



## KNOWLEDGE TESTS

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- 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 2009-10 are:

### **HUMAN GROWTH AND DEVELOPMENT**

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

- Prenatal 10%
- Infancy and Toddler 15%
- Early Childhood 10%
- School-age 10%
- Adolescent 15%
- Young Adulthood 10%
- Middle Adulthood 10%
- Older Adulthood 15%
- Death and Dying 5%

### **References for Human Growth and Development**

- Simmers, Louise, *Diversified Health Occupations (OR Introduction to Health Science Technology)* Delmar, Latest edition.
- Dacey, John S. & Travers, John F, *Human Development Across the Lifespan*, McGraw Hill College Division, Latest edition.

**NUTRITION**

- Carbohydrates 10%
- Fats 10%
- Proteins 15%
- Vitamins & Minerals 15%
- Diet Through Life Span 10%
- Chemical and Digestion – Physical 10%
- Cultural Influences 5%
- Diet Modification 15%
- Food related illnesses and allergies 10%

*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

## PHARMACOLOGY

Safety will be integrated throughout the test plan

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| • 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 and are required to enter their competitor number and level on the cover sheet of the test, as well as on the Scantron answer 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. 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. Monitors/Graders (if Scantron machine is not used)
4. Test proctors
5. 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
6. Two or more Courtesy Corps members

**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, grading of tests, and materials distribution
4. Official reference books
- \*\*\* 5. Number two pencils with an eraser to be brought to the event by the competitor.
6. Test packets which are pre-numbered and Scantron answer forms
7. Scantron machine (if not graded by hand)
8. Answer keys

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

**Event Flow Chart**