



**DR. Shyamaprasad Mukerjee Zoological Garden  
Surat Municipal Corporation  
Surat, Gujarat**

**Annual Report for the Year**

**2017-18**

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

Dr. Shyamprasad Mukerjee Zoological Garden, Sarthana, Surat is one of the medium zoos of the country. Established on 26<sup>th</sup> March, 2003 as the first zoological park in the Southern region of the Gujarat State, it has progressively emerged as an eminent and vibrant centre for biodiversity conservation and environmental education. As a primer medium zoo of India, it has spearheaded many significant improvements to provide highest standards of housing, husbandry and health care to the captive wild animals and contributed towards enriching our knowledge on the biology of endangered species.

Surat zoo exemplified the inimitable of ex-situ conservation initiatives. The sprawling zoo houses 49 species of mammals, reptiles and birds. The natural forest areas of Sarthana zoo provide home to a rich assemblage of free-living wild animals including 21 species of mammals, 06 species of reptiles, 23 species of birds, 29 species of butterflies. This is one of the most important plant conservation facilities in the Gujarat State. More than 250 species of plants have been documented in the Sarthana zoo premises.

We have completed another outstanding year of biodiversity conservation, zoo management, education. Sarthana zoo has been an excellent place for eco-tourism which attracted more than 1.02 million visitors during the year 2017-18. There was significant improvement in the infrastructure development, animal collection, health care, fodder production and conservation efforts. Many zoo education and awareness program including Celebration of wildlife week, World wildlife day, World Environment Day, International tiger day were organized during the year 2017-18. Many species of indigenous and exotic animals including Indian tiger, Sloth bear, Four Horned Antelope, Black buck, Rhesus Macaque, Mouse deer, Smooth Coated Otter, Barking deer, Sambar, Blue bull, Spotted deer, Emu, Night Heron, Alexandrine parakeet, White Ibis, etc. have bred successfully in the garden during the year.

During the year 2017-18 many enclosures were renovated notable Tiger, Lion, Hyena, Jackal, Four Horned antelope, Emu, Ostrich and Marsh Crocodile enclosures and supplemented with standoff barrier, directional and educational signages and landscaping.

This financial year we have welcomed 08 new animals of 03 species to the zoo in animal exchange programme with objective of adding new species to our collection plan for conservation and display. To make zoo self sustainable, animal adaption scheme has been launched so as to enable individual/institutions/corporate sector to contribute towards conservation of rare and endangered species as a part of Corporate Social Responsibility to save, protect and conserve nature.

There has been a substantial improvement in the field of health care reflected in the reduced annual death rate of 5.44 % during the year. This was possible due to sincere efforts by our staff in order to maintain highest standards of health care and animal husbandry practices and close association with college of Veterinary Sciences, Anand and Navsari and also with the valuable advice and guidance of the faculty members of above colleges on important health care issues.

Surat Zoo has always been an outstanding centre for education on various aspects of ex-situ conservation, health care and management of captive wild animals.

Information on various aspects of management and development of Dr Shyamprasad Mukerjee Zoological Garden, Surat during the year 2017-18 has been provided in the present Annual Report. I would like to thank all my staff for their hard work and dedication that made it a successful year in the maintenance and development of Sarthana zoo, Surat. I believe that Surat zoo will continue to grow as a world class zoo and to contribute significantly in the field of wildlife conservation, education and research in coming years.

(DR PRAFULL MEHTA)

Superintendent of Zoo & Aquarium  
Dr. Shyamprasad Mukerjee Zoological Garden  
Sarthana, Surat, Gujarat State

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

Dr. Shyamprasad Mukerjee Zoological Garden, Sarthana, Surat is one of the premier medium zoos located amidst a beautiful natural setting recognized by Central Zoo Authority, Government of India. Unlike conventional zoos, it spreads over in 81 acres of land with natural vegetation, water bodies and enchanting landscape that provides the zoo inhabitants an appropriate ambience to live in harmony with the nature. It was dedicated to the public on March, 2003. More than 1.1 million visitors visited the Zoological Park during 2017-18. Most of the animals of Sarthana zoo housed in open, large moated areas surrounded by natural vegetation. This gives them a feeling of living close to their natural habitat.

## **3. Vision**

To complement and strengthen the national efforts in conservation of the biodiversity of the country, particularly the fauna through the ex-situ conservation linked with in-situ practices thorough

- Fostering sound physical, psychological and social development for the animals in our care.
- Creating an educational environment for all sectors, groups and individuals that develops a unifying bond between our visitors and the animals which inspires appreciation and concern about wildlife and wild places.
- Contributing to worldwide animal management, conservation and research efforts. Improving the quality of our professional development, administration and operating environment.

Striving for the financial self-sufficiency of the organization.

## **4. Mission**

To connect visitors and animals through exemplary animal welfare and care, best educational and inspirational experiences, fostering public appreciation and support for wild animals and conservation"

To provide better upkeep and veterinary care to the wild animal housed in zoos in India to ensure their conservation through best practices of management and bringing education & awareness among the people.

## **5. Objective**

- To convey the value of conservation through education.
- Captive breeding of endangered species.
- To inspire local and global communities to protect, conserve, and celebrate wildlife.
- To provide a fun, unique, and inspirational experience fostering appreciation, knowledge and care for the natural world.
- To ensure thriving as a premier zoological institution, reaching its fullest potential to serve people, animals and the environment.

## **6. About us**

S.No.	Particulars	Information
<b>Basic information about the Zoo</b>		
1.	Name of the Zoo	Dr.Shyamaprasad Mukherjee Zoological Garden
2.	Year Of Establishment	2003
3.	Address Of the Zoo	Opposite Old Sarthana Octroi Naka, Sarthana, Surat- Kamrej Road, Surat-395006
4.	State	Gujarat
5.	Telephone Number	0261-2575611 0261-2578036
6.	Fax Number	0261-2451935, 2422110
7.	E-mail addresss	commissioner@suratmunicipal.org commissioner@suratmunicipal.gov.in
8.	Website	www.suratmunicipal.gov.in www.suratmunicipal.org
9.	Distance from nearest	Airport : Surat - 23 Kms Railway Station : Surat - 7 Kms Bus Stand : Surat - 7 Kms BRTS : 100 Mtr.
10.	Recognition Valid upto (Date)	27 <sup>th</sup> September 2020
11.	Category of Zoo	Medium
12.	Area (in Hectares)	32.78 Hectares
13.	Number of Visitors (Financial Year)	Adult : Zoo : 8,03,600 Butterfly park : 41,447  Children : Zoo : 1,63,347 Butterfly park : 4,525  Total Indian : 10,12,919 Total Foreigners : 00 Total Visitors : 10,12,919
14.	Visitor's Facilities Available in Zoo	Parking, Toilets, Water huts, Wheel Chair, Battery Operated Passenger Trolleys(BOPT) for zoo round.

15.	weekly Closure Day of the Zoo	Monday
<b>Management Personnel of the Zoo</b>		
16.	Name with designation of the Officer incharge	Dr. Prafull Chandra Mehta Zoo Superintendent
	Name of the Veterinary Officer	Dr. Rajesh A. Patel Assistant Vet. Officer
	Name of the Curator	-- (Vacant)
	Name of the Biologist	Prashant J Joshi
	Name of the Education officer	Instead of the Education Officer there is a two post of Zoo Guide in the zoo 1. Shri Hina C. Patel
<b>Owner / Operator of the Zoo</b>		
17.	Name of the Operator	Municipal Commissioner
18.	Address of the Operator	Gordhandas Chokhawala Marg, Mugalisara, Surat-395003
19.	Contact details / Phone number of Operator	0261- 2422244 (D), 0261-2423750 to 2423756 & 0261-2422285 to 2422287
20.	E-mail address of Operator	commissioner@suratmunicipal.org commissioner@suratmunicipal.gov.in

### **SALIENT FEATURES OF SARTHANA ZOO, SURAT**

Area	Dr.Shyamaprasad Mukhrjee Zoological Garden	32.78 hacter (81 acre)	
Captive animals as on 31.03.2017	Mammals Birds Reptiles Total	21 23 6 49	120 227 39 386
No. of animal House	nos. 386	(covered - 237, Open moated -149)	
Zoo holiday	Every Monday, and on the eve of Dhuleti, Muharram and Anant chaudash		
Zoo timing	for visitors	10.00 am. to 5.00 pm.	
Animal feeding time	Carnivores Reptile Birds Herbivores	11.00am. to 1.00 pm. (Except Monday) 11.00am. to 1.00 pm. 11.00am. to 1.00 pm. 11.00am. to 1.00 pm. 4.00 pm. to 5.00 pm.	

### **VISITORS' AMENITIES**

- Drinking water kiosks
- Toilets at convenient locations
- Special toilets ,wheel chairs and ramps for differently abled persons
- Rest areas, sit-outs / visitors sheds at various location
- Restaurant and snacks bar
- Cloak room near the entrance gate
- First aid (at zoo hospital and main gate entrance)
- Emission free battery operated vehicle
- Guide maps

### **SPECIAL ATTRACTION OF SARTHANA ZOOS**

Boating and water sports in river tapi.

Butterfly garden and insect kingdom

Wildlife interpretation centre with Light and Sound show.

Batter operated passenger trolley for zoo round for all age visitors.

Digitalized payment facility for entry ticket

### **OTHER SERVICES OF THE ZOO**

1. Interactive education and awareness program.
2. Conduct tour for school children.
3. Availability of zoo guided tour.

## GENERAL INFORMATION FOR VISITORS

**Entry Hours : 10.00 A.M. (Morning) to 5.00 P.M. (Evening)**  
**Zoo remain closed on every Monday**

### Entry Charges (Per Head)

### Entry Fee

1.	An Individual above 12 years of age	₹ 15.00
2.	Children age 5 to 12 years and senior citizens age 65 years and above.	₹ 5.00
3.	Children below 5 years	Free
4.	Visiting students of Education institutes (Primary to Secondary Schools).	₹ 2.00
5.	School & Institutes related with WWF or nature group activities and for the college students doing research on wild life and jungles.	₹ 5.00
6.	For the persons from Women protection centre, Orphanages, Institutions for disabled & mentally retarded and juvenile homes.	Free
7.	Foreigners.	₹ 100.00
8.	Foreigner's children (age 3 to 12 Years)	₹ 50.00

### Photography charges :

1.	Still Camera (Per day)	₹ 10.00
2.	Personal domestic video camera(Per day)	₹ 100.00
3.	Professional camera/video (Per day) [Prior approval of competent authority is required, for shooting the wildlife and natural view in the premises of the Nature Park.]	₹ 2000.00

## **BUTTERFLY GARDEN, INSECT KINGDOM AND WILDLIFE INTERPRETATION CENTER**

### General Information :

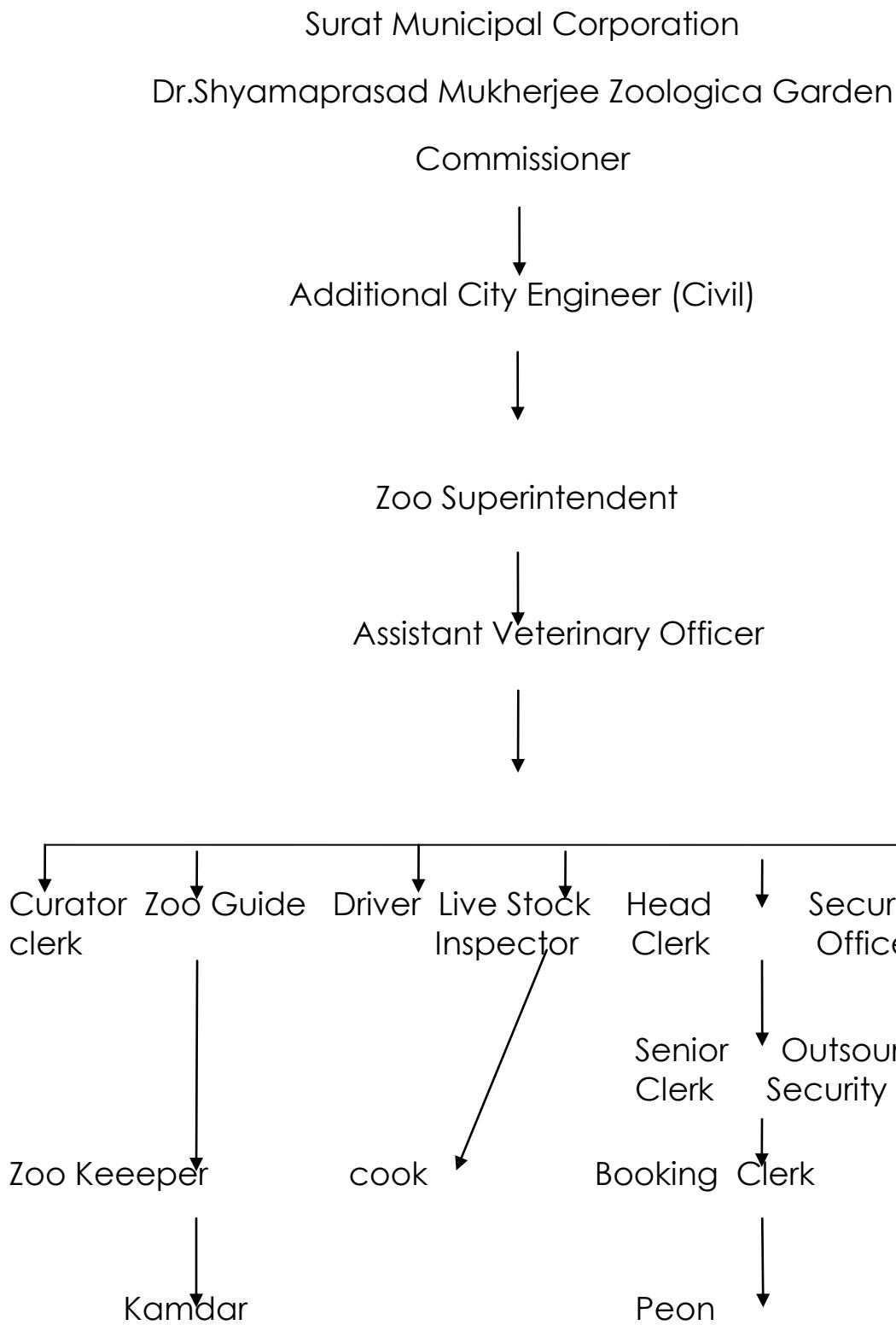
Visiting Hour's : 10.00 A.M to 5.00 P.M.

Butterfly Garden remains closed on every Monday.

### Entry Charges (per Head)

1.	Adult	₹ 10.00
2.	Children (age 5 to 12 years)	₹ 5.00
3.	Children Below 5 years.	Free
4.	Person from Women protection centre, Orphanages, Institution for disabled & mentally retarded and juvenile homes. Best time to watch Butterfly from 10.00 A.M to 3.00 P.M	Free

## 7. Organization Chart



## 8. Human Resources

Sr. No.	Designation	Number Of Sanctioned Posts	Names of the incumbent
1	Zoo Superintendent	01	Dr. P. C. Mehta
2	Assistant Veterinary Officer	01	Dr. Rajesh A. Patel
3	First Grade Clerk	01	Naresh B. Modi
4	Security Officer	01	Vacant
5	Curator ( Educator & Research)/Biologist	01	Prashant J Joshi
6	Zoo Guide	02	Smt. Hina C. Patel 01 Vacant
7	Second Grade Clerk	01	C. R. Chaudhary
8	Laboratory Technician	01	Vacant
9	Live Stock Inspector	01+01( on loan)	Pritesh Navinlal Patel Ravindra R.Darbar
10	Head Zoo Keeper	01	vacant
11	Third Grade Clerk	03	Ranjit K. Patel
12	Horticulture Assistant	01	Tejas S. Patel
13	Driver	01	Shailesh Surti
14	Mukadam	01	Jayprakash P.Patel
15	Zoo Keeper	15	08 Filled up and 07 post are vacant, which will be filled up as per the requirement of department.
16	Peon	03	Rasul Ibrahim Mirza Chirag D. Patel Subhash V. Chauhan
17	Beldar	21	all are filled
18	Zoo Sevak	01	Vacant
19	Cook	01	Balvant M. Parmar
20	Cleaner	01	Sunil I. Solanki
21	Safai kamdar	02	Hiren D.Solanki Rahul K Makwana

## 9. Capacity Building of Zoo personnel

Sr. No.	Name and designation of the zoo personnel	Subject matter of Training	Period of Training	Name of the Institution where the Training attended
1	Dr. Rajesh A. Patel Assistant Veterinary Officer	Training workshop on capacity building of Indian zoo veterinarian on health management	11/09/2017 to 14/09/2017	National Zoological Park, New Delhi

		in captivity		
<b>2</b>	1. Akash V. Parmar Trainee Zoo Keeper 2. Girish J. Chaudhary Trainee Zoo Keeper	Specialised theme base training programme for Zoo Keeper	19/02/2018 to 25/02/2018	Sakkarbaug zoo, Junagadh
<b>3</b>	Smt. Hina Chirag Patel Zoo Guide Cum Educator	ZIMS Data entry training	11/05/2017 to 12/05/2017	Surat Zoo
<b>4</b>	Smt. Hina Chirag Patel Zoo Guide Cum Educator	ZIMS Data entry training		Sakkarbaug zoo, Junagadh

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

- a. Date of Constitution : Not in existence
- b. Member : Not applicable
- c. Date on which Meeting held during the year : NA

#### **11. Health advisory Committee**

- a. Date of Constitution : 22 / 03 / 2004
- b. Member : 3
- c. Date on which Meeting held during the year : Visit/Meeting not held since last 5 years

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

##### **Income of Zoo during the 2017-2018**

Sr.No.	Perticulars	Income ( Rs.)
<b>1</b>	Zoo entry fees	1,27,99,095
<b>2</b>	Butterfly park entry fees	4,49,195
<b>3</b>	Canteen / cafeteria rent	32,65,920
<b>4</b>	Mango tree auction income	2,15,500
<b>5</b>	Income from parking contract	18,12,000
<b>6</b>	Tender fees income	5,000
<b>7</b>	Water sports income	1,46,312
<b>Total Income</b>		<b>1,86,93,022</b>

**Expenditure of Zoo during the 2017-2018**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Amount</b>
<b>1</b>	Zoo staff Salary	1,51,00,858
<b>2</b>	Feed cost of animals	50,88,573
<b>3</b>	Medicine cost	1,17,7447
<b>4</b>	Security	46,34,500
<b>5</b>	Electricity	12,07,460
<b>6</b>	Miscellaneous	10,55,753
<b>7</b>	Garden and butterfly park maintenance	16,11,447
<b>Total Expenditure</b>		<b>2,88,16,336</b>

### 13. Daily diet schedule chart of animals

Sr. No.	Species	feed item	Quantity		Day of Fasting
			Winter	Summer	
1	Antelope Four horned	Green fodder + Concentrate	1.5Kg + 50gm	1.5Kg + 50gm	Nil
2	Antelope Black buck	Green fodder + Concentrate	2.0 Kg + 100 gm	2.0 Kg + 100 gm	Nil
3	Antelope Black buck (White)	Green fodder + Concentrate	2.0 Kg + 100 gm	2.0 Kg + 100 gm	Nil
4	Barking deer	Green fodder + Concentrate	2.5 Kg + 100 gm	2.5 Kg + 100 gm	Nil
5	Sloth Bear	Milk + Rice +Boiled Egg + Seasonal Green vegetable & fruits + Roti + Honey	1.5lit+400gm+1 +3.0 kg+1+ 50gm	1.5lit+300gm +1+2.0 kg+1+ 50gm	Monday for milk and Rice
6	Himalayan Black Bear	Milk + Rice +Boiled Egg + Seasonal Green vegetable & fruits + Roti + Honey	1.5lit+500gm+2 +4.0 kg+1+ 75gm	1.5lit+400gm +2+3.0 kg+1+ 75gm	Monday for milk and Rice
7	Jackal	Beef	1.0 kg	750 gm	Monday
8	Monkey Bonnet	Sprouted legume grains+Seasonal Green vegetable & fruits	500 gm	500 gm	Nil
9	Monkey Rhesus	Sprouted legume grains+ Seasonal Green vegetable & fruits	500 gm	500 gm	Nil
10	Panther	Beef	3.5 kg	3.0 kg	Monday
11	Porcupine	Sprouted legume grains +seasonal green vegetable and fruits	1.0 kg.	1.0 kg	Nil
12	Tiger	Beef	10 kg	8 kg	Monday
13	Otter	Fish	1.5 kg	1.4 kg	Nil
14	Mouse Deer	Green fodder+Green leafy vegetables +Seasonal fruits	250 gm	200 gm	Nil
15	Crocodile Marsh	Beef	1 kg / week	1.5 kg / week	--
16	Crocodile Siamese	Beef	1 kg / week	1.5 kg / week	--
17	Crocodile Caiman	Beef	0.750 kg /week	1 kg / week	--
18	Tortoise	Mix Green	100gm	100 gm	Nil

		Vegetable+Sproutd Leguminous grains Roots+Underground stem.			
<b>19</b>	Gharial	fish	2.5 kg / week	2.5 kg / week	--
<b>20</b>	Indian Rock python	Rabbit / Gunea pig	3.0 kg monthly	3.0 kg fort nightly	--
<b>21</b>	Crane Saras	Boiled Rice + fish + Cereals grains	100 gm + 500gm	100 gm + 500gm	Nil
<b>22</b>	White Peafowl	Grains +Gramms+ Green Leafy Vegetable+Cabbage	200 gm	200 gm	Nil
<b>23</b>	Indian Peafowl	Grains +Gramms+green palak +cabbage	200 gm	200 gm	Nil
<b>24</b>	Night heron	Small Fish	150 gm	150 gm	Nil
<b>25</b>	Spoon bill	Small Fish	150 gm	150 gm	Nil
<b>26</b>	White ibis	Small Fish	150 gm	150 gm	Nil
<b>27</b>	Black kite	Beef (Minced)	50 gm	50gm	Nil
<b>28</b>	Alexandrine parakeet	Seasonal fruits + milk + bread	50 gm + 25 gm	50 gm + 25 gm	
<b>29</b>	Cockatiel	maize + grains	5-10 gm	5-10 gm	
<b>30</b>	Cockatoo (Umbrella)	seasonal fruits + milk + bread + sunflower seed	100 gm + 50 gm	100 gm + 50 gm	
<b>31</b>	Cockatoo (Sulphur)	seasonal fruits + milk + bread + sunflower seed	100 gm + 50 gm	100 gm + 50 gm	
<b>32</b>	Emu	poultry layer mash	600 gm	600 gm	
<b>33</b>	Flamingo	small fish	500 gm	500 gm	
<b>34</b>	Lorrikeet Rainbow	seasonal fruits + milk + bread	50 gm + 25 gm	50 gm + 25 gm	
<b>35</b>	Lorrikeet Red	seasonal fruits + milk + bread	50 gm + 25 gm	50 gm + 25 gm	
<b>36</b>	Lorrikeet Chetering	seasonal fruits + milk + bread	50 gm + 25 gm	50 gm + 25 gm	
<b>37</b>	Parrakeet African Grey	seasonal fruits + milk + bread + sunflower seed	100 gm + 50 gm	100 gm + 50 gm	
<b>38</b>	Pelican Rosey	Fish	1.5 kg	1.5 kg	
<b>39</b>	Pheasant Lady amhrest	grains + layer mash + milk + bread	25 gm + 25gm + 25 gm	25 gm + 25gm + 25 gm	
<b>40</b>	Torecco Hertube	seasonal fruits + milk + bread	50 gm + 25 gm	50 gm + 25 gm	
<b>41</b>	Golden Pheasant	grains + layer mash + milk + bread	25 gm +5gm + 25 gm	25 gm + 25gm + 25 gm	
<b>42</b>	Swann Black	Layer mash+ green	200gm + 100	200gm + 100	

		fodder	gm	gm	
<b>43</b>	Ostrich	layermash+green fodder +lucern	2.0-2.5 kg	2.0 -2.5kg	
<b>44</b>	Deer Hog	Green Grass + Concentrate	2.5 Kg + 100 gm	2.5 Kg + 100 gm	Nil
<b>45</b>	Deer Samber	Green Grass + Concentrate	10 Kg + 300 gm	10 Kg + 300 gm	Nil
<b>46</b>	Deer Spotted	Green Grass + Concentrate	2.5 Kg + 100 gm	2.5 Kg + 100 gm	Nil
<b>47</b>	Hynae	Beef	2.0 kg	2.0 kg	Monday
<b>48</b>	Hippopotemus	Green fodder+Concentrate + potato + banana	45kg+2.0kg+3.0 kg+2.0kg	45kg+2.0kg+3.0kg+2.0kg	
<b>49</b>	Nilgai	Green Grass + Concentrate	8 Kg + 200 gm	8 Kg + 200 gm	Nil

#### 14. Vaccination Schedule of animals

Sr. No.	Species	Disease vaccinated for	Name of the Vaccine and dosage / Quantity used	periodicity	Remarks
<b>1</b>	Tiger Leopard (felines)	Canine leptospira,Parvo,Para influenza,	Canigen-DHHPPi-Lepto 1 dose	Yearly	
		Rabies	Nobivac-R 1 dose	Yearly	
		Panleukopenia virus,Calci virus, Herpes virus, Rabies	Biofel-PCHR 1 dose	Yearly	
<b>2</b>	Bears (Sloth bear & Himalayan Black bear)	Canine leptospira,Parvo,Para influenza,	Canigen-DHHPPi-Lepto 1 dose	Yearly	
		Rabies	Nobivac-R 1 dose	Yearly	
<b>3</b>	Hyena,Jackle (Canine)	Canine leptospira,Parvo,Para influenza,	Canigen-DHHPPi-Lepto 1 dose	Yearly	
		Rabies	Nobivac-R 1 dose	Yearly	

### 15. Deworming Schedule of animals

Sr. No.	Species	Drugs used	Months
1	Felines (tiger,Leopard)	Fenbendazole Albandazole Fenbendazole Albendazole	April-2017 July-2017 November-2017 March-2018
2	Canines (Hyena,Jackal,Otter,)	Fenbendazole Albandazole Fenbendazole Albendazole	April-2017 July-2017 November-2017 March-2018
3	Omnivorous (Bears)	Fenbendazole Albandazole Fenbendazole Albendazole	April-2017 July-2017 November-2017 March-2018
4	Herbivorous(All deers)	Fenbendazole Albandazole closentel Albendazole	April-2017 July-2017 November-2017 March-2018
5	Hippopotemus,	Fenbendazole Albandazole Fenbendazole Albendazole	April-2017 July-2017 November-2017 March-2018
6	Birds (All Parakeet,lorrikeet,water birds,Peafowl,Phesants, pelican, etc.)	Fenbendazole Albandazole Fenbendazole Albendazole	April-2017 July-2017 November-2017 March-2018
7	Reptiles (python)	Fenbendazole Albandazole Fenbendazole	May-2017 August-2017 February-2018
8	Monkey	Fenbendazole Ivermectin Fenbendazole Ivermectin	April-2017 July-2017 November-2017 March-2018

### 16. Disinfection Schedule

Sr. No.	Species	Type of enclosure	Disinfectant used and method	Frequency of disinfection
1	Felines (tiger,Leopard)	Open moated	Kohrsoline-Th	every fortnightly in night shelter
2	Canines (Hyena,Jackal,Otter,)	Open moated	Kohrsoline-Th	every fortnightly in night shelter

<b>3</b>	Omnivorous (Bears)	Open moated	Kohrsoline-Th	every fortnightly in night shelter
<b>4</b>	Herbivorous(All deers)	Open moated	quick lime dust and sometime NaOH solution spray	one in three months or as an when needed
<b>5</b>	Hippopotemus,	Open moated	Calcium Hypochloride powder	every 15-21 days
<b>6</b>	Birds (All Parakeet,lorrikeet,water birds,Peafowl,Pheasants, pelican, etc.)	Cage type	Kohrsoline-Th	every fortnightly
<b>7</b>	Reptiles (python)	Cage type	Kohrsoline-Th	every fortnightly
<b>8</b>	Monkey	Open moated	Kohrsoline-Th	every fortnightly

#### **17. Health Check-up of Employees for Zoonotic disease.**

<b>Sr. No.</b>	<b>Name</b>	<b>Designation</b>	<b>Date of Health Check up</b>	<b>Finding of Health Check up</b>
<b>1</b>	Rajeshkumar A. Patel	Assist.Vet.Officer	8/08/2017	Negative for T.B. vaccinated for Rabies
<b>2</b>	Hinaben Chirag Patel	Zoo Guide	8/08/2017	"
<b>3</b>	Priteshkumar Navinlal Patel	Livestock Inspector	8/08/2017	"
<b>4</b>	Tejas s.Patel	Horticulture Assistant	8/08/2017	"
<b>5</b>	Dhanjibhai Bhimabhai Parghi	Zoo Keeper	8/08/2017	"
<b>6</b>	Dahyabhai Malabhai Vijuda	Zoo Keeper	8/08/2017	"
<b>7</b>	Rameshbhai SomabhaiChaudhari	Zoo Keeper	8/08/2017	"
<b>8</b>	Sureshbhai Sravanbhai Vasava	Zoo Keeper	8/08/2017	"
<b>9</b>	Sureshchandra Chhotulal Patel	Zoo Keeper	8/08/2017	"
<b>10</b>	Sumabhai Mavjibhai Bariya	Beldar	8/08/2017	"
<b>11</b>	Balvantbhai Manibhai Parmar	Cook	24/08/2017	"
<b>12</b>	Shankarbhai Chandulal Randeri	Beldar	24/08/2017	"
<b>13</b>	Nareshbhai A.Makavana	Beldar	24/08/2017	"
<b>14</b>	Kasubhai Maknabhai Damor	Beldar	24/08/2017	"
<b>15</b>	Vijya Kanji Jethva	Beldar	24/08/2017	"

<b>16</b>	Mahendra Ratilal Valhe	Zoo Keeper	24/08/2017	"
<b>17</b>	Mohanbhai K Charaniya	Beldar	24/08/2017	"
<b>18</b>	Atulbhai Dineshbahi Gamit	Beldar	24/08/2017	"
<b>19</b>	Mayur Prakashbahi Patel	Beldar	24/08/2017	"
<b>20</b>	Rakeshbahi Hasmukhbhai Gamit	Beldar	24/08/2017	"
<b>21</b>	Ganeshbhai Dilipbhai Deshmukh	Beldar	24/08/2017	"
<b>22</b>	Mukeshbahi Naranbhai Parmar	Beldar	24/08/2017	"
<b>23</b>	SunilKumar Kashinathbahi Mali	Beldar	24/08/2017	"
<b>24</b>	Jitesh Lalji Parmar	Beldar	24/08/2017	"
<b>25</b>	Bhikhabahi Jerambhai Vaghela	Beldar	24/08/2017	"
<b>26</b>	Kanubahi N. Panada	Beldar	29/08/2017	"
<b>27</b>	Dilipkumar Kukabahi Damor	Beldar	29/08/2017	"
<b>28</b>	Vipulkumar Dhansukhbahi Patel	Beldar	29/08/2017	"
<b>29</b>	Rajeshkumar Ratilal Damkia	Beldar	29/08/2017	"
<b>30</b>	Rupsing D.Bariya	Beldar	29/08/2017	"
<b>31</b>	Manohar K.Desale	Zoo Keeper Trainee	29/08/2017	"
<b>32</b>	Pavan R.Patil	Zoo Keeper Trainee	29/08/2017	"
<b>33</b>	Chetan S.Patil	Zoo Keeper Trainee	29/08/2017	"
<b>34</b>	Mrutunjay R.Mahire	Zoo Keeper Trainee	29/08/2017	"
<b>35</b>	Girish J.Chaudhary	Zoo Keeper Trainee	29/08/2017	"
<b>36</b>	Jayesh M.Mahajan,	Zoo Keeper Trainee	29/08/2017	"
<b>37</b>	Akash V.Parmar	Zoo Keeper Trainee	29/08/2017	"

#### **18. Development works carried out in the Zoo during the year**

- Visitors walkway and zoo roads with cement coating.
- Refurbishing of Gharial and Crocodile enclosures.
- Replacement of chain-link of open yard portion of Lion, Tiger, Hyena, Jackal, Blackbucks, Emu, and Four horned Antelope enclosures.
- Shelter in open yard of Ostrich and Four Horned Antelope.

## **19. Education and Awareness programme during the year**

It has been mentioned in report of the director.

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

- Celebration of World Environment day.
- Tiger day
- Wildlife Week celebration during the 2nd October to 10th october.
- World Environment day Tree plantation programme in Zoo Premises in the presence of Miss Sweden on 24th September, 2017.
- World Tiger day.

## **21. Seasonal special arrangement for upkeep of animals**

- SUMMER MANAGEMENT Usually the animals are under severe stress during summer. In order to improve the comfort level, heat relief measures were undertaken during last year: • All deer enclosures were provided with new thatched sheds. • Sprinkling/fogger of water/cooler were arranged in enclosures housing tiger, leopard, Himalayan bear, ostrich & aviary section • Special dietary arrangements were made for primates, bears, elephants and birds to keep them at ease. • Shade nets cutting off sunlight are provided at aviaries, ostrich and white tiger enclosures. a
- During winter, electric heater has been installed in tiger, leopard, Hyena, Himalayan bear and lamps are provided in each cages of the bird aviary.
- During monsoon, night shelter entry kept open throughout the day, so animal may go to the sheded area to protect itself from heavy rain.

**22. Research Work carried out and publications:** During this year Surat zoo has neither undertaken any research work nor any publications have been carried out.

## **23. Conservation Breeding programme of the Zoo**

- Zoo has successfully bred Sloth bear, Mouse deer, Four Horned antelope, smooth coated Indian otter and other animals in the captivity.

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

A.	Animals arriving in the Zoo				
	H. No.	species	Number (M:F)	From which Zoo	Date of arrival in the Zoo
		Black swan	1 : 1	Mysuru Zoo	08/07/2017
		Hyena	1 : 1	Mysuru Zoo	08/07/2017
		Ostrich	2 : 2	Tamilnadu Agri.University	12/11/2017

B.	Animals going from the Zoo				
	H. No.	species	Number (M:F)	From which Zoo	Date of diposition from the Zoo
		Smooth Indian Otter	1 : 1	Musuru Zoo	30/06/2017

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

Sr. No.	Date of Rescue	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

26. Annual Inventory of animals

Form-II  
[See Rule 11(1)]  
Part-A

Inventory Report for the Year:2017-2018

Endangered Species

Sr. No.	Animal Name	Scientific Name	Opening Stock as on 01-04-2017				During the year												Closing Stock as on 31-03-2018				
							Birth			Aquisition			Disposal			Death							
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	T	M	F	U	T
1	Antelop four horned	Tetracerus quadricornis	3	3	0	6	1	1	0	0	0	0	0	0	0	0	0	0	0	4	4	0	8
2	Antelope Black buck	Antelop cervicapra	2	4	4	10	2	0	2	0	0	0	0	0	0	0	0	0	0	4	4	6	14
3	Antelope Black buck(White)	Antelop cervicapra	2	1	0	3	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1
4	Barking deer	Antelop cervicapra	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	2
5	Bear sloth	Melursus urisinus	2	2	0	4	0	3	0	0	0	0	0	0	0	0	0	0	0	2	5	0	7
6	Bear (Himalayan Black)	Ursus thibetanus	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
7	Jackal	Canis aureus	3	5	12	20	0	0	0	0	0	0	0	0	0	0	1	1	0	2	4	12	18
8	Monkey (Bonnet)	Muntiacus muntjac	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
9	Monkey (Rhesus)	Macaca mulatta	4	5	0	9	0	0	2	0	0	0	0	0	0	0	0	0	0	4	5	2	11
10	Panther	Panthera pardus	4	2	0	6	0	0	0	0	0	0	0	0	0	0	1	0	0	3	2	0	5
11	Porcupine	Hystrix indica	1	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3
12	Tiger	Panthera tigris	2	1	0	3	1	0	0	0	0	0	0	0	0	0	1	0	0	2	1	0	3
13	Otter	Lutrogale perspicillata	2	2	7	11	0	0	1	0	0	0	1	1	0	0	0	0	0	1	1	8	10
14	Mouse deer	Muntiacus muntjac	2	1	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	1	5

<b>TOTAL:-</b>	<b>31</b>	<b>30</b>	<b>25</b>	<b>86</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>29</b>	<b>31</b>	<b>30</b>	<b>90</b>
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Sr. No.	Animal Name	Scientific Name	Opening Stock as on 01-04-2017				During the year									Closing Stock as on 31-03-2018						
							Birth			Aquisition			Disposal			Death						
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	T			
<b>Reptiles :-</b>																						
1	Crocodile Marsh	Crocodylus palustris	1	1	10	12	0	0	0	0	0	0	0	0	0	0	0	1	1	10	12	
2	Crocodile Siemese	Crocodylus siamensis	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
3	Crocodile Caiman	Caiman crocodilus	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
4	Tortoise-lissemys	Geochelone eleganus	0	8	15	23	0	0	0	0	0	0	0	0	0	0	2	2	0	6	13	19
5	Gharial	Gavialis gangeticus	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	
6	Indian rock phython	Python molurus	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
<b>TOTAL :-</b>			<b>1</b>	<b>11</b>	<b>31</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>2</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>29</b>	<b>39</b>
<b>Birds :-</b>																						
1	Crane (Saras)	Grus antegone	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
2	White peafowl	Pavo crestatus	2	6	0	8	0	0	0	0	0	0	0	0	0	1	0	0	1	6	0	7
3	Indian peafowl	Pavo crestatus	2	4	1	7	0	0	0	0	0	0	0	0	0	0	0	0	2	4	1	7
4	Night Heron	Nycticorax nycticorax	2	2	4	8	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	8
5	Spoon Bill	Platalea leucordia	2	2	5	9	0	0	0	0	0	0	0	0	0	0	0	0	2	2	5	9
6	White Ibis	Threskiornis acthiopica	1	2	4	7	0	0	0	0	0	0	0	0	0	0	0	0	1	2	4	7
7	Black kite	Milvis migrans	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	5
<b>Total Birds</b>			<b>9</b>	<b>16</b>	<b>21</b>	<b>46</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>0</b>	<b>0</b>	<b>8</b>	<b>16</b>	<b>21</b>	<b>45</b>	
<b>Total Animals.</b>			<b>41</b>	<b>57</b>	<b>77</b>	<b>175</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>5</b>	<b>2</b>	<b>38</b>	<b>56</b>	<b>80</b>	<b>174</b>

No.	Animal Name	Scientific Name	Opening Stock as on 01-04-2017				During the year									Closing Stock as on 31-03-2018						
							Birth			Aquistion			Disposal			Death						
			M	F	U	T	M	F	U	M	F	U	M	F	U	M	F	U	T			
1	Alexandrine perakeet	psittacula eupatria	7	4	6	17	0	0	0	0	0	0	0	0	0	0	0	7	4	6	17	
2	Cockatiel	Nymphicus hollandicus	0	0	126	126	0	0	0	0	0	0	0	0	0	0	0	0	0	126	126	
3	Cockatoo (Umbrella crested)	Cacatua alba	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	
4	Cockatoo (Greater sulphur )	Cacatua galrita	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
5	Emu	Dromaius novaehollandiae	2	1	11	14	0	0	0	0	0	0	0	0	0	0	1	0	2	0	11	13
6	Flamingo	Phoenicopterus roseus	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	
7	Lorikeyt Rainbow	Trichoglossus haematodus	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	
8	Lorikeyt Red	Eos bornea	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
9	Lorikeyt Chetaring	Lorius garrulus	0	0	3	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	
10	Parakeet African Grey	Pistocous erithacas	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
11	Pelican (Rosey)	Pelecanus onocrotalus	3	3	0	6	0	0	0	0	0	0	0	0	0	0	0	3	3	0	6	
12	Phesant Lady ampherest	Chrysolophus amherstiae	3	0	0	3	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	2
13	Torecco Hertobe	Tauraco hartlaubi	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
14	Golden pheasant	Chrysolophus pictus	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
15	Swan Black	Cygnus atratus	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	1	
16	Ostrich	Struthio camelus	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	2	0	4	
Total Birds.....				19	10	153	182	0	0	0	3	3	0	0	0	2	1	3	18	9	150	177

Other than Endangered Species

No.	Animal Name	Scientific Name	Opening Stock as on 01-04-2017				During the year												Closing Stock as on 31-03-2018												
							Birth			Aquistion			Disposal			Death															
M			F			U			M			F			U			M			F			U			M				
MAMMALS :-																															
1	Deer Hog	Axis porcinus	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0			
2	Deer Samber	Cervus unicolor	4	4	1	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	1	9					
3	Deer Spotted	Axis axis	5	4	0	9	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	5	4	0	9						
4	Hynae	Hyaena hyaena	1	1	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4					
5	Hippopotemus	Hippopotamus amphibius	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3						
6	Nilgai	Boselaphus tragocamelus	1	3	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	0	5						
Total Mammals :-			13	14	1	28	1	1	0	1	1	0	0	0	0	0	0	2	0	0	13	16	1	30							
Total Animals :-			32	24	154	210	1	1	0	4	4	0	0	0	0	0	0	4	1	3	31	25	151	207							

**27. Mortality of animals**

Sr. No.	Animal Name (with individual identification mark, if any)	Scientific Name	Sex	Date of Death	Reason of Death as per the Post mortem report
1	Spotted Deer	Axis axis	M	18/03/2018	Old age
2	Emu	Dromaius novaehollandicus	F	13/02/2018	Traumatic shock
3	Tortoise Indian Star	Geochelone eleganus	M	22/12/2017	Chronic Debilitating disease
4	Flamingo(Greater)	Phoenicopterus roseus	M	11/12/2017	Old age
5	Black buck (Albino)	Antelope cervicapra	M	30/11/2017	Old age
6	Swan Black	Cygnus atratus	M	27/11/2017	Senility
7	Macaque Bonnet	Muntiacus muntjac	M	25/11/2017	Old age
8	Peafowl White	Pavo cristatus	M	30/09/2017	Chronic Disease
9	Lorry	Eos bornea	U	19/09/2017	Senility
10	Deer Hog	Axis porcinus	M	12/09/2017	Chronic Respiratory Disease
11	Jackal	Canis aureus	F	30/08/2017	Infighting Injuries
12	Tortoise Indian Star	Geochelone eleganus	F	28/08/2017	Senility
13	Jackal	Canis aureus	M	25/08/2017	Infighting Injuries
14	Tortoise Indian Star	Geochelone eleganus	U	24/08/2017	Pneumonia
15	Tiger Bangal	Panthera tigris	M	07/08/2017	Silll birth due to some unknown reason during delivery
16	Deer Barking(Kakar)	Antelope cervicapra	F	25/06/2017	Chronic Pneumonia
17	Leopard (Panther)	Panthera pardus	M	11/06/2017	Bacterial / Viral Infection
18	Pheasant Lady Amherst	Chrysolophus amherstiae	M	04/05/2017	Senility
19	Black buck (Albino)	Antelope cervicapra	F	02/05/2017	Acute Infection
20	Tortoise Indian Star	Geochelone eleganus	U	01/05/2017	Acute Pneumonia
21	Lorry	Eos bornea	U	11/04/2017	Traumatic shock

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

Sr. No.	Norm No. under RZR 2009	Condition Stipulated	Time Period to Comply	Since when pending	Status with regards to compliance of the conditions
<b>1.General requirements:</b>					
1	1(9)	The Zoo Operator has failed to remove the domestic ducks from display, in spite of repetitive reminders from the CZA. All such domestic ducks should be relocated outside the zoo premises.	With immediate effect	27/10/2017	Zoo is not keeping any number of domestic ducks/geese in cages/captivity. Zoo official are in search of some agency, who can take them and keep them upkeep in their premises/farm/resort.
<b>2. Administrative and staffing pattern</b>					
2	2(1)	The Zoo has failed to post full time officer -in-charge at the zoo. The present Officer-in-charge for food and drug licence of Municipal Corporation of Surat. Full time Officer-in-charge should be appointed.	Six months.	27/10/2017	SMC has already advertised the post of Zoo Superintendent in year, 2018 and the matter is in process with the competent authority.
3	2(1)	It has been noticed during the evaluation that maintenance of animal enclosures and other infrastructures is not being done on regular basis. It is suggested that may have independent adequate power to take up emergency repair as and when required. The delay in dealing with such repair works was noticed during the evaluation.	with immediate effect	27/10/2018	All pending work of repair and refurbishing of animal enclosures have been completed by the Engineer In- Charge and a certificate of completion has been issued by this office.
<b>3.Development and planning :</b>					
4	3 (1&2)	The Zoo Operator has failed to submit the Master Plan for the long term development of the zoo to Central Zoo Authority for its approval. The CZA has already granted extension of 3 months times for submission of Master Plan. The same period has also been lapsed, the zoo failed to submit the master Plan. Should submit Master Plan to the CZA for approval.	With immediate effect.	27/10/2017	Master (Layout) Plan has already been submitted and approved by the CZA. Management Plan will be submitted as early as possible in near future.
5	3(5)	A kiosk is being operated in unhygienic manner just after entry to the Zoo. The same should be relocated to an appropriate place and should be maintained hygienically and it should be ensured that no goods are sold in the plastic.	Three months	27/10/2018	SMC has already decided and assigned a task of facelift of main entry gate to a renowned Architectural Consultant, which include provision of shifting existing kiosk/ cafeteria outside the zoo premises. This will automatically ban entry of plastic inside the zoo premises.

<b>4. Development and Planning :</b>					
6	4(3,4,&5)	The leopard enclosure should be provided 25% viewing area of the total exhibit to the visitors.	Three months	27/10/2018	We have stopped to trim the hedges. Once they will grow sufficiently, we will cut them in the manner, which will allow visitors to view the animal from 25% area only.
7	4(3)	All the aviaries at the zoo should have at least 10-20% area as kuccha floor with soil and live plants	Three months	27/10/2017	All the cages of the aviary have been facilitated with 20% natural bedding material (soil+sand) to provide kaccha floor to the captive birds. Live plants are already in existence.
8	4(3)	The aviaries should have elevated feeding platform for terrestrial birds.	Three months	27/10/2017	All the cages of the aviary have been facilitated with elevated platform.
9	4(9)	The stand-off barrier provided at various animals exhibits needs immediate repair.	With immediate effect	27/10/2017	The stand- off barrier provided at various animal exhibit have been repaired by the Engineer In Charge.
10	4(9)	The stand-off barriers provided at the aviaries should at a distance of 150 cm from the chain link mesh	With immediate effect	27/10/2018	Pending being this work involves total changes in positioning of railing and walkway but it will be taken to the task soon.
11	4(10)	The zoo should provide directional signage to facilitate the visitors	Three months	27/10/2017	Work of directional signage through out the zoo premises has been completed.
12	4(10)	The signage provided at the zoo does not have much educational values. All the signage's should be assessed and should be upgraded. All signage should have educational value.	Three months	27/10/2017	Educational signage with upgraded version has been fixed up at required and desired places.
<b>5. Upkeep and healthcare of animals:</b>					
13	5(1)	The sub-adult Sloth bear at the zoo, housed in small cell for long period should be shifted to main enclosure area or it should be provided area as prescribed in the CZA norms.	With immediate effect	27/10/2017	The sub-adult Sloth bear at the zoo, housed in small cell has been shifted to the spacious vacant enclosure.
14	5(2)	The zoo should have diet schedule for each animals prepared and the same should be displayed in animal kitchen area	With immediate effect	27/10/2017	Diet schedule/ Chart for each animals prepared and the same has been displayed in animal enclosure of particular animal and kitchen area.
15	5(4)	The MS sheet covered shade provided to Spotted deer should be covered by coconut leaves or other such material.	With immediate effect	27/10/2017	The MS sheet covered shade provided to Spotted deer has been covered with hay/dry grass/thatch.
16	5(10)	The zoo has failed to maintain the animal history cards in the format as prescribed by the CZA. The records should be maintained.		27/10/2018	The zoo is maintaining animal history card in the format as prescribed by the cza. Zoo is also maintaining Livestock Register and keeping it always updated.
<b>6. Veterinary and infrastructure facilities:</b>					

17	6(1)	Dr.Shyama Prasad Mukherjee Zoological Garden, Surat, Gujarat being classified as a medium category zoo, but does not have adequate veterinary facility, including the basic veterinary equipments, x-ray machine etc. Should be complied.	Three months	27/10/2017	As Surat city is well facilitated with ultra modern veterinary hospital and Navsari Veterinary College, is very much nearby to Surat zoo, we are availing all these facilities from them under the guidance of subject matter specialist for accurate diagnosis and proper treatment.
18	6(3)	The zoo does not have appropriately designs isolation and quarantine house. It should be located away from animal exhibit as well as existing veterinary hospital area.	Three months	27/10/2017	Surat zoo has constructed isolation and quarantine house/cages as per the design, drawing and location approved by the CZA and now its not possible to redesigned and reconstructed elsewhere.
19	6(6)	The zoo should conduct mock drill and various other awareness campaigns including the training the zoo guards, keepers, and other support staff on the issues of disaster	With immediate effect	27/10/2017	Mock drill and various other awareness campaigns including the training the zoo guards, keepers, and other support staff on the issues of disaster are undertaken periodically throughout the year.
<b>9.Acquisition and breeding of animals:</b>					
20	9(7)	The Zoo had been housing 105 nos. of healthy Rose ringed parakeet. the surplus population of Rose ringed parakeet should be released into the natural habitat after due screening of their health and it should be ensured that protocols laid by the CZA/IUCN in this regard are followed or the birds may be given to other recognized zoo with prior approval from CZA and CWLW of the State.	Should be comply	27/10/2017	These 105 nos. of healthy Rose ringed parakeet have been seized and rescued by the Forest Department and on request of them, these have been kept temporarily at the zoo (with the order of the court). If some zoo will submit a demand for them, we will spare them immediately with the permission of CZA and State Forest Department.

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

**a. Mammals**

No.	Name of the animal	Scientific Name
1.	Grey Mongoose	<i>Herpestes edwardsii</i>
2.	Small Indian Mongoose	<i>Herpestes javanicus</i>
3.	Ruddy Mongoose	<i>Herpestes smithii</i>
4.	Indian Civet	<i>Viverricula indica</i>
5.	Bats	<i>Chiroptera</i>
6.	Three Stripped Palm Squirrel	<i>Funambulus palmarum</i>
7.	Large Bandicoot Rat	<i>Bandicota indica</i>
8.	Hanuman Langur	<i>Semnopithecus entellus</i>
9.	Indian Hare	<i>Lepus nigricollis</i>

**b. Birds**

No.	Name of the bird	Scientific Name
1.	Little Cormorant	<i>Phalacrocorax niger</i>
2.	Grey Heron	<i>Ardea cinerea</i>
3.	Cattle Egret	<i>Bubalcus ibis</i>
4.	Little Egret	<i>Egretta garzetta</i>
5.	Black Kite	<i>Milvus migrans govinda</i>
6.	Shikara	<i>Accipiter trivirgatus</i>
7.	Indian Peafowl	<i>Pavo cristatus</i>
8.	White Breasted Waterhen	<i>Amaurornis phoenicurus</i>
9.	Rock Pigeon	<i>Columba livia</i>
10.	Spotted Dove	<i>Streptopelia chinensis</i>
11.	Rose Ringed Parakeet	<i>Psittacula krameri</i>
12.	Plum Headed Parakeet	<i>Psittacula cyanocephala</i>
13.	Asian Koel	<i>Eudynamys scolopacea</i>
14.	Spotted Owlet	<i>Athene brama</i>
15.	House Swift	<i>Apus affinis</i>
16.	Pied King Fisher	<i>Ceryle rudis</i>
17.	Green Bee Eater	<i>Merops orientalis</i>
18.	Indian Roller	<i>Coracias benghalensis</i>
19.	Black Rumped Wood Pecker	<i>Dinopium benghalense</i>
20.	Small Skylark	<i>Alauda gulgula</i>
21.	Jungle Myna	<i>Acridotheres fascus</i>
22.	House Crow	<i>Corvus spendens</i>
23.	Large Billed Crow	<i>Corvus macrorhynchos</i>
24.	Red Vented Bulbul	<i>Pycnonotus cafer</i>
25.	Asian Paradise Fly Catcher	<i>Terpsiphone paradise</i>
26.	Tailor Bird	<i>Orthotomus sutorius</i>
27.	Oriental Magpie Robin	<i>Copsychus saularis</i>
28.	White Wagtail	<i>Motacilla alba</i>
29.	House Sparrow	<i>Passer domesticus</i>
30.	Red Avadavat	<i>Amandava amandava</i>
31.	Black Headed Ibis	<i>Threskiornis melanocephalus</i>

**c. Reptiles**

No.	Name of the animal	Scientific Name
1.	sand Boa	<i>Eryx conicus</i>
2.	Viper Saw Scaled	<i>Echis carinata</i>
3.	Snake Rat / Dhaman	<i>Ptyas mucosus</i>

<b>4.</b>	Cobra Indian	<i>Naja naja</i>
<b>5.</b>	Trinket snake	<i>Coelognathus helena</i>
<b>6.</b>	Green vine snake	<i>Ahaetulla nasatu</i>
<b>7.</b>	Indian wolf snake	<i>Lycodon aulicus</i>
<b>8.</b>	Bamboo pit viper	<i>Tremeresus gramineus</i>
<b>9.</b>	Checkered Keelback	<i>Xenochrophis piscator</i>
<b>10.</b>	common Krait	<i>Bungarus caeruleus</i>
<b>11.</b>	Turtle Fresh Water /Indian Soft Shelled	<i>Presdypis entellus</i>