

Pathophysiology

New for 2019-2020

Competitors are no longer required to show event guidelines. Time remaining announcements have been added to the test. Editorial updates and clarifications have been made to guidelines. Scholarship information has been added to the guidelines. The designation of "Knowledge Test" has been removed from the event name.

Purpose

To encourage HOSA members to improve their ability to identify, spell, define and apply the prefixes, suffixes, roots, anatomy and physiology of human diseases impacting the health community.

Description

This event shall be a written test requiring competitors to apply, analyze, synthesize and evaluate information related to pathophysiology. Competitors will recognize, identify, define, interpret and apply terms related to human diseases and conditions in a 100 item multiple choice test plus one tie-breaker essay question. Written test will measure knowledge and understanding at the recall, application and analysis levels. Higher-order thinking skills will be incorporated as appropriate.

Dress Code

Competitors must be in official HOSA uniform or proper business attire. Bonus points will be awarded for proper dress.

Rules and Procedures

- 1. Competitors in this event must be active members of HOSA-Future Health Professionals and in good standing in the division in which they are registered to compete (Secondary or Postsecondary/Collegiate).
- 2. Competitors must be familiar with and adhere to the "General Rules and Regulations of the National HOSA Competitive Events Program (GRR)."
- 3. One essay question will be administered with the original test. In case of a tie, the essay question will be judged and used to break the tie.
- 4. The test plan and resources for Pathophysiology are:

PATHOPHYSIOLOGY

| • | Disease Proces | s and Terminology | 12% |
|---|------------------|----------------------------|-----|
| | (Including cance | er and neoplasms) | |
| • | Body Systems: | Integumentary | 8% |
| | | Musculoskeletal | 10% |
| | | Heart | 8% |
| | | Blood vessels | 4% |
| | | Lymphatic | 6% |
| | | Respiratory | 8% |
| | | Digestive | 12% |
| | | Endocrine | 8% |
| | | Nervous (including senses) | 12% |
| | | Reproductive | 6% |
| | | Urinary | 6% |

References for Pathophysiology:

- 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.

NOTE: States/regions may use a different process for testing, to include but not limited to pre-conference testing, online testing, and testing at a computer. Check with your Area/Region/State for the process.

- 5. All competitors shall report to the site of the event at the time designated for the event orientation. The test will immediately follow the orientation. At ILC, <u>photo ID</u> must be presented prior to competing. **No proxies will be allowed for the orientation.**
- 6. <u>Test Instructions:</u> The competitors will be given instructions and will be notified to start the test. There will be a maximum of 90 minutes to complete the test. Competitors should leave the testing site promptly after submitting all testing materials and evaluations.
- 7. **TIME REMAINING ANNOUNCEMENTS:** There will be a verbal announcement when there are 60 minutes, 30 minutes, 15 minutes, 5 minutes, and 1 minute remaining to complete the test.
- 8. The competitor should write his/her answer to the tie-breaker essay question on the tie-breaker page of the test that remains attached to the original test.
- 9. HOSA offers numerous scholarships every year to its members interested in pursuing a variety of health careers. As you consider participating in this competitive event, please keep in mind there may be a HOSA Scholarship offered that fits your interests! For more information on the HOSA Scholarship program, please visit http://www.hosa.org/scholarships.

| Competitor Must Provide: ☐ Two #2 lead pencils with an eraser ☐ Photo ID | | |
|--|--|--|
| FOR SPECIFICS ON EVENT MANAGEMENT SEE MANAGING COMPETITIVE EVENTS Required Personnel: | | |

☐ One Judge Manager (JM) to provide quality assurance for the event by ensuring that the

guidelines are followed and all event documents are complete.

☐ Proctors for Testing – Approximately one proctor for 20 competitors

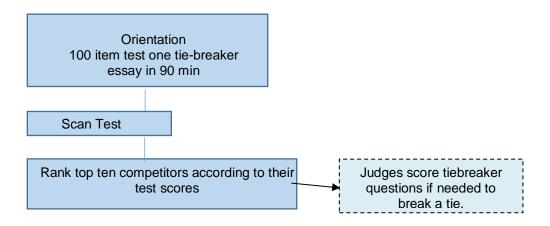
☐ One Event Manager

| | One judge who is considered by the HOSA Competitive Events committee to be an expert in the |
|---|---|
| | area being tested - to grade the essay questions in case of a tie |
| П | Event assistants as needed |

Facilities, Equipment and Materials:

| | One room to accommodate the total number of competitors (see HOSA Room Sets |
|---|---|
| | Tables/chairs or schoolroom desks/chairs for total number of competitors |
| | Table/chairs for event personnel to provide for registration and materials distribution |
| | List of competitors for check-in |
| | One pre-numbered test per competitor |
| | Scantron/answer forms - one copy per competitor |
| | Timer or clock |
| | Evaluation Forms – competitor and personnel |
| П | #2 lead pencils with eraser to complete evaluations (event personnel) |

Event Flow Chart



Sample Test Questions

- 1. The primary cause of osteomalacia is a deficiency or ineffective use of:
 - A. calcium.
 - B. vitamin A.
 - C. iodine.
 - D. vitamin D.
- 2. The type of shock that is caused by a severe allergic reaction is _____ shock.
 - A. anaphylactic
 - B. cardiogenic
 - C. hypovolemic
 - D. neurogenic
- 3. What neurotransmitter is produced in insufficient quantities in a patient with Parkinson's disease?
 - A. aldosterone
 - B. dopamine
 - C. gamma globulin
 - D. prednisone