



VIT
Vellore Institute of Technology

Final Assessment Test – April 2025

Course: TBIT205L - Human Anatomy and Physiology

Class NBR(s): 2331 / 2333

Time: Three Hours

Slot: C1+TC1

Max. Marks: 100

- KEEPING MOBILE PHONE/ANY ELECTRONIC GADGETS, EVEN IN 'OFF' POSITION IS TREATED AS EXAM MALPRACTICE
- DON'T WRITE ANYTHING ON THE QUESTION PAPER

Answer ALL Questions

(10 X 10 = 100 Marks)

1. Illustrate and explain the architecture and role of the cell membrane. Additionally, detail the processes of cellular transport and the mechanisms involved.
2. Describe the various types of blood and outline the mechanism of blood coagulation.
3. Examine the absorption processes of carbohydrates, proteins, and lipids within the digestive system, highlighting the unique adaptations of each segment for the effective breakdown of these macromolecules.
4. Neatly describe the structure and function of the basic unit of the renal system and its various types.
5. The pituitary gland, often referred to as the "master gland," plays a crucial role in regulating various physiological processes in animals by secreting a range of hormones. Each hormone produced by the pituitary gland is designed to act on specific target sites within the body. Would you like to elaborate on these hormones?
6. Explain how the female reproductive system is regulated by hormones. Emphasize the hormone secreted by the ovary, and helps to maintain pregnancy.
7. Describe about the respiratory tract and its functions, along with the neurological regulation of respiration.
8. Which gland is referred to as a mixed gland? Please provide explanation of its mechanism of action, accompanied by a diagram.
- 9.a) Neatly describe the structural component and working mechanism of heart along with blood circulation track.

OR

- 9.b) Give the details anatomy and function of the Heart's Electrical System. Highlight the detailed mechanism of myocardial infarction.
- 10.a) Provide a concise overview of the various components of the brain, accompanied by a clear diagram.

OR

- 10.b) Briefly explain the difference between an electrocardiogram and a electroencephalogram their purpose in medical test?

⇔⇔⇔ Y/D/TY ⇔⇔⇔