

Con. 6342-10. Sem 3 - Biomed - Human Anatomy & Physiology GT-6264  
(3 Hours) [ Total Marks : 100

**N.B. :** (1) Question No. 1 is compulsory.

(2) Attempt any four questions out of remaining six questions

(3) Illustrate answers with sketches wherever required.

(4) Draw neat and labelled sketches.

1. (a) Explain the cardiac cycle. Define stroke volume and cardiac output. 8  
(b) Define cell, Tissue and organ with examples. 8  
(c) Functions of Liver. 4
2. (a) Describe the anatomy of Small Intestine. What are the functions of Pancreatic Juice. 10  
(b) Describe the factors which maintain the Blood Pressure. 10
3. (a) Describe the mechanism of hearing. 10  
(b) Write short notes on :- 10  
(i) Functions of Skin  
(ii) Lens of the eye.
4. (a) Describe the microscopic structure of a Nephron. 10  
(b) Explain the formation of Urine. 10
5. (a) Describe the various respiratory volumes and capacities. 10  
(b) With the help of neat diagram, explain internal and external respiration ? 10
6. (a) Explain in detail the various actions carried out by Androgens, Oestrogens and Progesterone. 10  
(b) What are endocrine glands ? Name the various endocrine glands, their secretions and its functions. 10
7. (a) What is Reflex action and what do you understand by reflex arc ? 5  
(b) Explain the concept of Action Potential. 10  
(c) Role of sympathetic and parasympathetic Nervous system. 5

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