## KERALA PUBLIC SERVICE COMMISSION SYLLABUS FOR THE POST OF RANGE FOREST OFFICER IN KERALA FOREST & WILDLIFE DEPARTMENT

## **Optional subject- (Veterinary Science)**

- 1. Acts and Rules related to wild and captive wild animals. Status and conservation practices of wild life in India. National and international organization and institutions related to forests and wildlife. [05 marks]
- 2. Management of sanctuaries, national parks Biosphere reserve etc. Taxonomy of major wild animals. [10 marks]
- 3. Basic physiology and biochemistry of animals

[15 marks]

- 4. Anatomical peculiarities of common wild animals. Feeding habits of wild animals. Restraining, capture, handling, physical examination of wild captive animals. [15 marks]
- 5. Transportation of wild captive animals. Welfare of animals during transportation. Stress Management in wild animals during capture release procedures. [15 marks]
- 6. Basic principles of habitat and housing of various classes of wild captive animals. Size and space requirement (dimension) of cubicles, enclosures of important wild captive animals.

  [10 marks]
- 7. Management of livestock in fringe areas, in and around the breeding areas. Wildlife damage control capture, telemetry. Man-Animal conflict, Mitigation strategies. Dangerous animal crisis management-risk management-public relations. [10 marks]
- 8. Wildlife census. Population dynamics and effective population size of wild animals in captivity or zoo or natural habitats. Contraception-Planned breeding of wild animals. Controlled breeding and assisted reproduction. Breeding for conservation of wild animals.

  [20 marks]
- 9. Non-invasive techniques to assess health and ecology of wildlife populations. Prevention, control and treatment of infectious, parasitic, nutritional and metabolic diseases in zoo and wild animals including exotic birds. Drug delivery in zoo and wild animals.

  [25 marks]
- 10. Indications and general considerations of anaesthesia, Pain and its management in animals, local and regional anaesthesia, Premedication, Uses of premedication. Wild and zoo animal anaesthesia and capture myopathy. Anaesthetic emergencies and management, Toxicity, antidote and reversal agents. Common surgical procedures in wild or captive animals.
  [20 marks]
- 11. Necropsy: Introduction, objectives, pre-necropsy guidelines, procedure for post mortem examination of various species of animals including wild animals, post mortem changes, collection, preservation and dispatch of specimens (morbid materials) for laboratory examination, writing of post mortem report, veterolegal necropsy, veterolegal wounds. Gross and microscopic pathology of important diseases of wild animals [15 marks]
- 12. Classification of zoonoses and approaches to their management. Multisectoral approach for zoonoses prevention and control. Emerging, re-emerging and occupational zoonoses. Role of wild animals and birds in transmission of zoonoses. Epidemiology, clinical manifestations and management of major zoonotic diseases [20 marks]

- 13. General approaches to diagnosis and treatment of poisoning, Toxicity caused by metals and non-metals, agro-chemicals, venomous bites and stings, poisonous plants, fungal and bacterial toxins, environmental pollutants, radiation hazards [15 marks]
- 14. One Health Approach to the management of wild animal diseases. Dynamics of carrier population in Kerala in relation to public health. Analytical and molecular techniques of meat species identification [05 marks]