

SYLLABUS OF VOCATIONAL COURSES

- 1. NUTRITION AND HEALTH SCIENCE (CREDITS: 3)**
- 2. ORGANIC FARMING (CREDITS: 3)**
- 3. PEARL CULTURE (CREDITS: 3)**

NUTRITION AND HEALTH SCIENCE

(CREDITS: 3)

OBJECTIVES:

1. To familiarize the students with fundamentals of food, nutrients and their relationship to health.
2. To enable students to identify and contribute to the prevention of public health/ social health problems in the country.
3. To equip students with workable knowledge to treat common illnesses at home.

UNIT I:

Basic concepts in Food and Nutrition, Understanding relationship between food, nutrition and health, Functions of food - Physiological, psychological and social

UNIT II:

Functions, dietary sources and clinical manifestations of the following nutrients: Carbohydrates, lipids and proteins, Fat soluble vitamins - A, D, E and K, Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B12 and vitamin C Minerals – calcium, iron and iodine

UNIT III:

Introduction to Nutritional deficiency diseases Causes, symptoms, treatment, prevention of the following: Protein Energy Malnutrition (PEM), Vitamin A Deficiency (VAD), Iron Deficiency Anaemia (IDA), Iodine Deficiency Disorders (IDD), Zinc Deficiency, Fluorosis

UNIT IV

Social health problems : Smoking, Alcoholism, Drug addiction, AIDS including AIDS Control Programme

ORGANIC FARMING

(CREDITS: 3)

OBJECTIVES:

1. To familiarize the students with types of farming.
2. To enable students to process of organic farming, organic fertilizers, Plants nutrients and various manure.

Unit I

Types of Farming (Advantage & disadvantage of each system): Pure Organic Farming – Definition, Concept & Benefits, Integrated Farming system (Combination of Organic and Inorganic), Mixed Farming, Concept of different cropping systems in relation to Organic Farming (Inter cropping etc)

Unit II

Organic Farming (Process): Concept of farming system, Developing organic farms, Important steps & methods, Need of Organic Fertilizer; Benefits of Organic Fertilizer; Preparation of Organic Fertilizer

Unit III

Plant Nutrients: Name of plant Nutrients with gradation, Functions of Nutrients in plant growth and Development, Nutrient uptake and Utilization by plant: (From Organics) From Inorganic

Unit IV

Organic Manure – FYM/Rural compost, City compost, Oil cakes, Animal wastes, Vermi composts, etc; Green Manure – Green Manure with Leguminous crops in crop rotation. In-situ incorporation of crop residues –Benefits; Liquid Manure

PEARL CULTURE

(CREDITS: 3)

Objectives

1. To understand the basic concept of pearl culture and elementary knowledge regarding the Anatomical and Physiological aspects of fresh water oysters.
2. To familiarize with the various types of implantation methods and pearl culture surgery techniques.
3. Production of pearl and its marketing for economic gain.

UNIT I

Introduction to pearl culture. Global and national status of pearl culture, History of pearl culture, Significance of pearl culture, Quantity and quality assessment, culture requirement

UNIT II

Management of pH of water, Depth of water, Water temperature, Medication of water to avoid infection, Soil and water quality standards, organic and inorganic fertilizers, fertilizer grade, source, rate and frequency of application, bio fertilizers

UNIT III

Types of oysters Fresh water oysters. Mantle cavity and gonadal identification, Morphology and heir taxonomic importance. Internal anatomy: Alimentary canal and associated structure, Nutritional requirements of oyster

UNIT IV

Pearl oyster Surgery, Selection of Oyster, Half round Pearl, Spherical Pearl, Nucleus implantation, Surgery and precautions. Beads insertion., Graft tissue preparation, Sorting of Pearl. Marketing and economics concerned with Pearl Culture