



Tripura University

(A Central University)

Suryamaninagar

West Tripura

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

5th Semester (Minor)

Revised as on October, 2025

3rd YEAR
Semester-V
Paper- 5A (Theory)
HP-501M

Full marks-60 (Internal assessment-24; End Sem. Exam. -36)

Unit-1: Digestion & Absorption I

1. Anatomy and histology of alimentary tract & digestive glands.
2. Mechanism of swallowing,
3. Movements of alimentary canal. Peristalsis.
4. Composition and function of salivary, gastric Juice, mechanism secretion
5. Composition and function pancreatic and intestinal juice- mechanism of secretion

Unit – 2: Digestion and absorption II

1. Gastro-intestinal hormones.
2. Composition of Bile and its functions, enterohepatic circulation of bile salts.
3. Digestion and absorption of carbohydrates, proteins and fats.
4. Vitamins & minerals-sources, functions and deficiency symptoms.

Unit-3: Metabolism I

1. Glycolysis and TCA cycle - pathway and significance.
2. Gluconeogenesis, pentose phosphate pathway
3. Glycogenesis, Glycogenolysis- pathway and significance.
4. Energetic of glycolysis and TCA cycle.

Unit-4: Metabolism II

1. Fatty acid biosynthesis, β -oxidation,
2. Ketone body synthesis and significance.
3. Synthesis and function of cholesterol,
4. Ketogenic and glucogenic amino acids, Transamination and Deamination, Urea cycle.

Paper-5B (Practical)

HP-501M

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

CONTENTS:

1. Qualitative identification of physiologically important substances –
2. HCL, Lactic acid, Uric acid,
3. Albumin, Peptone, Starch, Dextrin, Glucose,
4. Fructose, Lactose, Maltose, Sucrose,
5. Bile salt, Acetone, Glycerol, urea.