.<br><br>b. Damaged pillar of stand-off barrier must be repaired or replaced.   | One year<br><br>Immediately | 31/12/2020 | Complied<br><br>Fully complied  |
| 14.                                 | 10.4(10) | The signage in nocturnal house should be fixed at appropriate place so that the visitor could see it well.   | One month                   | 31/12/2020 | Complied  |
| 5. Upkeep and Healthcare of Animals |          |  |                             |            |   |
| 15.                                 | 10.5(1)  | Efforts must be made to make pair of Giraffe, Asiatic lion, African lion, hill mynah, spoonbill, Ganges soft shell turtle.<br><br>The green dirty water of hippo enclosure should be treated through STP and re- | One year<br><br>One year    | 31/12/2020 | Asiatic lion already paired; Spoonbill has died and not in current animal collection. Animal exchange proposal initiated for the remaining species.<br><br>Provision has been made in new Master Plan for |

|     |   |   |                   |            |   |
|-----|---|---|-------------------|------------|---|
|     |   | circulate.  |                   |            | implantation of STP will be carried out in the current financial year.  |
| 16. | 10.5(2)                                     | Keeping in view the large number of animals the storage facility for keeping required food is inadequate. Therefore, additional food storage go down is required.   | Six months        | 31/12/2020 | New feed Godown is being contemplated in the new Master plan for implementation in next year.   |
|     | 6. Veterinary and Infrastructure Facilities |   |                   |            |   |
| 17. | 10.6(1)                                     | The zoo hospital should have one portable x-ray unit, gaseous anaesthesia apparatus, separate operation theatre, more number In-Patient Ward units and a mini conference hall to increase its efficiency. | One and half year | 31/12/2020 | Modernization of zoo hospital have been carried out with addition of portable x-ray unit, gaseous anaesthesia apparatus, ultrasonography and a modern operation theatre, one movable x-ray unit procured. After establishment of new quarantine facility away from animal enclosures, the existing quarantine near is converted to inpatient ward with adequate facility for housing the animals under treatment.<br><br>The provision of mini conference hall is made in the new Master Plan |

|     |  |  |          |            |  |
|-----|--|--|----------|------------|--|
|     |  |  |          |            | and will be implemented in subsequent years.   |
|     | 9. Acquisition and Breeding of animals |  |          |            |  |
| 18. | 10.9(4)                                | Efforts should be made pair of the species like Hill Myna, White Spoonbill, White Backed Vulture, Indian Small Civet, Salt Water Crocodile, two species of Python, Rat Snake, Ganges Soft-shelled Turtle, Russell's Viper, Sarus Crane, Large Egret, Median Egret, Black Headed Munia, Spotted Munia, Oriental Scops Owl, Blossom Headed Parakeet, Adjutant Stork (lesser), White Neck Stork, Indian Porcupine, Lesser Sulphur Crested Cockatoo, White Cockatoo, Star Finch, Yellow Backed Lorry, Giraffe. | One year | 31/12/2020 | Animal exchange proposal initiated and followed up for these species.<br><br>White spoonbill, white necked stork, white backed vultures have meanwhile died. |
| 19. | 10.9(6)                                | The CZA has assigned the conservation breeding of Indian pangolin since 2009. This zoo has shown good result by breeding this endangered species in captivity. This project should continue by financial assistance  |          | 31/12/2020 | The conservation breeding for Indian pangolin is continuing with financial assistance from CZA.  |

|     |                        |  |          |            |   |
|-----|------------------------|--|----------|------------|---|
|     |                        | from CZA.  |          |            |   |
| 20. | 10.9(9)                | The authorities now should try to send the excess Spotted deer, Sambar, Blackbuck, common palm civet, gharial, mugger population to different wildlife protected area in consultation with the concerned authorities | One year | 31/12/2020 | The zoo has rehabilitated 16 gharials in the river Mahanadi under ongoing Species recovery of gharial in river Mahanadi programme. And, 169 spotted deer are also translocated Chandaka-Dampara Sanctuary. Similar plans are prepared for other surplus species. The has developed well equipped Zoo laboratory to facilitate disease screening prior to release of these species to wild. Liaison with local forest divisions going on for release of stock. |
| 21. | 10.9(12)               | Efforts should be made to phase out hybrid lion  | One year | 31/12/2020 | Disposal of hybrid lions are under consideration. there breeding has been banned  |
|     | 12. Visitor Facilities |  |          |            |   |
| 22. | 10.12(1)               | The under-construction parking must be completed so that the temporary parking which is inadequate may be discontinued   | One year | 31/12/2020 | Complied. Construction of new parking facility completed and made operational.  |

|     |          |   |  |            |   |
|-----|----------|---|--|------------|---|
| 23. | 10.12(1) | <p>The vendors in front of the Main gate give shabby look and create hazard for the vehicles as well as visitors, which should be trans-located</p> <p>It is observed that the Safari Bus Stop is situated within the main zoo area near Reptile Park which is dangerous for the visitors as it intercepts visitor circulation path. The zoo has already taken steps to relocate the safari bus stop to outside main zoo area, which should be completed immediately to avoid plying of bus in zoo visitors route.</p> <p>It is observed that the BOVs are moving in zigzag manner though there are earmarked stoppages for the BOVs. Hence the zoo-in-charge should give attention that the BOVs must move in tracks dedicated for the purpose</p> <p>There should be separate exit path for the visitors to avoid</p> | <p>One year</p> <p>Three months</p> <p>Immediately</p> <p>Three months</p> | 31/12/2020 | <p>Provision of has been made in the new Master plan to shift the vendors in to a market complex near the bus bay and renovate the Entrance Plaza.</p> <p>Complied.</p> <p>Complied.</p> <p>Complied.</p> |
|-----|----------|---|--|------------|---|

|     |          |   |                                     |            |  |
|-----|----------|---|-------------------------------------|------------|--|
|     |          | <p>congestion and rush. The zoo authorities have already taken steps to make separate exit path for the visitors. It should be completed immediately</p>  |                                     |            |  |
| 24. | 10.12(1) | <p>There is an eatery complex near reptile park where majority of the visitors congregate to take snacks, thereby polluting the space with leftover foods which attracts many free-living animals like rodents, cats and crows which may lead to hazardous effect on captive animals. Therefore, this particular eatery complex should be relocated to the place far away from enclosures.</p> <p>The frontage gate of the restaurant run by OTDC (near FRH) should be shifted to outside the zoo premises.</p> | <p>Six months</p> <p>Six months</p> | 31/12/2020 | <p>Complied.</p> <p>Official communication initiated with OTDC for shifting of entry gate outside of Zoo premises.</p> |

## 29. List of free living wild animals within the zoo premises:

### MAMMALS OF NANDANKANAN

| Sl. No. | Common Name                     | Scientific name                   | Status |
|---------|---------------------------------|-----------------------------------|--------|
| 1       | Wild Boar                       | <i>Sus scrofa</i>                 | R      |
| 2       | Spotted Deer                    | <i>Axis axis</i>                  | VC     |
| 3       | Ratel                           | <i>Mellivora capensis</i>         | R      |
| 4       | Common mongoose                 | <i>Herpestes edwardsi</i>         | VC     |
| 5       | Indian Poprcupine               | <i>Hystrix indica</i>             | R      |
| 6       | Mouse Deer or Indian Chevrotain | <i>Tragulus meminna</i>           | R      |
| 7       | Common palm civet               | <i>Paradoxurus hermaphrodites</i> | R      |
| 8       | Jackal                          | <i>Canis aureus</i>               | R      |
| 9       | Indian fox                      | <i>Vulpes bengalensis</i>         | VR     |
| 10      | Common Langur                   | <i>Presbytis entellus</i>         | VC     |
| 11      | Rhesus Macaque                  | <i>Macaca mulatta</i>             | VC     |
| 12      | Jungle Cat                      | <i>Felis chaus</i>                | R      |
| 13      | Pangolin                        | <i>Manis crassicaudata</i>        | VR     |
| 14      | Indian hare                     | <i>Lepus nigricollis</i>          | C      |
| 15      | Small Indian civet              | <i>Viverricula indica</i>         | R      |
| 16      | Striped hyena                   | <i>Hyaena hyaena</i>              | R      |
| 17      | Three striped palm squirrel     | <i>Funambulus palmarium</i>       | VC     |
| 18      | Rat                             | <i>Rattus rattus</i>              | VC     |
| 19      | Indian flying fox               | <i>Pteropus giganteus</i>         | R      |
| 20      | Horse shoe bat                  | <i>Rhinolophus lepidus</i>        | VC     |

### BIRDS OF NANDANKANAN

| Sl. No.        | Common Name           | Scientific Name                  | Status |
|----------------|-----------------------|----------------------------------|--------|
| PHASIANIDAE    |                       |                                  |        |
| 1              | Grey Partridge        | <i>Francolinus pondicerianus</i> | C      |
| 2              | Common Peafowl        | <i>Pavo cristatus</i>            | VC     |
| 3              | Red Jungle fowl       | <i>Gallus gallus murghi</i>      | R      |
| 4              | Red Spurfowl          | <i>Galloperdix spadicea</i>      | R      |
| DENDROCYGNIDAE |                       |                                  |        |
| 5              | Lesser Whistling Teal | <i>Dendrocygna javanica</i>      | VR     |
| ANATIDAE       |                       |                                  |        |
| 6              | Cotton pigmy goose    | <i>Nettapus coromandelianus</i>  | VR     |
| 7              | Common Teal           | <i>Anas crecca</i>               | R      |
| 8              | Spot-billed Duck      | <i>Anas poecilorhyncha</i>       | VR     |
| 9              | Gadwall               | <i>Anas strepera</i>             | R      |
| 10             | Northern Pintail      | <i>Anas acuta</i>                | R      |
| 11             | Brahminy Duck         | <i>Tadorna ferruginea</i>        | VR     |
| TURNICIDAE     |                       |                                  |        |
| 12             | Barred Buttonquail    | <i>Turnix suscitator</i>         | R      |

|               |  |                                      |    |
|---------------|--|--------------------------------------|----|
| PICIDAE       |  |                                      |    |
| 13            | Yellow fronted Pied or Mahratta Woodpecker | <i>Dendrocopos mahrattensis</i>      | R  |
| 14            | Larger Golden backed Woodpecker            | <i>Chrysocolaptes lucidus</i>        | C  |
| 15            | Black-rumped flameback                     | <i>Dinopium benghalense</i>          | VR |
| MEGALAIMIDAE  |  |                                      |    |
| 16            | Small Green Barbet                         | <i>Megalaima viridis</i>             | R  |
| 17            | Copper-smith Barbet                        | <i>Megalaima haemacephala</i>        | R  |
| 18            | Brown-headed Barbet                        | <i>Megalaima zeylanica</i>           | R  |
| UPUPIDAE      |  |                                      |    |
| 19            | Common Hoopoe                              | <i>Upupa epops</i>                   | R  |
| CORACIIDAE    |  |                                      |    |
| 20            | Indian Roller or Blue Jay                  | <i>Coracias benghalensis</i>         | C  |
| ALCEDINIDAE   |  |                                      |    |
| 21            | Indian Small Blue Kingfisher               | <i>Alcedo atthis bengalensis</i>     | VR |
| DACELOPIDAE   |  |                                      |    |
| 22            | White breasted Kingfisher                  | <i>Halcyon smyrnensis perpulchra</i> | C  |
| CERYLIDAE     |  |                                      |    |
| 23            | Lesser Pied Kingfisher                     | <i>Ceryle rudis</i>                  | VR |
| MEROPIIDAE    |  |                                      |    |
| 24            | Indian Small Green Bee-eater               | <i>Merops orientalis</i>             | C  |
| 25            | Blue Bee-eater                             | <i>Merops philippinus</i>            | R  |
| CUCULIDAE     |  |                                      |    |
| 26            | Indian Koel                                | <i>Eudynamis scolopacea</i>          | VC |
| 27            | Pied Cuckoo                                | <i>Clamator jacobinus</i>            | R  |
| 28            | Common hawk Cuckoo                         | <i>Hierococcyx varius</i>            | VR |
| 29            | Plaintive Cuckoo                           | <i>Cacomantis merulinus</i>          | VR |
| 30            | Blue faced Malkoha                         | <i>Phaenicophaeus viridirostris</i>  | VR |
| CENTROPODIDAE |  |                                      |    |
| 31            | Crow-pheasant or Coucal                    | <i>Centropus sinensis</i>            | VC |
| PSITTACIDAE   |  |                                      |    |
| 32            | Rose-ringed Parakeet                       | <i>Psittacula krameri</i>            | VR |
| 33            | Alexandrine Parakeet                       | <i>Psittacula eupatria</i>           | R  |
| APODIDAE      |  |                                      |    |
| 34            | Asian palm swift                           | <i>Cypsiurus balasiensis</i>         | C  |
| TYTONIDAE     |  |                                      |    |
| 35            | Barn Owl                                   | <i>Tyto alba</i>                     | VC |
| STRIGIDAE     |  |                                      |    |
| 36            | Eastern Spotted Scops Owl                  | <i>Otus spilocephalus</i>            | VR |
| 37            | Spotted Owlet                              | <i>Athene brama</i>                  | C  |
| CAPRIMULGIDAE |  |                                      |    |
| 38            | Indian Jungle Nightjar                     | <i>Caprimulgus indicus</i>           | C  |
| COLUMBIDAE    |  |                                      |    |

|                   |                         |   |    |
|-------------------|-------------------------|---|----|
| 39                | Indian Blue Rock Pigeon | <i>Columba livia intermedia</i>                 | C  |
| 40                | Indian Spotted Dove     | <i>Streptopelia chinensis</i>                   | VC |
| 41                | Emerald Dove            | <i>Chalcophaps indica</i>                       | VR |
| RALLIDAE          |                         |   |    |
| 42                | Purple Moorhen          | <i>Porphyrio porphyrio</i>                      | R  |
| 43                | Water cock              | <i>Gallicrex cinerea</i>                        | R  |
| 44                | Common moorhen          | <i>Gallinula chloropus</i>                      | C  |
| 45                | White breasted Waterhen | <i>Amaurornis phoenicurus<br/>boliocephalus</i> | C  |
| SCOLOPACIDAE      |                         |   |    |
| 46                | Eurasian Curlew         | <i>Numenius arquata</i>                         | VR |
| 47                | Common snipe            | <i>Gallinago gallinago</i>                      | R  |
| 48                | Wood Sandpiper          | <i>Tringa glareola</i>                          | R  |
| 49                | Indian Stone Curlew     | <i>Burhinus oedicephalus indicus</i>            | VR |
| JACANIDAE         |                         |   |    |
| 50                | Bronze winged Jacana    | <i>Metopidius indicus</i>                       | C  |
| 51                | Pheasant-tailed Jacana  | <i>Hydrophasianus chirurgus</i>                 | R  |
| CHARADRIIDAE      |                         |   |    |
| 52                | Red-wattled Lapwing     | <i>Vanellus indicus</i>                         | C  |
| 53                | Yellow wattled Lapwing  | <i>Vanellus malabaricus</i>                     | C  |
| ACCIPITRIDAE      |                         |   |    |
| 54                | Pariah Kite             | <i>Milvus migrans govinda</i>                   | VR |
| 55                | Shikra                  | <i>Accipiter badius dussumderi</i>              | R  |
| 56                | Osprey                  | <i>Pandion haliaetus</i>                        | R  |
| 57                | Crested Serpent eagle   | <i>Spilornis cheela</i>                         | R  |
| ANHINGIDAE        |                         |   |    |
| 58                | Darter or Snake-bird    | <i>Anhinga melanogaster</i>                     | C  |
| PHALACROCORACIDAE |                         |   |    |
| 59                | Little Cormorant        | <i>Phalacrocorax niger</i>                      | VC |
| ARDEIDAE          |                         |   |    |
| 60                | Pond Heron              | <i>Ardeola grayii</i>                           | C  |
| 61                | Purple Heron            | <i>Ardea purpurea</i>                           | VR |
| 62                | Grey Heron              | <i>Ardea cinerea</i>                            | VR |
| 63                | Cattle Egret            | <i>Bubulcus ibis coromandus</i>                 | VC |
| 64                | Little Egret            | <i>Egretta garzetta</i>                         | VC |
| 65                | Median Egret            | <i>Mesophoyx intermedia</i>                     | R  |
| 66                | Great Egret             | <i>Casmerodius albus</i>                        | R  |
| 67                | Night Heron             | <i>Nycticorax nycticorax</i>                    | C  |
| 68                | Great Bittern           | <i>Botaurus stellaris</i>                       | VR |
| 69                | Black Bittern           | <i>Dupetor flavicollis</i>                      | VR |
| 70                | Yellow Bittern          | <i>Ixobrychus sinensis</i>                      | VR |
| 71                | Cinnamon Bittern        | <i>Ixobrychus cinnamomeus</i>                   | R  |
| CICONIDAE         |                         |   |    |
| 72                | Painted Stork           | <i>Mycteria leucocephala</i>                    | VR |
| 73                | Openbill Stork          | <i>Anastomus oscitans</i>                       | VC |

|                   |                             |  |    |
|-------------------|-----------------------------|--|----|
| 74                | Woolly-necked Stork         | <i>Ciconia episcopus</i>                     | R  |
| THRESKIORNITHIDAE |                             |  |    |
| 75                | Oriental White Ibis         | <i>Threskiornis aethiopica melanocephala</i> | R  |
| LANIDAE           |                             |  |    |
| 76                | Large Cuckoo-shrike         | <i>Coracina novaehollandiae</i>              | R  |
| 77                | Brown Shrike                | <i>Lanius cristatus</i>                      | R  |
| CORVIDAE          |                             |  |    |
| 78                | Northeastern Tree Pie       | <i>Dendrocitta vagabunda</i>                 | VC |
| 79                | Indian House Crow           | <i>Corvus splendens</i>                      | VC |
| 80                | Indian Jungle Crow          | <i>Corvus macrorhynchos culminates</i>       | VR |
| 81                | Indian Paradise Flycatcher  | <i>Terpsiphone paradisi</i>                  | R  |
| 82                | Indian Black Drongo         | <i>Dicrurus macrocercus</i>                  | VC |
| 83                | Indian white-bellied Drongo | <i>Dicrurus caerulescens</i>                 | R  |
| 84                | Black-naped Monarch         | <i>Hypothymis azurea</i>                     | VR |
| 85                | Indian Golden Oriole        | <i>Oriolus oriolus kundoo</i>                | C  |
| 86                | Indian Black headed Oriole  | <i>Oriolus xanthornus</i>                    | C  |
| 87                | Black headed Cuckoo-shrike  | <i>Coracina melanoptera</i>                  | VR |
| 88                | Common Iora                 | <i>Aegithina tiphia</i>                      | R  |
| MUSCICAPIDAE      |                             |  |    |
| 89                | Oriental Magpie Robin       | <i>Copsychus saularis</i>                    | C  |
| 90                | Indian Robin                | <i>Saxicoloides fulicata</i>                 | C  |
| 91                | Orange headed thrush        | <i>Zoothera citrina</i>                      | VR |
| 92                | Red-throated flycatcher     | <i>Ficedula parva</i>                        | R  |
| STURNIDAE         |                             |  |    |
| 93                | Indian Pied Myna            | <i>Sturnus contra</i>                        | C  |
| 94                | Common Myna                 | <i>Acridotheres tristis</i>                  | VC |
| 95                | Jungle Myna                 | <i>Acridotheres fuscus</i>                   | C  |
| 96                | Brahminy Starling           | <i>Sturnus pagodarum</i>                     | C  |
| PYCNONOTIDAE      |                             |  |    |
| 97                | Red whiskered Bulbul        | <i>Pycnonotus jocosus</i>                    | R  |
| 98                | Red vented Bulbul           | <i>Pycnonotus cafer</i>                      | C  |
| 99                | White-browed Bulbul         | <i>Pycnonotus luteolus</i>                   | R  |
| CISTICOLIDAE      |                             |  |    |
| 100               | Plain Prinia                | <i>Prinia inornata</i>                       | R  |
| 101               | Streaked Fantail Warbler    | <i>Cisticola juncidis</i>                    | VR |
| ZOSTEROPIDAE      |                             |  |    |
| 102               | Oriental White-eye          | <i>Zosterops palpebrosa</i>                  | R  |
| SYLVIDAE          |                             |  |    |
| 103               | Indian Rufous Babbler       | <i>Turdoides subrufus</i>                    | R  |
| 104               | Jungle Babbler              | <i>Turdoides striatus</i>                    | VC |
| 105               | Puff-throated Babbler       | <i>Pellorneum ruficeps</i>                   | R  |
| 106               | Yellow Browed Warbler       | <i>Phylloscopus inornatus</i>                | R  |

|              |                         |                                  |    |
|--------------|-------------------------|----------------------------------|----|
| 107          | Greenish Warbler        | <i>Phylloscopus trochiloides</i> | R  |
| 108          | Common Tailor Bird      | <i>Orthotomus sutorius</i>       | VR |
| ALAUDIDAE    |                         |                                  |    |
| 109          | Red-winged Bush-lark    | <i>Mirafra erythroptera</i>      | VR |
| NECTARINIDAE |                         |                                  |    |
| 110          | Purple-rumped Sunbird   | <i>Nectarinia zeylonica</i>      | C  |
| 111          | Purple Sunbird          | <i>Nectarinia asiatica</i>       | VC |
| 112          | Loten's Sunbird         | <i>Nectarinia lotenia</i>        | R  |
| PASSERIDAE   |                         |                                  |    |
| 113          | White Wagtail           | <i>Motacilla alba</i>            | R  |
| 114          | White-browed Wagtail    | <i>Motacilla maderaspatensis</i> | R  |
| 115          | Forest Wagtail          | <i>Dendronanthus indicus</i>     | R  |
| 116          | House Sparrow           | <i>Passer domesticus</i>         | R  |
| 117          | Paddy field Pipit       | <i>Anthus rufulus</i>            | C  |
| 118          | Indian Baya             | <i>Ploceus philippinus</i>       | VR |
| 119          | Black-headed Munia      | <i>Lonchura malacca</i>          | R  |
| 120          | Red Avadavat            | <i>Amandava amandava</i>         | R  |
| HALCYONIDAE  |                         |                                  |    |
| 121          | Stork-billed kingfisher | <i>Pelargopsis capensis</i>      | R  |

#### REPTILES OF NANDANKANAN

| Sl.no. | Common Name                            | Scientific Name              | Status |
|--------|--|------------------------------|--------|
| 1      | Land Monitor lizard                    | <i>Varanus bengalensis</i>   | VC     |
| 2      | Indian Python                          | <i>Python molurus</i>        | VC     |
| 3      | Yellow monitor lizard                  | <i>Varanus flavescens</i>    | R      |
| 4      | Russels Viper                          | <i>Daboia russelli</i>       | C      |
| 5      | Banded krait                           | <i>Bungarus fasciatus</i>    | R      |
| 6      | Common Indian Krait                    | <i>Bungarus caeruleus</i>    | VC     |
| 7      | Indian Cobra Binocellate               | <i>Naja naja naja</i>        | VC     |
| 8      | Cobra Monocellate                      | <i>Naja naja kaouthia</i>    | C      |
| 9      | Rat Snake                              | <i>Ptyas mucosus</i>         | VC     |
| 10     | Common Indian Broze back or tree snake | <i>Dendrelaphis tristis</i>  | C      |
| 11     | Checkered keel back                    | <i>Xenochrophis piscator</i> | R      |
| 12     | Chameleon                              | <i>Chameleon zeylanicus</i>  | C      |
| 13     | Common Green Whip Snake                | <i>Ahaetulla nasuta</i>      | R      |
| 14     | Earth Boa                              | <i>Eryx johnii</i>           | VR     |
| 15     | Garden lizard                          | <i>Calotes verricolor</i>    | VR     |

#### STATUS

VR- Very Rare, R- Rare, VC- Very Common, C- Common