Tirumala Tirupati Devasthanams
శ్రీ వేంకటేశ్వర కళాశాల
Sri Venkateswara College
(University of Delhi)
NAAC Grade A+

Annexure II

SRI VENKATESWARA COLLEGE
(UNIVERSITY OF DELHI)

EVENT REPORT

NAME OF THE EVENT: Field visit to Delhi Zoo (National Zoological Park) 2024			
DATE	**DEPARTMENT**	**COMMITTEE/SOCIETY**	**COORDINATORS NAME**
18 March, 2024	Zoology		Dr. Richa Misra
TIME	**VENUE**	**NUMBER OF PARTICIPANTS**	**NATURE: Outdoor/Indoor; online/offline/hybrid**
9 am onwards	Delhi Zoo, Mathur Road	28 students accompanied by teacher	Outdoor
FINANCIAL SUPPORT/ASSISTANCE (if any):	None		

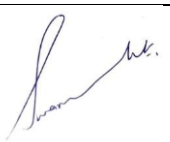
BRIEF INFORMATION ABOUT THE ACTIVITY

TOPIC/SUBJECT OF THE ACTIVITY	Field Trip to Delhi Zoo for B.Sc. (H) Zoology Sem IV students as part of their Animal Behaviour paper syllabus
OBJECTIVES	To introduce the concept of Ethogram construction to students as paper of animal behaviour study Field exercise to study animals in captivity
METHODOLOGY	Ethogram construction *ad libitum* General rules for field observation
INVITED SPEAKERS WITH AFFLIATION DETAILS (IF ANY)	None
OUTCOMES	The students enjoyed the concepts of animal behaviour in field and made their own observations and reports

PROOFS & DOCUMENTS ATTACHED (Tick mark the proofs attached):

1 Notice & Letters ✓	2 Number of Participants & Name of participants ✓	3 Video clip	4 Photos ✓	5 Feedback Form & analysis
6 News clip with details	7 Sample Copy of the Certificate	8 Posters/ Invites	9 Event report Attested by Event Coordinator & IQAC Coordinator	10 Any other document

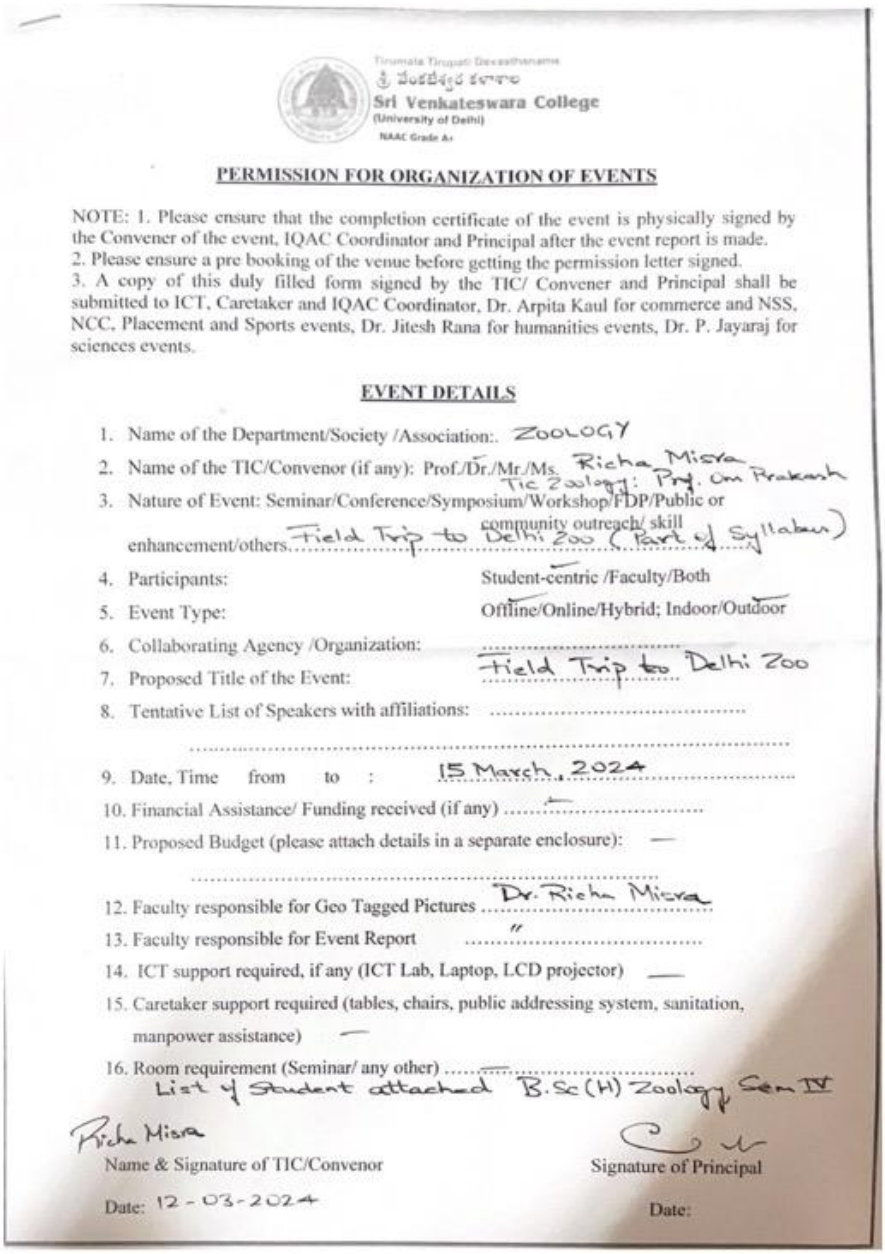
IQAC Document No: IQAC/SVC/2023-2024/Zoo/Delhi Zoo	Criterion No: II
Departmental file no: SVC/2023- 2024/Zoo/Delhi Zoo	IQAC file No: 2023-24

NAME OF TEACHER & SIGNATURE	NAME OF HEAD/ COMMITTEE INCHARGE & SIGNATURE	IQAC COORDINATOR (SEAL & SIGNATURE)
Dr. Richa Misra Richa Misra	Dr. Richa Misra Richa Misra	

For Reference

Criterion I	Curricular Aspects (planning & Implementation)		Criterion V	Student Support & Progression
Criterion II	Teaching Learning & Evaluation		Criterion VI	Governance
Criterion III	Research, Innovations & Extension		Criterion VII	Institutional Values & Best Practices
Criterion IV	Learning Resources and Infrastructure			

Permission Letter



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PERMISSION FOR ORGANIZATION OF EVENTS

NOTE: 1. Please ensure that the completion certificate of the event is physically signed by the Convener of the event, IQAC Coordinator and Principal after the event report is made.
2. Please ensure a pre booking of the venue before getting the permission letter signed.
3. A copy of this duly filled form signed by the TIC/ Convener and Principal shall be submitted to ICT, Caretaker and IQAC Coordinator, Dr. Arpita Kaul for commerce and NSS, NCC, Placement and Sports events, Dr. Jitesh Rana for humanities events, Dr. P. Jayaraj for sciences events.

EVENT DETAILS

1. Name of the Department/Society /Association:. ZOOLOGY
2. Name of the TIC/Convenor (if any): Prof./Dr./Mr./Ms. Richa Misra Tic Zoology: Pry. Om Prakash
3. Nature of Event: Seminar/Conference/Symposium/Workshop/FDP/Public or community outreach/ skill enhancement/others. Field Trip to Delhi Zoo (Part of Syllabus)
4. Participants: Student-centric /Faculty/Both
5. Event Type: Offline/Online/Hybrid; Indoor/Outdoor
6. Collaborating Agency /Organization: .....
7. Proposed Title of the Event: Field Trip to Delhi Zoo
8. Tentative List of Speakers with affiliations: .....
9. Date, Time from to : 15 March, 2024
10. Financial Assistance/ Funding received (if any) .....
11. Proposed Budget (please attach details in a separate enclosure): —
12. Faculty responsible for Geo Tagged Pictures Dr. Richa Misra
13. Faculty responsible for Event Report "
14. ICT support required, if any (ICT Lab, Laptop, LCD projector) —
15. Caretaker support required (tables, chairs, public addressing system, sanitation, manpower assistance) —
16. Room requirement (Seminar/ any other) —

List of Student attached B.Sc (H) Zoology Sem IV

Richa Misra
Name & Signature of TIC/Convenor

Date: 12-03-2024

Signature of Principal

Date:

Student Observations

National Zoological Park

The Delhi Zoological Park, also known as the **National Zoological Park**, is one of the oldest zoos in India and is located near the Old Fort in Delhi. Established in 1959, it covers an area of about 176 acres and serves as a significant attraction for both locals and tourists alike.

The zoo is home to a diverse range of flora and fauna from different parts of the world. It houses over 1,350 animals representing almost 130 species including mammals, birds, and reptiles. Some of the notable species found here include Royal Bengal Tigers, Asiatic Lions, Indian Rhinoceros, Giraffes, Zebras, and various species of deer.

Apart from being a recreational spot, the Delhi Zoo also plays a crucial role in conservation efforts. It actively participates in breeding programs for endangered species, with a focus on species native to India. The zoo also conducts research and educational programs to raise awareness about wildlife conservation and environmental sustainability.

The zoo is designed to provide naturalistic habitats for its inhabitants. It features spacious enclosures with lush vegetation, water bodies, and enrichment activities to ensure the well-being of the animals. Visitors can observe the animals in settings that closely resemble their natural habitats.

The Delhi Zoological Park offers various educational programs and guided tours for visitors of all ages. These programs aim to educate the public about wildlife conservation, biodiversity, and the importance of preserving natural habitats. Schools often organize field trips to the zoo to enhance students' understanding of wildlife and ecology.

A zoo, short for zoological garden or zoological park, is a facility where a wide variety of animal species are kept and displayed for public viewing, education, conservation, and research purposes. These facilities are typically designed to mimic natural habitats as closely as possible to provide a comfortable and stimulating environment for the animals.

Zoos play several important roles:

1. Education: Zoos are valuable educational resources where visitors can learn about different animal species, their habitats, behaviors, and conservation needs. Many zoos offer guided tours, interactive exhibits, and educational programs for schools and families.

2. Conservation: Modern zoos often participate in conservation efforts aimed at preserving endangered species and their habitats. They may engage in breeding programs, research on animal behavior and genetics, and support conservation projects in the wild.

3. Research: Zoos contribute to scientific research by studying animal behavior, physiology, nutrition, reproduction, and veterinary medicine. This research not only benefits the animals in zoos but also contributes to broader scientific knowledge and conservation efforts.

4. Recreation: Zoos provide recreational opportunities for people of all ages to observe and appreciate wildlife up close. They offer a unique and engaging experience that fosters a connection between humans and the natural world.

However, it's worth noting that the role of zoos and ethical considerations related to animal welfare and conservation are topics of ongoing debate. Critics argue that some aspects of traditional zoos, such as limited space for animals and captivity-related stress, may be detrimental to animal well-being. As a result, many modern zoos focus on creating more naturalistic environments, enrichment activities, and conservation initiatives to address these concerns.

Introduction:

Ethology: The study of Animal behaviour.

Ethogram: A list of species-specific behaviours, categorised into a table format. When planning to observe animal behaviour, an ethogram is constructed in advance and used to record behaviour in a systematic way.

Key concepts in ethology include:

1. **Innate Behavior:** Behaviors that are genetically programmed and do not require learning, such as reflexes or instinctual responses to stimuli.
2. **Learned Behavior:** Behaviors that are acquired through experience, observation, or interaction with the environment, such as foraging techniques or social customs.
3. **Social Behavior:** Patterns of interaction and communication among members of the same species, including mating rituals, dominance hierarchies, and cooperative hunting.
4. **Communication:** The exchange of signals, cues, or displays between animals for purposes such as mate attraction, territory defense, or warning of danger.
5. **Behavioral Ecology:** The study of how behavior contributes to an animal's survival and reproduction in its natural habitat, considering factors such as food availability, predation risk, and competition for resources.

Ethology has practical applications in various fields, including conservation biology, animal welfare, and animal training. By understanding animal behavior, researchers can develop strategies for wildlife conservation, improve captive animal management practices, and enhance human-animal interactions. Prominent ethologists, such as Konrad Lorenz, Niko Tinbergen, and Jane Goodall, have made significant contributions to our understanding of animal behavior and have helped shape the field into what it is today.

Important Terminologies:

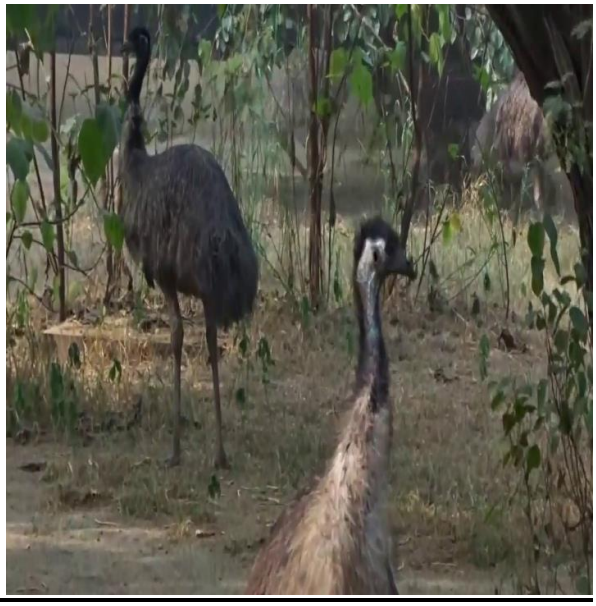
1. **Preening:** Trimming or dressing of the feathers with the beak. It also removes dirt and parasites which keeps birds clean and disease free.
2. **Ruminating:** to chew repeatedly for an extended period,chew the cud
3. **Fanning:** This behaviour is particularly crucial during hot weather when animals may need to cool down to prevent overheating.
4. **Zoochosis:** Abnormal behaviour in captive animals can include stereotypic behaviours – highly repetitive, invariant, functionless behaviour, such as repetitive pacing, swaying, head-bobbing, bar-biting, over-grooming or excessive licking. These behaviours result from “the frustration of natural behaviour patterns, impaired brain function, or repeated attempts to deal with some problem”
5. **Basking:** Basking is common to most active diurnal reptiles. Reptiles are ectotherms, making them dependent on the warmth produced by the sun and their environment for internal temperature regulation.
6. **Courtship:** Courtship behaviour informs a potential mate that the intention is breeding and not aggression. Courtship behavior can include things like food delivery, dance moves (displays), and mutual preening.

(1) GROOMING BEHAVIOUR

TIME	ANIMAL	CODE	DECRIPTION
10:33	Emu	G	Crow is sitting on it and grooming it
10:58	Rhesus macaque	G	Mother grooms her baby
11:05	Leopard	G	Grooms itself on its own
11:30	Green winged macaque	G	Grooms itself on its

Rhesus macaque

Emu



Grooming behavior in animals is a common and important activity that serves several functions across different species. It involves the physical cleaning and maintenance of the body surface, including removing dirt, parasites, dead skin, and excess oil from the fur, feathers, or skin. Grooming behavior can vary in complexity and frequency depending on the species, environmental conditions, and social context. Here are some key aspects of grooming behavior in animals:

1. **Hygiene:** One of the primary functions of grooming behavior is to maintain cleanliness and hygiene. By removing dirt, debris, and parasites from their bodies, animals can reduce the risk of skin infections, parasitic infestations, and other health problems.
2. **Thermoregulation:** Grooming behavior can help regulate body temperature by redistributing oils and moisture across the skin or feathers. In some species, grooming can also help to fluff up fur or feathers, creating an insulating layer that traps air and helps retain heat.
3. **Social Bonding:** Grooming behavior is often observed in social animals as a form of social bonding and communication. Mutual grooming, where individuals groom each other, helps strengthen social bonds within groups and reinforces social hierarchies. It can also serve as a way to alleviate tension or conflict between group members.
4. **Stress Reduction:** Grooming behavior has been shown to have stress-reducing effects in some animals. Engaging in grooming activities can help individuals relax and reduce anxiety, especially in situations of social stress or environmental disturbance.
5. **Mate Attraction:** In some species, grooming behavior may play a role in mate attraction and courtship rituals. Displaying clean and well-groomed appearance signals health and vitality to potential mates, making grooming an important aspect of reproductive success.
6. **Parental Care:** Grooming behavior is commonly observed in parental care, where adults groom their offspring to remove parasites, stimulate blood circulation, and strengthen parent-offspring bonds. In some species, parental grooming also helps to establish recognition and imprinting between parents and offspring.

(2) RESTING BEHAVIOUR

TIME	ANIMAL	CODE	DESCRIPTION
11:00	Indian rhinoceros	R	Resting in a shade
11:05	Crocodile	R	Basking in sun
11:45	Bare eyed cockatoos	R	Sitting on a branch
12:02	Brahminy kite	R	Sitting

Resting behavior in animals varies widely across species and is influenced by factors such as habitat, diet, social structure, and evolutionary history. Here are some common types of resting behaviors observed in animals:

1. **Sleep**: Most animals, including mammals, birds, and some reptiles and fish, require sleep. Sleep is characterized by reduced responsiveness to external stimuli, changes in brain activity, and specific postures or locations for rest. The duration and pattern of sleep vary greatly among species. Some animals, like humans, have consolidated periods of sleep, while others, like certain birds, engage in short naps throughout the day.
2. **Hibernation**: Many mammals, such as bears, groundhogs, and certain rodents, enter a state of hibernation during periods of cold weather or food scarcity. During hibernation, metabolic rate decreases, body temperature drops, and the animal remains in a state of torpor for an extended period, conserving energy until conditions improve.
3. **Estivation**: Similar to hibernation, estivation is a period of inactivity and reduced metabolic rate, but it occurs in response to high temperatures or drought conditions. Animals that estivate, such as certain amphibians, reptiles, and snails, may retreat to underground burrows or other sheltered locations to conserve water and energy.
4. **Daily rest periods**: Many animals have distinct periods of rest or inactivity within their daily activity cycles. Diurnal animals, such as humans and most primates, typically rest at night, while nocturnal animals, such as owls and bats, are active during the night and rest during the day.
5. **Roosting**: Birds and bats often roost in specific locations during periods of rest, such as trees, caves, or buildings. Roosting sites provide protection from predators and the elements while allowing animals to conserve energy.
6. **Resting posture**: Animals may adopt specific postures or positions during rest to facilitate relaxation and conserve energy. For example, many mammals curl up or lie down during sleep, while birds may tuck their heads under their wings while roosting.
7. **Social resting**: Some animals, particularly social species like primates and certain carnivores, engage in group rest or social grooming behaviors during periods of inactivity. These social interactions help strengthen social bonds within the group and may also serve to remove parasites or maintain grooming hygiene.

8. **Basking**: Reptiles, such as snakes and lizards, often bask in the sun to raise their body temperature and regulate metabolic processes. Basking behavior is particularly common in ectothermic species, which rely on external heat sources to maintain body temperature.

These are just a few examples of the diverse resting behaviors observed in the animal kingdom, highlighting the adaptive strategies that different species have evolved to conserve energy, regulate body temperature, and ensure survival in their respective environments.

Animal Behaviour observed:

Location**: National Zoological Park, New Delhi** Date: **18 March, 2024**

Weather: **Sunny**

Animals observed:

1. **Emu**

The emu is the second largest living bird and the largest bird found in Australia. Their necks and legs are long, but their wings are tiny, reduced to less than 8 inches (20 centimeters). After molting, the birds are dark, but sunlight fades the feathers and they become paler at the end of the season.

TIME	BEHAVIOUR	CODE	DESCRIPTION
10:26 a.m.	Resting	R	Resting under shed
10:30 a.m.	Grooming	G	Crow sitting on top of one Emu and grooming it by feeding on parasites present on emu's feathers.

2. **Nil Gai**

Nilgai antelopes live in dry areas with a variety of land types. Nilgai antelope are among the largest of the asian antelopes. They stand about 120-150cm at the shoulder and have a body length of 180-200cm.

TIME	BEHAVIOUR	CODE	DESCRIPTION
10:36	Resting	R	Resting under shed.
10:37	Foraging	F	Foraging around the ground.
10:38	Socializing	S	Infant rubbing against adult.
10:40	Ruminating	RU	Chewing repeatedly.

3. **Ostrich**

The ostrich is the largest and heaviest living bird in the world. Males are jet black with white plumage and bright red or blue skin. Females are fairly uniform in color, with earthy gray-brown plumage and skin. Large adults can reach a height of 2.75 m (9 ft.).

TIME	BEHAVIOUR	CODE	DESCRIPTION
10:43	Foraging	F	Roaming around ground.
10:44	Preening	P	Use of the beak to position feathers
10:44	Fanning	FA	Flapping of wings.

4. Tiger

Tigers have reddish-orange coats with prominent black stripes, white bellies and white spots on their ears. Like a human fingerprint, no two tigers have the exact same markings. Due to this, researchers use stripe patterns to identify different individual in the wild. Presently, tigers are found across South and Southeast Asia, China and Eastern Russia.

TIME	BEHAVIOUR	CODE	DESCRIPTION
10:47	Zoochosis	Z	Repeatedly circling in one spot.
10:47	Roaring	RO	Roaring while roaming.
10:49	Sniffing	SN	Sniffing while circling around tree.
10:52	Urine Spraying	US	Spraying urine on tree.

5. Mugger

The mugger is a crocodile of medium to large size with the broadest snout of all the living members of the genus Crocodylus. It lives in the Indian subcontinent as well as other countries in southern Asia.

TIME	BEHAVIOUR	CODE	DESCRIPTION
10:54	Basking	B	Lie in the warmth of the sun.

6. Leopard

Leopards are powerful big cats closely related to lions, tigers, and jaguars. They live in sub-Saharan Africa, northeast Africa, Central Asia, India, and China. However, many of their populations are endangered, especially outside of Africa.

TIME	BEHAVIOUR	CODE	DESCRIPTION
11:05	Grooming	G	Licking itself
11:06	Resting	R	Resting under shed.

7. Hippopotamus

Hippopotamuses are large mammals found in sub-Saharan Africa. Their name comes from the Greek word for “river horse” because they're often found in water, which helps them stay cool in the hot, tropical climate where they live.

TIME	BEHAVIOUR	CODE	DESCRIPTION
12:07	Bathing	B	Bathing and dipping fully under water.

8. African Grey Parrot

The African grey parrot is one of the largest parrots in Africa. It is predominantly grey in color and has darker grey than its body over the head and both wings. The head and body feathers have slight white edges. Its tail feathers are red.

TIME	BEHAVIOUR	CODE	DESCRIPTION
11:46	Courtship	C	Male orienting it’s head upwards and downwards while gently flapping wings, while walking sideways.

11:50	Mating	M	Male getting at top of female.

9. African Elephant

African elephants are the largest animals walking the Earth. Their herds wander through 37 countries in Africa. They are easily recognized by their trunk that is used for communication and handling objects. And their large ears allow them to radiate excess heat. Upper incisor teeth develop into tusks in African elephants and grow throughout their lifetime.

TIME	BEHAVIOUR	CODE	DESCRIPTION
12:38	Drinking water	DW	Taking up water in trunk and infuse water in mouth.
12:40	Defecating	D	Directing tail upwards to defecate.

10. Indian Elephant

The Indian elephant is one of three extant recognized subspecies of the Asian elephant, native to mainland Asia. The species is smaller than the African elephant species with a convex back and the highest body point on its head. They feed mainly on grasses, but large amounts of tree bark, roots, leaves and small stems are also eaten.

TIME	BEHAVIOUR	CODE	DESCRIPTION
12:56	Feeding	F	Feeding grass.
12:56	Resting	R	Resting under shed.

REFRENCES:

1. **https://www.allaboutbirds.org/news/how-do-birds-fall-in-love-a-look-at-courtship-displays/#:~:text=Courtship%20behavior%20can%20include%20things,dancing%20birds%2Dof%2Dparadise.**
2. **https://en.wikipedia.org/wiki/Preening**
3. **https://animalia.bio/african-grey-parrot**
4. **https://www.inaturalist.org/taxa/465033-Elephas-maximus-indicus**

5. https://www.worldwildlife.org/species/african-elephant
6. https://kids.nationalgeographic.com/animals/mammals/facts/hippopotamus
7. https://nestwatch.org/about/overview/?utm_campaign=NW%20spring%202024&utm_source=AAB&utm_medium=lightbox&utm_content=join_NW_2024
8. https://kids.nationalgeographic.com/animals/mammals/facts/leopard
9. https://animalia.bio/mugger?letter=m
10. https://animalia.bio/mugger?letter=m
11. https://nationalzoo.si.edu/animals/tiger#:~:text=Physical%20Description,studying%20tigers%20in%20the%20wild.
12. https://seaworld.org/animals/facts/birds/ostrich/#:~:text=The%20ostrich%20is%20the%20largest,m%20(9%20ft.).
13. https://www.bornfree.org.uk/zoochosis/

Completion Certificate

Tirumala Tirupati Devasthanams
Sri Venkateswara College
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NAAC Grade A+

CERTIFICATE

This is to certify that the **Field visit to Delhi Zoo 2024** was successfully conducted on 18-03-24 from (9am- 4pm) by Department of Zoology in the (Offline/Outdoor) mode and its event report has been submitted to IQAC for records.

Richa Misra

Event-in-Charge

IQAC Coordinator

Coordinator, IQAC
Sri Venkateswara College
(University of Delhi)
Dhaula Kuan, New Delhi-110021

Principal

PRINCIPAL
Sri Venkateswara College
(University of Delhi)
Dhaula Kuan, New Delhi-110021