

Anatomical Study of the Urinary System

Experiment 28 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Aim

To identify the main structures of the urinary system on models, charts or preserved teaching material.

Principle

Nephrons form urine; the collecting and urinary passages convey it. Structural relationships help explain the physiological function.

Structures and Functional Link

- Renal cortex, medulla, pelvis, nephron model, ureter, bladder and urethra.
- Renal filtration and tubular processing → collecting system → ureters → bladder → urethra.
- Filtration, reabsorption and secretion are distinct renal processes.

Requirements

- Kidneys and urinary tract model or chart
- Institution-approved preserved demonstration material if available
- Labelled drawing sheet

Procedure

1. Orient

Identify the anatomical position and major divisions of the model or chart.

2. Identify

Locate and label: Renal cortex, medulla, pelvis, nephron model, ureter, bladder and urethra.

3. Trace function

Renal filtration and tubular processing → collecting system → ureters → bladder → urethra.

4. Compare structures

Relate tissue or organ design to its major function.

5. Record

Draw a labelled schematic and explain the functional pathway in your own words.

Human Anatomy and Physiology

Observations and Record

Structure / pathway	Identification / function
Main structures	_____
Inlet / outlet or connections	_____
Labelled drawing	_____
Functional pathway	_____
Structure-function explanation	_____

Result

The main structures were identified and labelled as _____. The functional pathway was explained as _____.

Precautions

- Handle museum material only as authorised.
- Use the provided orientation rather than assuming left/right from the viewer's position.
- Do not infer a patient diagnosis from the teaching model.

Viva Questions and Answers

1. Which structures should be identified?

Renal cortex, medulla, pelvis, nephron model, ureter, bladder and urethra.

2. What pathway should be traced?

Renal filtration and tubular processing → collecting system → ureters → bladder → urethra.

3. What key concept is illustrated?

Filtration, reabsorption and secretion are distinct renal processes.

Continue Learning with FirstHope

Complete Notes on the FirstHope App

Complete subject and semesters are available on FirstHope app only.

- Get complete subject and semester notes in the FirstHope app.
- Available for B.Pharm, D.Pharm, M.Pharm and Pharm.D students.

[Click here to get the FirstHope app](#)

Join the FirstHope Telegram Channel

Join FirstHope Notes and keep up with channel updates.

[Click here to join Telegram](#)

Instagram

@firsthope.official

[Click here to follow Instagram](#)

YouTube Channel

FirstHope-Pharmacy / Live streams

[Click here to watch the YouTube channel](#)

WhatsApp Channel

Follow FirstHope on WhatsApp.

[Click here to join the WhatsApp channel](#)

FirstHope Website

firsthopenotes.com

[Click here to visit the website](#)