

- Tissue culture
- Immuno technology – AIDS
- Role of biotechnology in medicine

(III) Wild life :-

Wild life (Conservation and management)

(a) Introduction to wild life :-

Following topics to be taught :

- (i) What is wild life?
- (ii) Causes of wild life depletion, importance of its conservation, wild life protection Act 1972.
- (iii) Introduction to National Parks (NP) and Sanctuaries (S) with special reference to
 - Ghana (Bharatpur)
 - Sundarbans (Tiger reserve)
 - Gir NP and S
 - Marine NP and S

(b) Some important National Parks (NP), Sanctuaries and Conservation projects.

(Elementary knowledge only)

- Dudhava NP
- Dalma NP
- Dachigam NP (Kashmir)
- Bandipur NP (Madhumalai)
- Kanha NP
- Ghana (Bharatpur) S & NP.
- Sundarbans Tiger Reserve
- Corbet Park
- Kaziranga
- Peryar S.

- Projects :-
- (1) Project Tiger
 - (2) Gir Lion Sanctuary Project
 - (3) Musk Deer Project

(c) Some National Parks and Sanctuaries of Gujarat :-

- Gir NP & S
- Velavedar
- Marine NP & S
- Vansda NP
- Wildass S
- Ratanmahal Sloth bear S.
- Hingolghadh Nature Education S
- Khijadia bird S.
- Nalsarovar bird S

(d) Wildlife Management :-

- Tools & Techniques for wildlife management

(IV) Fisheries :-

- (i) Fish Processing :- Various methods of preservations like deep freezing , cold storage, canning, smoking, salting & sun-drying.
- (ii) Fish Pathology :- Study of various diseases caused by bacteria, fungi, protozoa, worms & crustaceans and their preventive measures.
- (iii) Pond construction & lay out.
 - Natural and cultivative ponds
 - Induced breeding methods in fishes, their collection and transport.
- (iv) Effects of pollution on fresh water & marine fisheries.

(V) Bioinformatics :-

- Historical perspective on computers and their applications to biology.
- Operating systems – WINDOWS.
- Introduction to Programming.
- Sequence analyses- Basic concepts and operational aspects.