

SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER



SESSION 2023-24

Criterion 7: Institutional Values and Best Practices

7.1.6 Quality audits on environment and energy undertaken by the institution:



Green Audit



SOPHIA GIRLS' COLLEGE (AUTONOMOUS)
AJMER

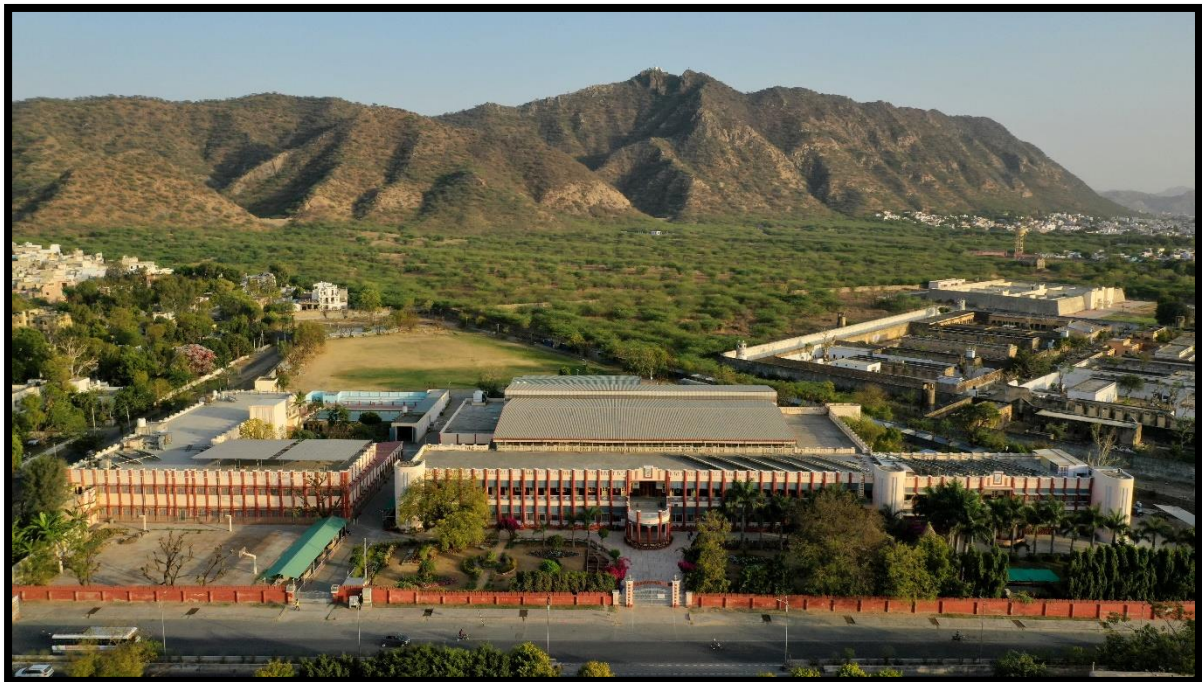
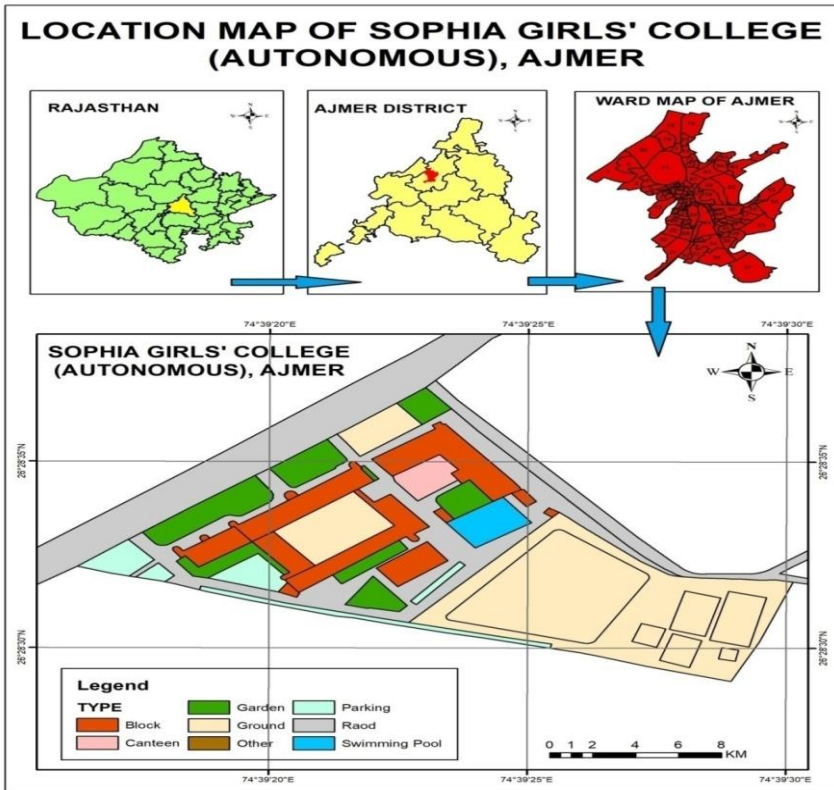
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Affiliated To Maharshi Dayanand Saraswati University, Ajmer

Session 2023-24



Flora & Fauna



INTRODUCTION

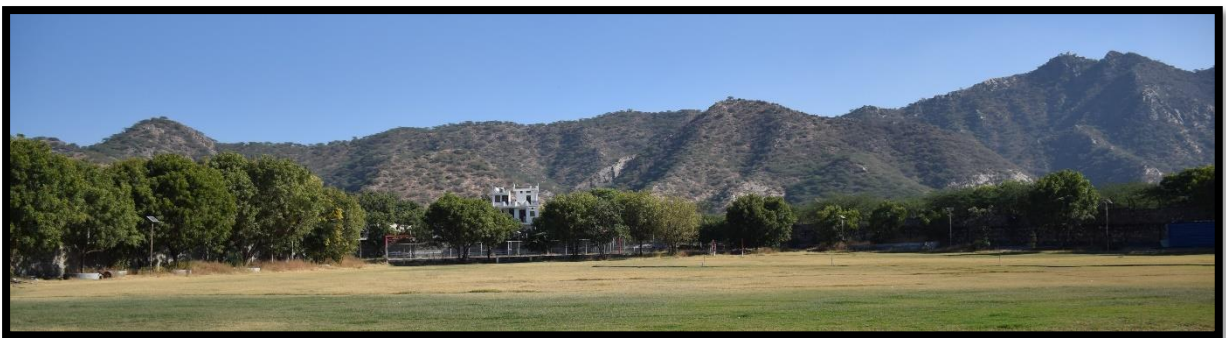
Rt. Rev. Msgr. Fortunatus Caumont and his sister Rev. Mother Matilda established Sophia Girls' College in 1919 with the intention of empowering girls through comprehensive education. Initially established as a primary school, the establishment swiftly grew and attained degree status in 1959, which made it possible for Sophia Girls' College to be acknowledged in Ajmer. Because the college is situated in the sparsely inhabited Aravalli foothills, it has always had a close interaction with the natural world. The College's 2015 acquisition of autonomy served to further solidify this goal by giving us additional chances to identify, assess, and improve our contribution to environmental preservation. In order to maintain a safe and sustainable campus, the college has implemented a number of green initiatives, such as regular tree plantation drives, use of biogas and steam cooking in the hostel, rain water harvesting and generation of 100 KWH of solar power.



The 1970s saw a surge in the global awareness towards sustainable development. Industries and organizations are increasingly required to calculate their

environmental impact. The Green Audit is a tool we intend to use to assess our ecological position because of the law and our conviction that the Earth and all of its riches are a legacy that needs to be protected for future generations. The study's main concerns were the sustainability of the local biota, water management and conservation, and the environment. Under the direction of the advisory specialists, the goal of this exercise was to increase our understanding of and responsibility for the care of the natural environment.

Located at the base of the Aravalli Mountains, the College's picturesque campus draws a lot of visitors due to its captivating vista. 9.9 acres of lush greenery surround Sophia Girls' College in Ajmer, with its expansive grounds and beautifully manicured views. The entire campus of the college is home to a diverse range of flora and wildlife, contributing to its rich ecological diversity. Eight gardens make up the campus: a cactus garden, a decorative flower garden, a medicinal plant garden, an organic fruit and vegetable garden, and lawns covered in seasonal summer and winter flowers that add a charming touch to the campus. In addition, a significant number of trees are scattered throughout the campus, attesting to the institution's affinity for the cause. The College raises a wide variety of plant species, such as neem, Ashoka, Aru, palm, mango, cycads, cassia, roses, and many more. These encompass medicinal plants, fruit-bearing plants, flowering plants, and more.



The magnificent vista of the college is striking, enjoyable, and soothing. One is enthralled and captivated by the College's environment and pristine air. A vast array of creatures and birds, such as Drongos, Sparrows, Bulbul, Maina,

Redwattled lapwing, Squirrels, Snake, Cats, Honey bees, Wasps, etc., can also be seen on the campus in addition to the diverse range of vegetation. The campus has a good air quality index that is significantly lower than the allowable limits because to its diverse flora and fauna.

Objectives of the Audit:

- To assess the advancement of our Clean and Green Campus programme.
- To ascertain what proportion of institutional energy needs are met by renewable resources.
- To recommend actions needed to improve the Campus's internal environment's ecological quality for the benefit of its stakeholders.
- To evaluate our comprehension of the pursuit of sustainable development and our role in bringing it to pass.
- To assess the flora's growth on the College grounds, both quantitatively and qualitatively.
- To find fresh approaches for boosting our involvement in protecting the environment.



FLORA



List of trees specifying their common names, scientific names,
families and the number of each kind of species

Total area of the Campus- 9.99 acres

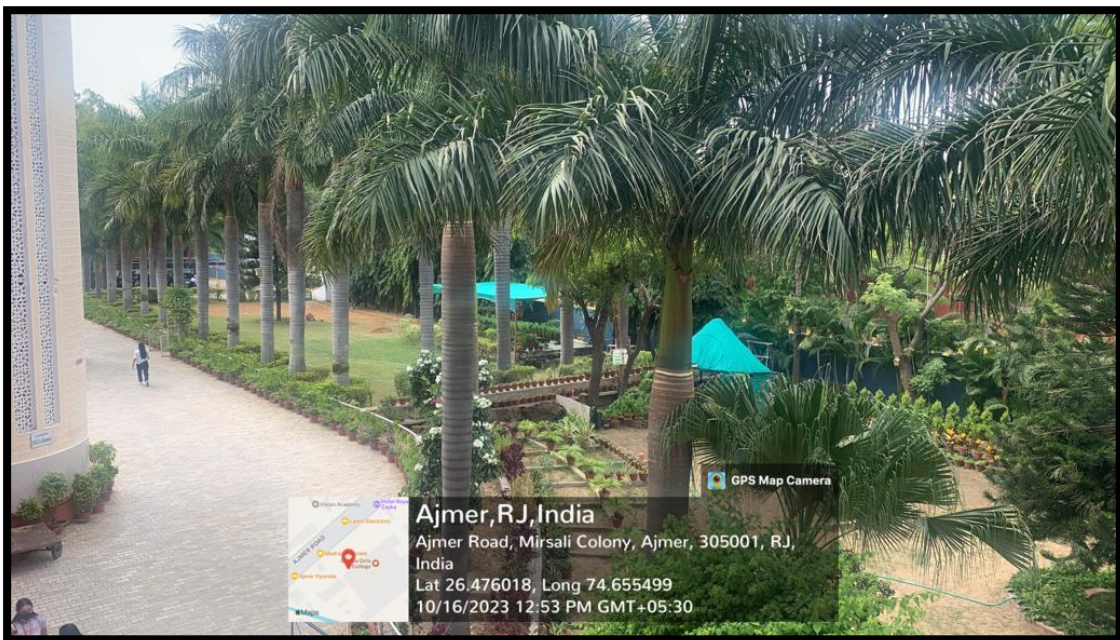
Area of the Campus covered under green landscaping- 1/3 of total campus area

No of gardeners taking care of the gardens- 04

S.No.	Botanical name	Common name	Vernacular name	Family
1.	<i>Ailanthus excelsa</i>	Tree of heaven	Aru	Simaroubaceae
2.	<i>Annona aquamosa</i>	Sugar apple	Sitaphal	Annonaceae
3.	<i>Araucaria spec.</i>	Monkey puzzle tree	Araucaria	Araucariaceae
4.	<i>Azadirachta indica</i>	Margosa tree	Neem	Meliaceae
5.	<i>Borassus flabellifer</i>	Palmyra palm	Tar	Arecaceae
6.	<i>Bougainvillea spp.</i>	Bougainvillea	Bougainvillea	Nyctaginaceae
7.	<i>Brahea calcarea</i>	Rock palm	Palm	Arecaceae
8.	<i>Butea monosperma</i>	Fire of forest	Dhak	Fabaceae
9.	<i>Cassia fistula</i>	Indian laburnum	Amaltas	Fabaceae
10.	<i>Cassia siamea</i>	Popcorn tree	Kasod	Fabaceae
11.	<i>Cocos nucifera</i>	Coconut	Nariyal	Arecaceae
12.	<i>Cordia dichotoma</i>	Glue berry	Lasora	Boraginaceae
13.	<i>Citrus spec.</i>	Lemon	Nimbu	Rutaceae
14.	<i>Cycas spec.</i>	Sago palm	Cycas palm	Cycadaceae
15.	<i>Dalbergia sisso</i>	Indian rosewood	Shisham	Fabaceae
16.	<i>Delonix regia</i>	Flamboyant	Gulmohar	Fabaceae
17.	<i>Ficus benjamina</i>	Benjamin fig	Ficus	Moraceae
18.	<i>Ficus religiosa</i>	Sacred fig	Peepal	Moraceae
19.	<i>Holoptelea integrifolia</i>	Indian elm	Bandar ki roti	Ulmaceae
20.	<i>Dypsis spec.</i>	Areca palm	Khari palm	Arecaceae
21.	<i>Macrozamia spec.</i>	Burrawong	Palm	Arecaceae
22.	<i>Mangifera indica</i>	Mango	Aam	Anacardiaceae
23.	<i>Manilkara zapota</i>	Naseberry	Chikoo	Sapotaceae
24.	<i>Moringa oleifera</i>	Drumstick	Sahjana	Moringaceae

25.	<i>Murraya paniculata</i>	Orange jasmine	Meetha neem	Rutaceae
26.	<i>Musa spec.</i>	Banana	Kela	Musaceae
27.	<i>Nyctanthes arbor-tristis</i>	Jasmine	Harsingar	Oleaceae
28.	<i>Phyllanthus emblica</i>	Indian gooseberry	Amla	Euphorbiaceae
29.	<i>Plumeria alba</i>	Temple flower	Champa	Apocynaceae
30.	<i>Polyalthia longifolia</i>	Buddha tree	Ashoka	Annonaceae
31.	<i>Prosopis cineraria</i>	Prosopis	Khejadi	Fabaceae
32.	<i>Psidium guajava</i>	Guava	Amrood, jamphal	Myrtaceae
33.	<i>Punica granatum</i>	Pomegranate	Anar, daram	Lythraceae
34.	<i>Roystonea regia</i>	Royal palm	Bottle palm	Arecaceae
35.	<i>Syzygium cumini</i>	Java plum	Jamun	Myrtaceae
36.	<i>Tabernaemontana divaricata</i>	Crape jasmine	Chandni	Apocynaceae
37.	<i>Tecomela undulata</i>	Desert teak	Rohida	Bignoniaceae
38.	<i>Thuja spec.</i>	White-cedar	Morpankhi	Cupressaceae
39.	<i>Zizyphus spec.(hybrid)</i>	Plum	Pemli ber	Rhamnaceae
40.	<i>Zizyphus mauritiana</i>	Indian plum	Ber	Rhamnaceae

Green Landscaping



List of Medicinal Plants specifying their common names, scientific names and families

S. No.	Botanical name	Common name	Vernacular name	Family
1.	<i>Adhatoda vasica</i>	Malabar nut	Adusa	Acanthaceae
2.	<i>Aloe vera</i>	Aloe	Ghritkumari	Liliaceae
3.	<i>Asparagus racemosus</i>	Indian asparagus	Satawari	Asparagaceae
4.	<i>Azadirachta indica</i>	Margosa	Neem	Meliaceae
5.	<i>Bryophyllum pinnatum</i>	Sprout leaf plant	Zakhm-haiyat	Crassulaceae
6.	<i>Butea monosperma</i>	Flame of forest	Dhak, palas	Fabaceae
7.	<i>Calotropis procera</i>	Madar	Aak	Asclepediaceae
8.	<i>Carica papaya</i>	Papaya	Papita	Caricaceae
9.	<i>Carissa carandas</i>	Bengal currents	Karaunda	Rutaceae
10.	<i>Cassia fistula</i>	Indian laburnum	Amaltas	Fabaceae
11.	<i>Catharanthus roseus</i>	Rosy periwinkle	Sadabahar	Apocynaceae
12.	<i>Citrus limon</i>	Lemon	Nimbu	Rutaceae
13.	<i>Datura stramonium</i>	Thorn apple	Dhatura	Solanaceae
14.	<i>Delonix regia</i>	Flamboyant	Gulmohar	Fabaceae
15.	<i>Hibiscus rosa-sinensis</i>	Shoe flower	Gurhal	Malvaceae
16.	<i>Kalanchoe blossfeldiana</i>	Flaming katy	Patharchita	Crassulaceae
17.	<i>Mentha piperita</i>	Mint	Pudina	Laniaceae
18.	<i>Moringa oleifera</i>	Drumstick	Sainjana	Moringaceae
19.	<i>Murraya paniculata</i>	Orange jasmine	Meetha neem	Rutaceae
20.	<i>Ocimum sanctum</i>	Holy basil	Tulsi	Lamiaceae
21.	<i>Oxalis spec.</i>	Wood sorrel	-	Oxalidaceae
22.	<i>Phyllanthus emblica</i>	Indian gooseberry	Amla	Phyllanthaceae
23.	<i>Plumeria alba</i>	Temple flower	Champa	Apocynaceae
24.	<i>Prosopis cineraria</i>	Prosopis	Khejadi	Fabaceae
25.	<i>Ricinus communis</i>	Castor plant	Arandi	Euphorbiaceae
26.	<i>Syzygium cumini</i>	Java plum	Jamun	Myrtaceae
27.	<i>Trachyspermum ammi</i>	Bishop's weed	Ajwain	Apiaceae
28.	<i>Withania somnifera</i>	Indian ginseng	Ashwagandha	Solanaceae
29.	<i>Zizyphus nimmularia</i>	Wild jujube	Jhari bor	Rhamnaceae

List of Vegetables specifying their common names, scientific names and families

S. No.	Botanical name	Common name	Family
1	<i>Allium cepa</i>	Onion, pyaz	Amaryllidaceae
2	<i>Allium sativum</i>	Garlic, lehsun	Amaryllidaceae
3	<i>Beta vulgaris</i>	Beet root, chukander	Amaranthaceae
4	<i>Brassica oleracea</i>	Cauliflower, gobhi	Brassicaceae
5	<i>Capsicum annuum</i>	Green chilli, mirch	Solanaceae
6	<i>Coriandrum sativum</i>	Coriander, dhania	Apiaceae
7	<i>Cucumis sativus</i>	Cucumber, kheera	Cucurbitaceae
8	<i>Cymopsis tetragonoloba</i>	Cluster bean, guar	Fabaceae
9	<i>Daucus carota</i>	Carrot, gajar	Apiaceae
10	<i>Luffa acutangula</i>	Ridge guard, turai	Cucurbitaceae
11	<i>Lycopersicon esculentum</i>	Tomato, tamatar	Solanaceae
12	<i>Mentha piperita</i>	Mint, pudina	Lamiaceae
13	<i>Momordica charantia</i>	Bitter melon, karela	Cucurbitaceae
14	<i>Pisum sativum</i>	Pea, matar	Fabaceae
15	<i>Praecitrullus fistulosus</i>	Indian squash, tinda	Cucurbitaceae
16	<i>Raphanus sativus</i>	Radish, muli	Brassicaceae
17	<i>Solanum melongena</i>	Brinjal, bengan	Solanaceae
18	<i>Solanum tuberosum</i>	Potato, aalo	Solanaceae
19	<i>Spinacia oleracea</i>	Spinach, palak	Amaranthaceae
20	<i>Trigonella foenum-greekum</i>	Fenugreek, methi	Fabaceae



List of Ornamental Flowering Plants specifying their common names, scientific names and families

S. No.	Botanical name	Common name	Family
1	<i>Bignonia spec.</i>	Crossvine	Bignoniaceae
2	<i>Bougainvillea spec.</i>	Bougainvillea	Nycatginaceae
3	<i>Calendula spec.</i>	Marigold	Asteraceae
4	<i>Catharanthus spec.</i>	Periwinkle, sadabahar	Apocynaceae
5	<i>Celosia spec.</i>	Cockscombs	Amaranthaceae
6	<i>Chrysanthemum spec.</i>	Guldaudi	Asteraceae
7	<i>Dahlia spec.</i>	Dahlia	Asteraceae
8	<i>Dianthus spec.</i>	Carnation	Caryophyllaceae
9	<i>Delphinium spec.</i>	Lark spur	ranunculaceae
10	<i>Dombeya spec.</i>	Dombeya	Malvaceae

11	<i>Euphorbia pulcherrima</i>	Poinsettia	Euphorbiaceae
12	<i>Gerbera spec.</i>	Daisy	Asteraceae
13	<i>Gladiolus spec.</i>	Sword lily	Iridaceae
14	<i>Hibiscus-rosa-sinensis</i>	China rose, gudhal	Malvaceae
15	<i>Helenium spec.</i>	Snnezeweed	Asteraceae
16	<i>Iberis amara</i>	Candytuft	Cruciferae
17	<i>Kalanchoe blossfeldiana</i>	Pattharchatta	Crassulaceae
18	<i>Lilium sativum</i>	Lily	Liliaceae
19	<i>Nerium oleander</i>	Oleander, kaner	Apocynaceae
20	<i>Orchid spec.</i>	Orchid	Orchidaceae
21	<i>Osteospermum spec.</i>	Daisybush	Asteraceae
22	<i>Petunia spec.</i>	Petunia	Solanaceae
23	<i>Rosa spp.</i>	Rose, gulab	Rosaceae
24	<i>Salvia spec.</i>	Sage	Lamiaceae
25	<i>Tagetes spec.</i>	Genda, marigold	Asteraceae
26	<i>Tropaeolum spec.</i>	Nasturtium	Tropaeolaceae
27	<i>Verbenas pec.</i>	Barbina	Verbenaceae
28	<i>Viola spec.</i>	Violet	Violaceae



List of varieties of Cactus

S.No.	Scientific name	Common name
1	<i>Agave spec.</i>	Agave
2	<i>Chamaelobivia spec.</i>	Peanut cactus
3	<i>Coryphantha spec.</i>	Starry ball
4	<i>Cereus spec.</i>	Cereus
5	<i>Cylindropuntia spec.</i>	Branched pencil cholla
6	<i>Echinocereus spec.</i>	Claret cup hedgehog
7	<i>Echinopsis spec.</i>	Carmine cob
8	<i>Euphorbia spec.</i>	Crown of thorns
9	<i>Ferocactus spec.</i>	Barrel cactus
10	<i>Hatiora spec.</i>	Drunkard's dream
11	<i>Mammillaria spec.</i>	Pincushion cactus
12	<i>Opuntia microdasys</i>	Bunny cactus
13	<i>Yucca spec.</i>	Needle palm





**SOPHIA GIRLS' COLLEGE (AUTONOMOUS)
AJMER**

Euphorbia milli

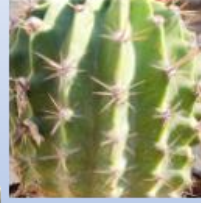


Coryphantha

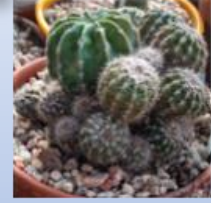


*Varieties
of
Cactus*

Echinocereus



Echinopsis



Cereus



Cylindropuntia



Opuntia microdasys

Euphorbia



Mammillaria



SOPHIA GIRLS' COLLEGE (AUTONOMOUS), AJMER

Varieties of Succulents





fauna

List of Arthropods

S.NO.	COMMON NAME	SCIENTIFIC NAME
BUTTERFLIES		
1	Blue Pansy	<i>Junonia orithya</i>
2	Common Emigrant	<i>Catopsilia pomona</i>
3	Common Gull	<i>Ceporanerissa</i>
4	Common Mormon	<i>Papilio polytes</i>
5	Common Rose	<i>Pachilopta aristolochiae</i>
6	Lemon Pansy	<i>Junonia lemonias</i>
7	Common Three Ring	<i>Ypthima asterope</i>
8	Common Grass Yellow	<i>Eurema hecabe</i>
9	Plain Tiger	<i>Danaus chrysippus</i>
10	Tawny Coster	<i>Acraea terpsicore</i>
SPIDERS		
1	Common Wall Jumping Spider	<i>Menemerus bivittatus</i>
2	Daddy Long Leg Spider	<i>Artema atlanta</i>
3	Orb Weaver Spider	<i>Araneus</i> sp.
4	White Crab Spider	<i>Thomisus lobosus</i>
5	Wolf Spider	<i>Lycosa</i> sp.
ARACHNID		
1	Indian Scorpion	
DRAGON FLY		
1	Ditch Jewel	<i>Brachythemis contaminata</i>
2	Granite Ghost	<i>Bradinopyga geminata</i>
INSECTS		
1	Black garden Ants	<i>Lasius</i> sp.
2	Honey Bee	<i>Apis</i> sp.
3	Housefly	<i>Musca domestica</i>
4	Indian Painted Grasshopper	<i>Poikilocerus pictus</i>
5	Red Cotton Stainer	<i>Dysdercus koenigii</i>
6	Termites	<i>Odontotermes obesus</i>



List of Aves (birds)

S. No.	Common Name	Scientific Name
	Hérons, Egrets & Bitterns	Ardeidae
1	Cattle Egret	<i>Bubulcus ibis</i>
2	Indian Pond-Heron	<i>Ardeola grayii</i>
	Ibises & Spoonbills	Threskiornithidae
3	Black Ibis	<i>Pseudibis papillosa</i>
	Hawks, Eagles, Buzzards, Old World Vultures, Kites, Harriers	Accipitridae
4	Black-shouldered Kite	<i>Elanus caeruleus</i>
5	Black Kite	<i>Milvus migrans</i>
6	Shikra	<i>Accipiter badius</i>
	Pheasants, Partridges, Quails	Phasianidae
7	Grey Francolin	<i>Francolinus pondicerianus</i>
8	Indian Peafowl	<i>Pavo cristatus</i>
	Plovers, Dotterels, Lapwings	Charadriidae
9	Red-wattled Lapwing	<i>Vanellus indicus</i>
	Ibisbill, Avocets & Stilts	Recurvirostridae
10	Black-winged Stilt	<i>Himantopus himantopus</i>
	Pigeons & Doves	Columbidae
11	Blue Rock Pigeon	<i>Columba livia</i>
12	Little Brown Dove	<i>Streptopelia senegalensis</i>
13	Eurasian Collared-Dove	<i>Streptopelia decaocto</i>
14	Yellow-legged Green-Pigeon	<i>Treron phoenicoptera</i>
	Parakeets & Hanging-Parrots	Psittacidae
15	Rose-ringed Parakeet	<i>Psittacula krameri</i>
16	Plum-headed Parakeet	<i>Psittacula cyanocephala</i>
	Cuckoos, Malkohas & Coucals	Cuculidae
17	Asian Koel	<i>Eudynamys scolopacea</i>
18	Greater Coucal	<i>Centropus sinensis</i>
	Owls	Strigidae
19	Spotted Owlet	<i>Athene brama</i>
	Kingfishers	Alcedinidae

20	White-breasted Kingfisher	<i>Halcyon smyrnensis</i>
	Bee-eaters	Meropidae
21	Small Bee-eater	<i>Merops orientalis</i>
22	Blue Cheeked Bee-eater	<i>Merops persicus</i>
	Rollers	Coraciidae
23	European Roller	<i>Coracias garrulus</i>
24	Indian Roller	<i>Coracias benghalensis</i>
	Hoopoes	Upupidae
25	Common Hoopoe	<i>Upupa epops</i>
	Hornbills	Bucerotidae
26	Indian Grey Hornbill	<i>Ocyrceros birostris</i>
	Barbets	Capitonidae
27	Coppersmith Barbet	<i>Megalaima haemacephala</i>
	Woodpeckers	Picidae
28	Lesser Golden-backed Woodpecker	<i>Dinopium benghalense</i>
	Swallows & Martins	Hirundinidae
29	Dusky Crag-Martin	<i>Hirundo concolor</i>
	Wagtails & Pipits	Motacillidae
30	Large Pied Wagtail	<i>Motacilla maderaspatensis</i>
31	White Browed Wagtail	<i>Motacilla maderaspatensis</i>
32	Citrine Wagtail	<i>Motacilla citreola</i>
33	Paddyfield Pipit	<i>Anthus rufulus</i>
	Cuckoo-Shrikes, Flycatcher-Shrikes, Trillers, Minivets, Woodshrikes	Campephagidae
34	Common Woodshrike	<i>Tephrodornis pondicerianus</i>
	Bulbuls & Finchbills	Pycnonotidae
35	Red-vented Bulbul	<i>Pycnonotus cafer</i>
36	White Eared Bulbul	<i>Pycnonotus leucotis</i>
	Shrikes	Laniidae
37	Rufous-backed Shrike	<i>Lanius schach</i>
38	Southern Grey Shrike	<i>Lanius meridionalis</i>
	Thrushes, Shortwings, Robins, Forktails, Wheaters	Turdinae
39	Oriental Magpie-Robin	<i>Copsychus saularis</i>
40	Indian Robin	<i>Saxicoloides fulicata</i>

41	Common Stonechat	<i>Saxicola torquata</i>
42	Indian Chat	<i>Cercomela fusca</i>
	Babblers, Laughingthrushes, Babaxes, Barwings, Yuhinas	Timaliinae
43	Large Grey Babbler	<i>Turdoides malcolmi</i>
	Goldcrest, Prinias, Tesias, Warblers	Sylviinae
44	Ashy Prinia	<i>Prinia socialis</i>
45	Plain Prinia	<i>Prinia inornate</i>
46	Common Lesser Whitethroat	<i>Sylvia curruca</i>
	Flycatchers	Muscicapinae
47	Red-throated Flycatcher	<i>Ficedula parva</i>
48	Gray Headed Canary Flycatcher	<i>Culicicapa ceylonensis</i>
	Sunbirds & Spiderhunters	Nectariniidae
49	Purple Sunbird	<i>Nectarinia asiatica</i>
	Munias (Estrildid Finches)	Estrildidae
50	Indian Silver Bill	<i>Euodice malabarica</i>
	Sparrows & Snowfinches	Passerinae
51	House Sparrow	<i>Passer domesticus</i>
	Weavers	Ploceinae
52	Baya Weaver	<i>Ploceus philippinus</i>
	Starlings & Mynas	Sturnidae
53	Brahminy Starling	<i>Sturnus pagodarum</i>
54	Asian Pied Starling	<i>Sturnus contra</i>
55	Common Myna	<i>Acridotheres tristis</i>
56	Bank Myna	<i>Acridotheres ginginianus</i>
	Orioles	Oriolidae
57	Indian Golden Oriole	<i>Oriolus kundu</i>
	Drongos	Dicruridae
58	Black Drongo	<i>Dicrurus macrocercus</i>
	Crows, Jays, Treepies, Magpies	Corvidae
59	Indian Treepie	<i>Dendrocitta vagabunda</i>
60	House Crow	<i>Corvus splendens</i>






List of Reptiles

S.No.	COMMON NAME	SCIENTIFIC NAME
1	Central Asian Cobra	<i>Naja naja</i>
2	Glossy Bellied Racer Snake	<i>Coluber ventromaculatus</i>
3	Indian Monitor Lizard	<i>Varanus bengalensis</i>
4	Oriental Garden Lizard	<i>Calotes versicolor</i>
5	Spotted Garden Skink	<i>Riopa punctata</i>
6	Common Grass Skink	<i>Eutropis craniata</i>



List of Mammals

S.No.	COMMON NAME	SCIENTIFIC NAME
1	Asian House Shrew	<i>Suncus murinus</i>
2	Domestic Cat	<i>Felis</i> sp.
3	Domestic Dog	<i>Canis</i> sp.
4	Indian House Rat	<i>Rattus rattus</i>
5	Northern Palm Squirrel	<i>Funambulus penantii</i>


Dr. Sr. Pearl
PRINCIPAL
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