Pathophysiology

Event Category: Health Science

Eligible Divisions: Secondary & Postsecondary/ Collegiate	**Round One: In Person Testing** Written 50 Q test (60 minutes)	**Digital Upload:** NO
Solo Event: 1 competitor		

This event will take place as a written test at SLC (Thursday, March 18th)

Refer to the 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.

General Event Information

General Rules	Competitors must be familiar with and adhere to the General Rules and Regulations.
Dress Code	HOSA's Official Uniform or HOSA Business Dress. Appendix D
Competitors Must Provide	• Photo ID • Two #2 lead pencils (not mechanical) with an eraser • Neon colored foam earplugs, NOT earbuds, for noise control (optional) HOSA Conference Staff will provide equipment and supplies listed in Appendix I.
Official References	The references below are used in the development of the test questions: • iCEV Pathophysiology and Anatomy and Physiology Courses (See special landing page for pricing) • Frazier. *Essentials of Human Diseases and Conditions*. Elsevier, Latest edition. • Zelman, Mark; Raymond, Jill; Holdaway, Paul; Dafnis, Elaine; Mulvihill, Mary Lou. *Human Diseases A Systemic Approach*. Pearson. Latest edition.

ROUND ONE- Test

Test Instructions	All competitors will be given a test and test answer sheet. The written test will consist of 50 multiple choice questions in a maximum of 60 minutes. See test instructions here. An essay tiebreaker question will be administered with the original test. Essay tiebreakers will be completed on the back of the test answer sheet.
Time Remaining Announcements	There will be NO verbal announcements for time remaining during SLC testing. All SLC testing will be completed in the Testing Center, and competitors are responsible for monitoring their own time.

Written Test Plan	The test plan for the Pathophysiology Test is: ● Disease Process & Terminology (includes cancer & neoplasms) - 12% ● Body Systems o Integumentary - 8% o Musculoskeletal - 10% o Circulatory & Lymphatic - 12% o Respiratory - 8% o Digestive - 12% o Endocrine - 8% o Nervous & Senses - 10% o Reproductive - 6% o Urinary - 6% o Mental Disorders - 8%
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

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 22-25, 2027, Pennsylvania Convention Center in Philadelphia, Pennsylvania

The expectation is that competitors read and are aware of all the content within these guidelines and associated links. Successful competitors will study all links for detailed information.

High School/Post-Secondary/Collegiate Seniors

Don't wait until you graduate to join the HOSA alumni network! Graduating from high school or completing your postsecondary/collegiate program does not mean your HOSA journey has to end. As a HOSA member, you are eligible to become a HOSA Lifetime Alumni Member- a free and valuable opportunity to remain connected, give back, and help to shape the future of the organization. Learn more and sign up at hosa.org/alumni.

SC HOSA Scholarship

Application: https://www.schosa.org/students/scholarships/
Application Window Opens: December 1, 2026
Application Deadline: February 1, 2027

National HOSA Scholarship

Scholarship program has funding available for HOSA members who have an interest in various health careers! The application process begins January 1, 2027, and can be found here: https://hosa.org/scholarships/.

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