



KNOWLEDGE TESTS

- Purpose:** To encourage Health Science students to explore and learn about selected health care careers and to assess knowledge in health-related areas.
- Description of Event:** Each "Knowledge Test" will be a 100 item multiple choice written exam with an essay tie-breaker question. Each test will be related to a specific career or specialty area from within the health care community or related information that applies to several health specialties. Questions will measure knowledge at the recall, application and analysis levels. Students will select only one test and each test will be considered a separate event. Students will be given **1 1/2 hours** to complete the examination.
- Dress Code:** Competitors must be in official HOSA uniform or proper business attire. Five bonus points will be awarded for proper dress.
- Rules and Procedures**
1. Competitors in this event must be active members of HOSA in good standing in the category in which they are registered to compete (Secondary or Postsecondary/Collegiate).
 2. The test shall be developed from the National HOSA test item bank.
 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 plans and resources for the Knowledge Tests for 2011-12 are:

HUMAN GROWTH AND DEVELOPMENT

All stages include biophysical, mental/cognitive, social, and emotional development.

- Culture 10%
- The Family 10%
- Communication 5%
- Theories of Growth and Development 10%
- Prenatal 10%
- Infancy and Toddler 15%
- Early Childhood and School-Age 10%
- Adolescence 10%
- Adulthood: Young, Middle and Older 15%
- Death and Dying 5%

References for Human Growth and Development

- Polan, Elaine and Daphne Taylor, *Journey Across the Lifespan: Human Development and Health Promotion*. F.A. Davis, Latest edition.
- Dacey, John S. & Travers, John F., *Human Development Across the Lifespan*, McGraw Hill College Division, Latest edition.

NUTRITION

- Carbohydrates, fats and proteins 15%
- Vitamins & minerals 15%
- Water (Fluid & electrolyte balance) 5%
- Diet through the life span 10%
- Digestion, absorption and metabolism 10%
- Cultural and religious influences 5%
- Food related illnesses and allergies 10%
- Medical nutrition therapy 30%
 - Diabetes
 - Cardiovascular disease
 - Renal disease
 - Gastrointestinal disease
 - Cancer
 - Clients with special needs

References for Nutrition

- Roth, Ruth. *Nutrition and Diet Therapy*, Delmar Publishers. Latest edition.
- Nix, Staci. *Williams' Basic Nutrition and Diet Therapy*, Elsevier Science/Mosby, Inc. Latest edition.

PATHOPHYSIOLOGY

- Disease Process and Terminology **(Including cancer and neoplasms)** 12%
- 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.
- Mulvihill, Mary Lou. *Human Diseases: A Systemic Approach*. Prentice Hall. Latest edition.

CONCEPTS OF HEALTH CARE

- History in Health Care 15%
- Communications/Personal Relationships 10%
- Health Care Delivery System 15%
- Careers in Health Care 15%
- Legal/Ethical Considerations 30%
- Cultural Diversity 15%

References for Concepts of Health Care

- Simmers, Louise, *Diversified Health Occupations (OR Introduction to Health Science Technology)* Delmar, Latest edition.
- Badash & Chesebro, *Health Science Fundamentals*. Prentice Hall, Latest Edition
- McDermott, Richard E. and Kevin Stocks. *Code Blue: A Tale of Romance, Murder, Mystery and Managed Care*. Traemus Books, Latest edition.
- Edge, Raymond & Krieger, John, *Legal and Ethical Perspectives in Health Care, An Integrated Approach*, Delmar, Latest Edition (Note: This book will be replaced with a different book in 2012-13.)

PHARMACOLOGY

Safety will be integrated throughout the test plan

- Basic Concepts in Pharmacology 12%
- Career Opportunities in Pharmacology 3%
- Ethical and Legal Responsibilities 10%
- Pediatrics and Geriatrics Adaptations 10%
- Drug Names, Classifications, Action, and Interactions 30%
- Drug Administration 20%
- Drug Measurement, Dosage, Conversions 10%
- Technologies in Pharmacology 5%

References for Pharmacology

- Fulcher, Soto and Fulcher. *Pharmacology: Principles and Applications: A Worktext*. Elsevier, Latest Edition.
- Smith, Bonnie J. and Sally Roach. *Introductory Clinical Pharmacology*. Lippincott, Williams and Wilkins, Latest Edition.

5. Competitor numbers will be pre-assigned.
6. 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.** No study materials are allowed in the room.
7. All competitors will be given a test with the test items turned face down. The 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 **1 1/2 hours** to complete the test. There will be a verbal announcement when there are 15 minutes remaining for the test period. Competitors should leave the testing site promptly after completion of the test.
8. The competitor should write his/her answer to the tie-breaker question on the tie-breaker page of the test THAT REMAINS ATTACHED to the original test.

9. Competitors must be familiar with and adhere to the **"General Rules and Regulations of the National HOSA Competitive Events Program."**

Required Personnel (Per Section): No sections within levels.

1. One Event Manager (per event)
2. One section leader for each test area
3. Test proctors
4. 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

Facilities, Equipment and Materials (Per Section):

1. One room to accommodate the total number of competitors
2. Tables/chairs or schoolroom desks/chairs for total number of competitors
3. Table/chairs for event personnel to provide for registration and materials distribution
- *** 4. Number two pencils with an eraser to be brought to the event by the competitor.
5. Test packets which are pre-numbered and Scantron answer forms
6. Scantron machine
7. Answer keys
- *** 8. Print copy of the event guidelines for the event orientation
9. Timer or stopwatch
- *** 10. (Optional) Competitors are encouraged to wear a watch to keep track of the time during the test. Most HOSA event rooms do not have wall clocks.

***To be brought to competitive event by competitors.

Event Flow Chart

