

Pathophysiology Knowledge Test



New for 2016 - 2017

Test questions will be taken from new edition of Frazier's Essentials of Human Disease and Conditions (6th edition).

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

- Competitors in this event must be active members of HOSA-Future Health Professionals, 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 the Pathophysiology Knowledge Test is:

PATHOPHYSIOLOGY

•	Disease Proces	s and Terminology	12%
	(Including can	cer 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. **No proxies will be allowed for the orientation.**
- 6. <u>Test Instructions</u> Competitors will be given instructions on the use of the Scantron form. After instructions have been given to the competitors, they will be notified to start the test. There will be a maximum of **90 minutes** to complete the test. There will be a verbal announcement when there are 15 minutes remaining for the test period. Competitors may be excused from the testing site promptly after completion of the test.
- 7. 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.

Competitor Must Provide:			
☐ Event guidelines (orientation)			
#2 lead pencils with an eraser			
☐ Watch with second hand (optional)			

Required Personnel (Per Section):

- 1. One Event Manager
- 2. One section leader
- 3. Test proctors
- One judge who is considered by the National HOSA Competitive Events committee
 to be an expert in the area being tested to grade the essay questions in case of a
 tie
- 5. One-two event assistants per section
- 6. One QA to provide quality assurance for the event by ensuring that the guidelines are followed and all event documents are complete.

Facilities, Equipment and Materials (Per Section):

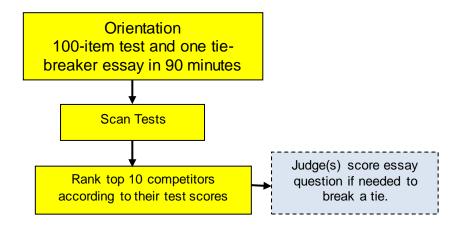
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One room to accommodate the total number of competitors
Tables/chairs or schoolroom desks/chairs for total number of competitors
Table/chairs for event personnel to provide for registration and materials distribution
Test packets which are pre-numbered and Scantron / answer forms
Timer or clock
Evaluation Forms – competitor and personnel
#2 lead pencils with eraser to complete evaluations

Icon Key



The orientation includes an event element. Competitors must bring pencils.

Event Flow Chart



Sample Test Questions

- 1. The primary cause of osteomalacia is a deficiency or ineffective use of:
 - A. calcium.
 - B. iodine.
 - C. vitamin A.
 - D. vitamin D.
- 2. The type of shock that is caused by a severe allergic reaction is:
 - A. anaphylactic shock.
 - B. cardiogenic shock.
 - C. hypovolemic shock.
 - D. neurogenic shock.
- 3. What neurotransmitter is not produced in sufficient quantities in a patient with Parkinson's disease?
 - A. aldosterone
 - B. dopamine
 - C. gamma globulin
 - D. prednisone