

Anatomical Study of the Nervous System

Experiment 31 - Practical Notes

Name: _____ Roll no.: _____ Date: _____

Aim

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

Principle

Central and peripheral components link sensory input, processing and motor output. Structural relationships help explain the physiological function.

Structures and Functional Link

- Cerebrum, cerebellum, brainstem, spinal cord, meninges and peripheral nerves.
- Receptor → sensory pathway → central processing → motor pathway → effector.
- Somatic and autonomic pathways serve different targets and functions.

Requirements

- Brain, spinal cord and major nerves 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: Cerebrum, cerebellum, brainstem, spinal cord, meninges and peripheral nerves.

3. Trace function

Receptor → sensory pathway → central processing → motor pathway → effector.

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?

Cerebrum, cerebellum, brainstem, spinal cord, meninges and peripheral nerves.

2. What pathway should be traced?

Receptor → sensory pathway → central processing → motor pathway → effector.

3. What key concept is illustrated?

Somatic and autonomic pathways serve different targets and functions.

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