

Pathophysiology



Health Science Event

Eligible Divisions: Secondary & Postsecondary / Collegiate	Round 1: IN PERSON TESTING 50 Q test in 60 minutes
Solo Event: 1 competitor	

**This event will take place as a written test at SLC
Refer to Conference Agenda for assigned testing time**

Event Summary

Pathophysiology allows members to gain knowledge and skills regarding pathophysiology concepts. This competitive event consists of a written test. In the event of a tie, the essay will be judged to break the tie. This event aims to inspire members to learn about the anatomy and physiology of human diseases impacting the health community.

Sponsorship

HOSA-Future Health Professionals is appreciative for the sponsorship of Pathophysiology by [iCEV](#). iCEV has developed a [special landing page](#) for HOSA competitors and advisors.

Dress Code

Proper business attire or official HOSA uniform.

Competitor Must Provide:

- [Photo ID](#)
- Two #2 lead pencils (not mechanical) with eraser

General Rules

1. Competitors must be familiar with and adhere to the [General Rules and Regulations](#).

Official References

2. The references below are used in the development of the test questions.
 - a. [iCEV Pathophysiology and Anatomy and Physiology Courses](#) (Individual course is \$65. Teacher access for 25 students is \$1500)
 - b. [Frazier. Essentials of Human Diseases and Conditions. Elsevier, Latest edition.](#)
 - c. [Zelman, Mark; Raymond, Jill; Holdaway, Paul; Dafnis, Elaine; Mulvihill, Mary Lou. Human Diseases A Systemic Approach. Pearson. Latest edition.](#)

Written Test

3. [Test Instructions](#): The written test will consist of 50 multiple-choice items in a maximum of 60 minutes.

4. One essay question will be administered with the original test.

5. Test Plan

The test plan for the Pathophysiology Test is:

- Disease Process & Terminology (includes cancer & neoplasms) - 12%
- Body Systems
 - Integumentary - 8%
 - Musculoskeletal - 10%
 - Circulatory & Lymphatic - 12%
 - Respiratory - 8%
 - Digestive - 12%

- Endocrine - 8%
- Nervous & Senses - 10%
- Reproductive - 6%
- Urinary - 6%
- Mental Disorders - 8%

6. Sample Test Questions

1. What area of pathophysiology study is concerned with the examination of the whole tissue? (iCEV online course)
 - A. Cytopathology
 - B. Forensic pathology
 - C. Hematopathology
 - D. Histopathology**

2. Which type of shock is caused by a severe allergic reaction? (Zelman pp 107)
 - A. Anaphylactic**
 - B. Cardiogenic
 - C. Hypovolemic
 - D. Neurogenic

3. What neurotransmitter is produced insufficiently in a patient with Parkinson's disease? (Frazier pp 560)
 - A. Aldosterone
 - B. Dopamine**
 - C. Gamma globulin
 - D. Prednisone

Final Scoring

7. In the event of a tie, the essay will be judged to break the tie.

International Leadership Conference (ILC) qualifiers

Go to <https://hosa.org/guidelines/> for specifics about this competitive event at ILC.
June 17-20, 2026 – Indianapolis Convention Center, Indianapolis, IN