

B.Sc., PHYSICIAN ASSISTANT

PHYSIOLOGY PUZZLE

UNIT - 1

TOPIC - INTRODUCTION TO PHYSIOLOGY

TOTAL MARKS - 10 MARKS

Puzzle: Logical Reasoning Puzzle - "System Synergy Matrix"

Four physiological systems - Nervous, Endocrine, Cardiovascular, Respiratory -each have a unique signaling mode (electrical impulses, chemical messengers, fluid transport, gas exchange), primary organ (brain, thyroid, heart, lungs), and interact with one other system for integrated function.

Complete the 4x4 grid using these clues:

- **Clue 1:** The system using electrical impulses originates in the brain and interacts with the chemical messenger system for stress responses.
- **Clue 2:** Gas exchange in the lungs does not interact with fluid transport but relies on it indirectly for oxygen delivery.
- **Clue 3:** Chemical messengers from the thyroid interact with the heart's fluid transport to regulate metabolic rate.
- **Clue 4:** The heart's fluid transport uses pumping action and interacts with lungs for oxygenation.

B.Sc., PHYSICIAN ASSISTANT

PHYSIOLOGY PUZZLE

TASKS:

- Fill the grid rows (systems) with columns (signaling mode, primary organ, interaction).
- Explain one inter-system dependency (e.g., how one relies on another).

RUBRICS:

Criterion	Marks (out of 10)
Grid Completion Accuracy	5
Clue Integration	2
Dependency Explanation	3
Total Marks	10 marks