ST.JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

VI SEMESTER **ZOOLOGY** TIME:3Hrs/Week

Z-E1-6502(4)**WILDLIFE:DIVERSITY,BEHAVIOR,CONSERVATION&MANAGEMENT**

19-20 admitted batch-“19AG” **SYLLABUS** Max.Marks:100

**OBJECTIVES:**

1. To understand the importance of protecting and conserving wildlife to maintain the ecosystem balance.
2. To acquire knowledge about the natural behavior of animals which help in conservation of endangered species.
3. To gain information about the significance of wildlife as a source of education, tourism & occupation.
4. To gain knowledge about the national parks, sanctuaries and bird areas which play a vital role in preserving wildlife.

**COURSE:**

**UNIT I:INTRODUCTION TO WILDLIFE:–** Wildlife values: Ecological, Commercial, Game, Scientific, Aesthetic and ethical values. Ecological balance, gene bank, plant propagation, scientific importance, soil erosion etc. Ecozones of India and faunal diversity of India. Definition of sanctuary, protected area, reserves etc. Threats to wild life and causes of depletion.

**UNIT II: ANIMAL BEHAVIOUR:**Chemical communication-channels of communication-( odour, sex attraction and olfaction in insects, scent marking), Pheromones, Audio(sound) communication-(various types of sounds, acoustical communication, species and specificity of songs. Territorial behaviour, social organization in primates.

**UNIT III: CONSERVATION AND MANAGEMENT OF WILDLIFE:**

**CONSERVATION STRATEGIES:**(Habitat management, Establishment of parks and sanctuaries, breeding in captivity, reintroduction, mass education, promulgation of laws.)

Indian and International Organizations, Conventions and Societies.

Wildlife laws and ethics.

. **CONSERVATION SCHEMES:**ProjectTiger(names of tiger reserves), Crocodile breeding project(reserves), Project Gir lion,(reserves), Sea turtle project(reserves).

Monitoring of wild life populations (visual count, pellet, Biotelemetry, other tracking devices & methods).

**UNIT IV: ZOO MANAGEMENT AND ECOTOURISM:** Basic considerations for designing a modern zoo. Functions of a modern zoo. Zoo layout and exhibits of animals. Zoo services, Zoo sanitation. ). Care of wild life – injured and sick, disease monitoring and control. Viral, bacterial and protozoan diseases of wildlife. Prospects and trends of Ecotourism – conventional, nature based, sustainable tourism and Ecotourism in India. Definitions of sanctuary, protected area(PA),etc.

**UNIT V: NATIONAL PARKS AND IMPORTANT BIRD AREA’S**: National Parks, sanctuaries and Important Bird Area’s of India, Endangered animals of India. Wildlife offences- relating to animals.

Poaching: prevention & management.

Management of wildlife crime.

Man Animal conflicts & management of conflicts.

**TEXT BOOKS AND REFERENCES:**

1. Wildlife of India by Agarwal K.C.
2. Management of Wildlife by Dwivedi.
3. A text book of Wildlife Management by Singh S.K.
4. Threatened Animals of India by Tikkader.
5. Animal Behaviour by ReenaMathur. Rastogi publications, Meerut.
6. National Parks of India by R.S.Bisht. Publications Division, Delhi.
7. Modern Textbook of Zoology Vertebrates by R.L.Kotpal. Rastogi publications, Meerut.
8. Wildlife in India by V.B.Saharia. Natraj, Dehradun, New Delhi.
9. Animal Behaviour by Reena Mathur.

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ST.JOSEPH’S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM

VI SEMESTER **ZOOLOGY** TIME:3HRS/WEEK

Z-E1-6552(2)**WILDLIFE:DIVERSITY,BEHAVIOR,CONSERVATION&MANAGEMENT**

19-20 admitted batch-“19AG” **PRACTICAL SYLLABUS** MAX.MARKS:50

**OBJECTIVES:**

1. Acquire skill in identifying ecozones of India, National parks and Bird areas.
2. Acquire skill\familiarise students to identify horns ,antlers ,pugmarks etc.
3. Gain knowledge about conservation of endangered animals and suggest methods of conservation.
4. Understand the purpose of conservation, sustainable use, or control of wildlife and its habitats, in order to safeguard sustainable relationships between wildlife and other human interests.
5. Acquire skill in performing experiments on animal behaviour.

**REFERENCE BOOKS:**

1. Identification of beaks and claws in birds: Fowl, Duck, Crow, Woodpecker, Hoopoe, Parrot, Myna and Kingfisher.
2. Identification of types of nests in birds.
3. Identification of claws, nails and hoofs.
4. Identification of horns and antlers.
5. Identification of pug marks, teeth and dental formula of mammals.
6. Identification of spotters: Asiatic lion, Black buck, Ganges River Dolphin, Indian elephant, Slender loris, otter, Sloth bear, Tiger, Gharial, Olive Ridley Turtle, Python, Monitor lizard, Vulture, Great Indian Bustard, Great Indian Horn bill, Jerdon’s Courser, Fish eating Eagle and Indian rhino from flash cards.
7. Map pointing: Ecozones of India, Important National parks and Bird Area’s of South India.
8. Map pointing of the distribution of endangered animals of India.
9. Identification of extinct animals.
10. Habituation to touch in a garden snail.
11. Ant behavoiur.
12. Experiment to study the geotactic response of an earthworm.

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