ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM VI SEMESTER – **ZOOLOGY-ELECTIVE PAPER VII-(B)**

TIME: hrs/week

Z WILD LIFE: DIVERSITY, CONSERVATION & MANAGEMENT Max. Marks: 100 SYLLABUS

OBJECTIVES:

- 1. To understand the importance of protecting and conserving wild life to maintain the ecosystem balance.
- 2. To acquire knowledge of the endangered species, and their conservation.
- 3. To gain information about the significance of wild life as a source of education, tourism & occupation.

COURSE:

UNIT I: Importance of wild life – Ecological, Commercial, Game, Scientific, Asethetic and ethical values. Ecological balance, gene bank, plant propagation, scientific importance ,soil erosion etc). Importance of forests (timber, fuel wood etc.) .Natural resources &their conservation. Wild life values (+, -). Animals in Indian mythology.

Ecozones of India and faunal diversity of India..

UNIT II: Management of Wild life:

Threats to wild life and causes of depletion.

Conservation strategies: (Habitat management, Establishment of parks and sanctuaries, breeding in captivity, reintroduction, mass education, promulgation of laws.) Wild life trade & legislation: Assessment, Documentation, Trade, Wild life laws and ethics.

Illegal wild life trade & pet trade in India – Major trade centre's, routes and related issues. Indian and International Organizations, Conventions and Societies.

UNIT III: Conservation Schemes: Project Tiger(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).

Wild life offences- relating to animals. Poaching: prevention & management . Management of wild life crime .

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 Sanctuaries of Andhra Pradesh. Endangered animals of South India. Economic importance of Wild life. Management of wild animals (translocation to new sites ,Management of excess populations ,rouge animals,etc).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.

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ST.JOSEPH'S COLLEGE FOR WOMEN (AUTONOMOUS), VISAKHAPATNAM
V SEMESTER
ZOOLOGY
TIME: 3 Hrs/Week
Z 5553 (1) WILD LIFE: DIVERSITY, CONSERVATION & MANAGEMENT
W.e.f 2013 -2016 (AA batch)
PRACTICAL SYLLABUS

- 1. Identification of poisonous and non-poisonous snakes: Tropidonotus, Dryophis, Ptyas, Typhlops, Cobra, Krait, Echis carinata, Hydrophis.
- 2. Identification of beaks and claws in birds: Fowl, Duck, Crow, Woodpecker, Hoopoe, Parrot, Myna and Kingfisher.
- 3. Identification of types of feathers: Remex, Rectrix, Contour, Filoplume and Down.
- 4. Identification of types of nests in birds.
- 5. Identification of claws, nails and hoofs.
- 6. Identification of horns and antlers.
- 7. Identification of pug marks, teeth and dental formula of mammals.
- 8. 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.
- 9. Map pointing: Ecozones of India, Important National parks and bird sanctuaries of South India.
- 10. Map pointing of the distribution of endangered animals of India.
- 11. Identification of extinct animals.

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