

# **SYLLABUS**

## **SIX MONTHS CERTIFICATE COURSE OF THE GAME WATCHERS TRAINEES**

**AT**

**FOREST AND WILDLIFE TRAINING  
SCHOOL MIANI @ HYDERABAD**



**SINDH FOREST DEPARTMENT  
GOVERNMENT OF SINDH**

**2019**

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# **SYLLABUS FOR SIX MONTHS COURSE OF THE**

## **GAME WATCHERS TRAINEES**

### **1. WILDLIFE LAW**

1. General study of Sindh wildlife protection ordinance 1972 and Power/ duties of game watcher.
2. Study of relevant portion of forest act with regard to cutting of trees (un-authorized), cultivation, quarry of stones, grazing and hunting of wild animals as applicable in the forest area.
3. Cattle Trespass act 1871
4. The Sindh Wildlife & Protected areas act, 2010.
5. Procedure of Booking Offence.
6. Prosecution & Presentation of Wildlife Offence Case papers.
7. Filling in of a first offence report, Search Nama & Mushir Nama etc.

### **2. PARKS AND WILDLIFE MANAGEMENT**

1. Introduction.
2. Important definitions,
3. Need for wildlife management
4. Wildlife management techniques and their applications with reference to national park, wildlife sanctuary and game reserves.
5. Identification of common wild animals, birds, reptiles etc. and their life cycles as well as breeding and feeding habits.
6. Study of wildlife habitats.
7. Studies on management of national park and amenities provided to the tourists in the park.

8. Wildlife of Pakistan
9. Economic Importance of Wildlife
10. Wildlife Resources in Pakistan

### **3. BOTANY AND WILDLIFE ECOLOGY**

#### **1. Introduction**

- 1.1 Definition of Botany and Biology
- 1.2 Introduction of different Branches of the subject

#### **2. Seed**

- 2.1 Different Kinds of Seeds
- 2.2 Morphology and Structure of Various types of Seeds.

3. Different Kinds Of Roots, Stems, Flowers & Fruits
4. Identification of trees, shrubs, herbs and grasses and their local names.
5. Parts of plants and their functions.
6. Study of plants as nutrient food of wildlife.
7. Study on habits, Population dynamics and migration patterns of wildlife.
8. Identification of common predators and their control and the role played by them.

### **4. WILDLIFE SURVEY**

1. Definition of Wildlife Survey & its Explanation.
2. Map reading, location of position on the map, and identification of features.
3. Identification of wildlife habitats and their documentation.
4. Use of binocular, scope, telescope and other relevant equipments.

5. Use of chains, compass etc.

## **5. SURVEY**

- a. Instruments used in Survey
- b. Prismatic Compass, Dumpy Level, A Level, Theodolite, GPS Devices.

## **6. COMPASS SURVEY**

- c. Prismatic Compass
- d. Parts and Uses
- e. Forward Bearing
- f. Backward Bearing
- g. Reduced Bearings
- h. Use of Prismatic Compass

## **7. MAPS AND MAP READING:**

- i. Plotting
- j. Colouring
- k. Printing
- l. Reducing
- m. Copying
- n. Enlarging of simple Maps by Various Methods (Squares And Proportional compass)
- o. Various Symbols of Maps & Map Reading

## **8. WILDLIFE CONSERVATION**

### **1. IMPORTANT DEFINITIONS.**

- a. Definition of Wildlife & Its Explanation
- b. Definitions of Habitat & Wildlife Ecosystem
- c. Definitions of Protected Areas

### **2. TYPES OF PROTECTED AREAS IN PAKISTAN**

- a. National Parks: 29 Nos
- b. Wildlife Sanctuaries: 99 Nos
- c. Game Reserves: 102 Nos
- d. Community Controlled Hunting Areas: 76 Nos

### **3. TYPES OF PROTECTED AREAS IN SINDH**

- a. National Parks: 01 Nos
- b. Wildlife Sanctuaries: 35 Nos
- c. Game Reserves: 14 Nos
- d. Community Controlled Hunting Areas: 00 Nos

### **4. WILDLIFE PROTECTION METHODS.**

### **5. WILDLIFE CONSERVATION/ PROPAGATION METHODS.**

### **6. BREEDING AND CAPTIVE BREEDING TECHNIQUES.**

### **7. HATCHING AND HATCHERY OPERATIONS.**

### **8. IDENTIFICATION OF WILDLIFE DISEASES AND THEIR CONTROL AND TREATMENT.**

### **9. ECONOMIC IMPORTANCE OF WILDLIFE.**

## **9. RANGE MANAGEMENT**

### **1. RANGE MANAGEMENT**

1. Definition
2. Importance of Rangelands and Range Management
3. Goals of Range Management

### **2. BASIC PRINCIPLES OF WILDLIFE HABITAT**

#### **TECHNIQUES OF RANGE MANAGEMENT.**

1. Correct King of Animal (Livestock)
2. Correct Number of Animals
3. Correct Season of Range use or Grazing
4. Proper (Uniform) Distribution of Livestock on range Areas
5. Range improvement of Practices

### **3. MANAGEMENT OF RANGELANDS AND GRAZING SYSTEMS.**

1. Object of Grazing System
2. Characteristics of good grazing system
3. Effect of grazing on range area
4. Important grazing system in Pakistan

### **4. GRAZING PATTERNS & PRACTICES IN PAKISTAN**

### **5. WATER HARVESTING & ITS TECHNIQUES**

### **6. PROBLEMS AND CONSTRAINTS OF RANGE MANAGEMENT IN PAKISTAN**

### **7. GOLDEN ROLES FOR (RANGE MANAGEMENT) GRAZING SYSTEM:**

### **8. RANGE IMPROVEMENT**

1. Range Improvement Practices

### **9. SHORT QUESTIONS**

1. Animal Equivalent
2. Animal Unit

3. AUM
4. Carrying Capacity
5. Drip / Trickling Irrigation System
6. Ecosystem
7. Frequency of Use
8. Grazing System
9. Grazing Frequency
10. Grazing Intensity
11. Herding
12. Key Area
13. Key Species
14. Light Grazing
15. Range Land
16. Range Management

## **10. HUNTING ETHICS**

1. Identification of hunting weapons.
2. Correct handling and use of hunting weapons.
3. Duties of hunters in respect of hunting laws.
4. Concept of game reserves, sanctuaries and national parks.

## **11. ISLAMIAT AND PAKISTAN STUDY**

1. Preliminary education of Quran, Namaz and other important basic principles and aspects of Islam
2. Geographical study of Pakistan in general and of Sindh province in particular.
3. Study of wildlife zone of Pakistan with special reference to wildlife zones in Sindh.

## **12. PHYSICAL TRAINING, SPORTS , DRILL, SWIMMING, HORSE RIDING, DOGS TRAINING, EMERGENCY & RESCUE**



### **13. 1ST AID AND HYGIENE.**

1. Elementary instructions how to avoid common diseases and measures to be taken in case of attacks. Special lectures will be given for deeping proper sanitations.

### **14. EXAMINATION OF GAME WATCHERS.**

1. Examination of game watchers will be written as well as practical.

### **There will be 900 total marks distributed as under:**

S. No	Name of subjects	Theory marks	Practical marks	Total
1	Wildlife law	75	25	100
2	Parks and wildlife managements	75	25	100
3	Botany and wildlife	50	50	100
4	Wildlife survey	50	50	100
5	Wildlife conservation	75	25	100
6	Range management	75	25	100
7	Hunting ethics	50	50	100
8	Islamiyat and Pakistan Studies	75	25	100
9	General marks by the principal a. PT. drill and sports b. Attendance c. Turnout and upkeep	50 25 10 15		100
			Total Marks	900

### **Certificates will be awarded on securing marks as under:**

1. Honors \_\_\_\_\_ 75% in aggregate and 60% in each subject.
2. Higher \_\_\_\_\_ 40% in each aggregate and 25% in each subject.