

Tripura University

(A Central University)
Suryamaninagar
West Tripura

Syllabus for
Four Years Undergraduate Programme Subject:
Human Physiology
(As per NEP-2020)

6th Semester (Minor)

Revised as on October, 2025

Semester-VI

Paper- 6A (Theory) HP-601M

Full marks-60 (Internal assessment-30; End Sem. Exam. -45)

Unit-1: Excretory System-I

- 1. Histology, Structural and Anatomy of kidney and nephron. Glomerular filtration, GFR, measurements, regulation.
- 2. Juxta-glomerular apparatus.
- 3. Formation of hypotonic and hypertonic urine formation, Counter-current mechanism.
- 4. Non-excretory functions of kidney.

Unit-2: Excretory System-II

- 1. Regulation of acid-base balance of the body- Role of kidney.
- 2. Physiology of urinary bladder and micturition.
- 3. Normal and abnormal constituents of urine, and pathophysiological significance.
- 4. Renal function tests. Disorders of renal functions. Artificial kidney.

Unit-3: Body temperature regulation

- 1. Histology and functions of skin.
- 2. Skin wounds, classification and phases and mechanisms of wound healing.
- 3. Sweat glands –structure and composition of sweat.
- 4. Mechanism of sweat formation, secretion and its regulation. Insensible perspiration. Heat Stress, Pyrexia, hyperthermia and hypothermia.

Paper-6B (Practical)

HP-601M

Full marks-40 (Internal assessment-16; End Sem. Exam. -24)

CONTENTS:

- 1. Study of Models for anatomical position and functions of organs of digestive system and excretory system and skin.
- 2. Study and identification of histological slides of digestive system and excretory system.
- 3. Urine analysis: Identification of abnormal constituents of urine (albumin, ketone, glucose, bile salt).
- 4. Preparation of buffer solution and determination of pH.