

Paper Code: BZ-SEC-1  
Instruction: .....h / week

Semester Exam:  
.....Marks  
Duration:  
.....hours  
Internal Assessment: .....Marks

### AQUARIUM FISH KEEPING

#### **Unit 1: Introduction to Aquarium Fish Keeping:**

The potential scope of Aquarium Fish Industry as a Cottage Industry, Varieties of aquarium fishes, Biology of Fresh water and Marine Aquarium Fishes their common characters, sexual dimorphism food and feeding and Breeding; Use of live fish feed organisms; Preparation and composition of formulated fish feeds

#### **Unit 2: Maintenance of Aquarium & Transportation::**

Aquarium maintenance; Equipments, water analysis, budget for setting up an Aquarium Fish Farm as a Cottage Industry; Live fish transport - Fish handling, packing and forwarding techniques.

### APICULTURE

#### **Unit 1: Biology & Rearing of Bees**

History, Classification and Biology of Honey Bees Social Organization of Bee Colony  
Artificial Bee rearing (Apiary), Beehives – Newton and Langstroth ,  
Bee Pasturage Selection of Bee Species for Apiculture, Bee Keeping Equipment ,  
Methods of Extraction of Honey (Indigenous and Modern)

#### **Unit 3: Diseases, Enemies and Bee Economy**

Bee Diseases and Enemies  
Control and Preventive measures  
Products of Apiculture Industry and its Uses (Honey, Bees Wax, Propolis), Pollen  
Etc Bee Keeping Industry – Recent Efforts, Modern Methods in employing artificial  
Beehives for cross pollination in horticultural gardens

Paper Code: BZ-SEC-2 Semester Exam:  
Instruction: .....h / week .....Marks  
Duration: .....hours  
Internal Assessment: .....Marks

## MEDICAL DIAGNOSTICS

### **Unit 1: Introduction and Diagnostics Methods Used for Analysis of Blood & urine:**

Introduction to Medical Diagnostics and its Importance, Blood composition, Preparation of blood smear and Differential Leucocyte Count (D.L.C) using Leishman's stain, Platelet count using haemocytometer, Erythrocyte, Sedimentary Rate (E.S.R), Packed Cell Volume (P.C.V.); Urine Analysis: Physical characteristics; Abnormal constituents

### **Unit 2: Infectious Diseases and Non-infectious Diseases:**

Tuberculosis and Hepatitis: Causes, types, symptoms, diagnosis and prevention; Diabetes and Hypertension - Causes, types, symptoms, complications, diagnosis and prevention. Testing of blood glucose using Glucometer/Kit, Tumor: Types (Benign/Malignant), Detection and metastasis; Medical imaging: X-Ray of Bone fracture, PET, MRI and CT scan (using photographs).