

# DEPARTMENT OF BIORESOURCES

## SEMESTER –III

Subject Code: BR19007OE

Credits: four (04)

### HORMONES IN HUMAN HEALTH

#### Unit: I

**Hormones:** Introduction, Classification, and Characteristics of Hormones, biosynthesis and functions of hormones from Pituitary Gland, Pineal gland, Thyroid Gland, Parathyroid Gland, Adrenal Gland, Pancreas.

#### Unit: II:

**Hormones in Reproduction:** Male and female reproductive system, Functional Anatomy, Gonadotropin Regulation of Gonadal Function, Physiologic Effects of Androgens at Target Organs. Ovarian Hormone Synthesis, Physiologic Effects of Ovarian Hormones, Menstrual cycle and its regulation

#### Unit: III

**Hormonal Disorders:** Mechanism of Hormone action, Feedback mechanism of hormonal regulation, Endocrine Disorders their types, causes, symptoms, diagnosis and treatment (Hyperthyroidism, Thyroiditis, Goiter, Obesity, Gigantism, Diabetes, PCOS, Hypoglycemia , Addison's Disease, Cushing Disease)

#### Unit: IV

**Hormone Therapy:** Hormones and therapeutic agents, Hormone replacement therapy, role of hormones in postmenopausal disorders, ovarian cancer, colorectal cancer, breast cancer, endometrial cancer, stroke, blood clots and heart disease.