



Pathophysiology

PLEASE NOTE THE FOLLOWING DIFFERENCES IN HOW THIS EVENT WILL BE RUN AT HOSA CANADA'S FALL LEADERSHIP CONFERENCE (FLC) AND SPRING LEADERSHIP CONFERENCE (SLC):

1. Written test time shortened to 60 minutes (still 100 questions) for both FLC and SLC.
2. Written test will take place online and be open book for both FLC and SLC.

New for 2021-2022

The 7th edition of *Essentials of Human Diseases and Conditions* by Frazier & Fuqua has been released.
The test plan has been updated.

Event Summary

Pathophysiology provides members with the opportunity to gain knowledge and skills regarding pathophysiology concepts. This competitive event consists of a written test with a tie-breaker essay question. This event aims to inspire members to learn about the anatomy and physiology of human diseases impacting the health community.

Dress Code Competitors must be in official HOSA uniform or proper business attire. Bonus points will be awarded for [proper dress](#).

General Rules

1. Competitors in this event must be active members of HOSA-Future Health Professionals and in good standing.
2. Secondary and Postsecondary/Collegiate divisions are eligible to compete in this event.
3. Competitors must be familiar with and adhere to the "[General Rules and Regulations of the HOSA Competitive Events Program \(GRR\)](#)."
4. All competitors shall report to the site of the event at the time designated for each round of competition. At ILC, competitor's [photo ID](#) must be presented prior to ALL competition rounds.

Official References

- [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.](#)

Written Test

5. [Test Instructions](#): The written test will consist of 100 multiple choice items in a maximum of 90 minutes.
6. **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.
7. 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.

8. The test plan for Pathophysiology 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%

*NOTE: **Chartered associations/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/**Chartered Association** for the process you will be using.*

9. **Sample Test Questions**

1. The primary cause of osteomalacia is a deficiency or ineffective use of which nutrient?
 - A. Calcium
 - B. Vitamin A
 - C. Iodine
 - D. Vitamin D**

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

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3. What neurotransmitter is produced in insufficient quantities in a patient with Parkinson's disease?
 - A. Aldosterone
 - B. Dopamine**
 - C. Gamma globulin
 - D. Prednisone

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Final Scoring

10. 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.
11. Final rank is determined by the test score. In case of a tie, the essay question will be used to determine the rank.

Competitor Must Provide:

- Two #2 lead pencils with an eraser
- [Photo ID](#)