Theory

Introduction to wildlife, Philosophy and significance of wildlife.

Animal distribution in Pakistan and their affinities.

Important wild animals, distribution, status, conservation and management (population estimates and diversity indices).

IUCN categories of wildlife status.

In-situ, ex-situ conservation,

Wildlife benefits, Zoonotic diseases,

Provincial wildlife rules in Pakistan, Zoo rules, National and International organizations involved in conservation and management of wildlife,

National Park, Wildlife Sanctuary, and Game Reserves in Pakistan,

IUCN protected areas, Eco-regions, Ramsar Convention, Ramsar sites of Pakistan, Major threats to wetlands. Threatened species of Pakistan.

Practicals:

Field work and study of species richness, species evenness, relative abundance, Simpson Index, Shannon Weiner Index.

Demonstration of distribution of animal species of Pakistan, (Blank map will be provided),

Individual presentation of threatened wild animal of Pakistan assigned to students.

Books Recommended:

- 1. Bailey, J.A., 1986. Principles of Wildlife Management, John Wiley.
- 2. Gaston, G. and J. Spicer. 2007. Biodiversity. Blackwell Publishing & Co. London, UK.
- 3. Grimmett, R. Inskipp, C. and Inskipp, T.2001, Birds of the Indian Sub-Continent. Helm.
- 4. Grimmett, R. Roberts, T. J and Inskipp, T. 2008. Birds of Pakistan. Helm Field Guide.
- 5. Hickman, Roberts, and Larsen, 2003. Animal Diversity (3rd Edition).McGraw Hill, New York.
- 6. Hickman, Roberts, and Larsen, 2004. Integrated principles of Zoology (12th Edition).McGraw Hill, New York.
- 7. Jordan, E. L. and Verma, P. S. 2011. Invertebrate Zoology, S. Chand and Company.
- 8. M. S. Khan. 2006. Amphibians and Reptiles of Pakistan. Krieger Publishing Company, Florida USA.
- 9. M. M. Shafique, 2005. Wildlife Acts and Rules of Pakistan. PFI, Peshawar.
- 10. Miller and Harly, 2007. Zoology (7th Edition). McGraw Hill, New York.

- 11. Mirza . Z. B. 1998. Illustrated handbook of Animal Biodiversity of Pakistan. Printopak.
- 12. Mitsch, W. J. and Gosselink, J. G. 2007. Wetlands 4th ed. John Wiley & Sons, Inc.
- 13. Odum, E.P., 1994. Fundamentals of Ecology, W.B. Saunders.
- 14. Pough, F. H., Janis, C. M. and Heiser, J. B. 2006. Vertebrate Life, 6th Ed. Pearson Prentice Hall. 15. Prasad, S. N. and Kashyap, V. 2011.A textbook of Vertebrate Zoology, New Age International
 - Publishers.
 - 16. Punjab Wildlife Act 1974. Government of the Punjab.
- 17. Roberts, T. J. 1991. Birds of Pakistan. Vol. I Oxford
- 18. Roberts, T. J. 1992. Birds of Pakistan. Vol. II. Oxford
- 19. Roberts, T. J. 1997. Mammals of Pakistan. Vol. II. Oxford
- 20. Roberts, T. J. 2005. Field Guide to the large and Medium-sized Mammals of Pakistan. Oxford 21. Roberts, T. J. 2005. Field Guide to the small Mammals of Pakistan. Oxford 22. Robinson, W.L. and Bolen, E.G., 1984. Wildlife Ecology and Management. McMillan,
- Cambridge. 23. S. S. Ali, 1999. Zoogeography, Paleontology and Wildlife Management, Naseem Book Depot, Hyderabad.
- 24. Singh, S. K. 2005. Text Book of Wildlife Management. IBDC
- 25. Smith, R. L. 1980. Ecology and field biology, Harper and Row.