

**B. PHARM**  
**(SEM II) THEORY EXAMINATION 2022-23**  
**HUMAN ANATOMY AND PHYSIOLOGY-II**

Total Marks: 75

Time: 3 Hours

Note: 1. Attempt all Sections. If require any missing data: then choose suitably.

10 x 2 = 20

**SECTION A**

1. Attempt all questions in brief.
- What do you mean by synapse?
  - Sequentially enlist different layers of meninges.
  - Discuss about brush border enzyme.
  - Outline the process of digestion.
  - Define vital capacity.
  - Determine net filtration pressure.
  - Recall any two functions of thyroid gland.
  - Differentiate between exocrine and endocrine glands.
  - Define spermatogenesis and oogenesis.
  - Explain importance of pineal gland.

**SECTION B**

2. Attempt any two parts of the following: 2 x 10 = 20
- Explain anatomy of spinal cord with the help of a diagram.
  - Outline the physical characteristics and composition of normal urine. Discuss the physiology of urine formation.
  - Explain anatomy and physiology of female reproductive system.

**SECTION C**

3. Attempt any five parts of the following: 7 x 5 = 35
- Categorize different parts of the brain. Explain structure of cerebrum and its functional organization.
  - Summarize various parts of digestive system and discuss anatomy and physiology of small intestine with structure of microvilli.
  - Explain various steps of neurohumoral transmission.
  - Explore mechanism of respiration with special emphasis on external and internal respiration.
  - Discuss structure of pituitary gland and explain functions of various hormones secreted from pituitary gland.
  - Elaborate digestion of carbohydrate, protein and lipid in human body.
  - Outline the various phases of pregnancy with detailed explanation on fertilization.