



Last updated: February 25th, 2022

Pharmacy Science

***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 40 minutes (still 50 questions) for both FLC and SLC.
2. Written test will take place online and be open book for both FLC and SLC.
3. Only the written test will be evaluated at FLC.
4. Both Rounds One and Two will take place at SLC. The Round Two skill demonstration at SLC will be **virtual**.
  - a. \*If students participate over Zoom, they must have their cameras on for the entire duration of the event and show the judges their surroundings to help us minimize cheating as much as possible.\*
  - b. \*Students participating over Zoom have the option of demonstrating their skill on a friend/family member.\*
  - c. \*Competitors may verbalize their skill demonstration, especially if they have not purchased the materials required for their event (no points will be deducted).

# Pharmacy Science

## ***New for 2021 – 2022***

*The Pharmacy Technician A Comprehensive Approach* 4<sup>th</sup> Edition by Moini has been released. Skill steps have been updated to align to the new edition. Skill step point values have been revised. Editorial updates have been made for clarity

### **Event Summary**

Pharmacy Science provides members with the opportunity to gain knowledge and skills required in pharmacy-related careers. This competitive event consists of 2 rounds. Round One is a written, multiple-choice test and the top scoring competitors will advance to Round Two for the skills assessment. This event aims to inspire members to learn more about pharmacy careers and practices.

**Sponsorship** This competitive event is sponsored by [CVS Health](#)



**Dress Code** Competitors shall wear proper business attire or official HOSA uniform, or attire appropriate to the occupational area, during both rounds. Bonus points will be awarded for [proper dress](#).

- General Rules**
1. Competitors in this event must be active members of HOSA 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**

5. All official references are used in the development of the written test and skill rating sheets.
  - [Johnston, Mike. The Pharmacy Technician: Foundations and Practices. Pearson, latest edition.](#)
  - American Academy of Allergy, Asthma, and Immunology. Symptoms and Diagnosis tab (as posted as of September 1, 2018) [.https://www.aaaai.org/conditions-and-treatments/allergies/drug-allergy](https://www.aaaai.org/conditions-and-treatments/allergies/drug-allergy)
  - [McCartney, Lisa. Sterile Compounding and Aseptic Technique: Concepts, Training, and Assessment for Pharmacy Technician. Paradigm, latest edition.](#)
  - [Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, Latest edition.](#)

## Round One Test

6. [Test Instructions](#): The written test will consist of 50 multiple choice items in a maximum of 60 minutes.
7. **Time Remaining Announcements**: There will be a verbal announcement when there are 30 minutes, 15 minutes, 5 minutes, and 1 minute remaining to complete the test.
8. **Written Test Plan**

Pharmacy Practice History & Practice Settings .....	5%
Pharmacy Law & Ethics and Safety & Infection Control .....	10%
Pharmacy Terminology & Abbreviations .....	10%
Dosage Formulations & Administration Routes .....	10%
Sterile and Non-Sterile Compounding.....	10%
Concentration & Dilutions .....	10%
Disorders & Treatments.....	45%

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

9. The test score from Round One will be used to qualify the competitor for Round Two.
10. **Sample Test Questions**
  1. What U.S. law was passed based upon international treaties intended to stop the recreational use of opium?
    - A. Sherley Amendment of 1912
    - B. Harrison Narcotic Tax Act of 1914**
    - C. Food, Drug, and Insecticide Administration of 1927
    - D. Food, Drug, and Cosmetic Act of 1938Moini Page 45
  2. The newest forms of insulin have been produced from which source?
    - A. Animal
    - B. Mineral
    - C. Synthetic
    - D. Genetic engineering**Johnston Page 94
  3. If a patient is to receive 1 ounce of an over-the-counter medication, how many tablespoons should be given?
    - A. 1
    - B. 2**
    - C. 4
    - D. 6Moini Page 140

## Round Two Skills

11. Round Two is the performance of a selected skill(s). The skills approved for this event are:

Skill I: Patient Screening for Pharmacist Consultation and Services  
(4 minutes)

Skill II: Verifying Controlled Substance Prescription Content  
and DEA Number (6 minutes)

Skill III: Withdrawing Liquid from a Vial (15 minutes)

Skill IV: Compounding an Oral Suspension (15 minutes)  
 Skill V: Identifying Equipment (*Including name of instrument and purpose or use*) (15 minutes)

Numbered Instruments (15) or photos from list:

Ampules	Eyewash Station	Intravenous System – Roller Clamp	Sharps Container
Autoclave	Heat Gun	Laminar Airflow Hood	Spatula
Auxiliary Labels	Hemostatic Forceps	Liquid Oral Syringe	Suppository Mold – Aluminum Type
Beaker Tongs	Hot Plate	Medication Containers	Suppository Mold – Plastic Type
Beakers	Indicator Strip (used for sterilization)	Medicine Cup	Syringes
Calibrated Spoon	Insulin Syringes	Medicine Dropper	Tablet Mold
Compounding Slabs or Disposable Slabs	Intravenous Injection	Mortar	Tissue Forceps
Conical Graduates	Intravenous System – Drip Chamber	Pestle	Transdermal Patch
Counting Trays	Intravenous System – Injection Port	Pipettes	Tuberculin Syringe
Crimper	Intravenous System – IV Solution Bag	Prefilled, Single-Dose Syringe	Weights
Cylindrical Graduates	Intravenous System – Piggyback Device	Safety Syringes	

Skill VI: Filling A Prescription (5 minutes)  
 Skill VII: Aseptic Garbing, Hand Washing and Gloving (10 minutes)

12. Skill II and/or Skill V may be administered with the Round One written test.
13. The selected Skill(s) will be presented to competitors as a written scenario at the beginning of the round. The scenario will be the same for each competitor and will include a challenging component that will require the competitors to apply critical thinking skills. A sample scenario can be found [here](#).
14. Timing will begin when the scenario is presented to the competitors and will be stopped at the end of the time allowed.
15. The scenario is a secret topic. Competitors MAY NOT discuss or reveal the secret topic until after the event has concluded or will face penalties per [the GRRs](#).
16. Judges will provide information to competitors as directed by the rating sheets. Competitors may ask questions of the judges while performing skills if the questions relate to patient physiology and will be included in the scenario.
17. The competitor must earn a score of 70% or higher on the combined skill(s) of the event (excluding the test and ID equipment) in order to be recognized as an award winner at the ILC.
18. Final rank is determined by adding the round one test score plus round two skill score. In case of a tie, the highest test score will be used to determine the rank.

**Final Scoring**

**Competitors Must Provide:**

- Two #2 lead pencils with eraser
- Ink pen
- Shoe covers
- Face mask
- Hair cover
- Beard cover (if appropriate)
- Hair Tie to pull back long hair (if appropriate)
- Sterile non-shedding gown with snug-fitting cuffs
- Eye shields or goggles
- Sterile, powder-free, latex free gloves
- Watch with second hand (optional-Round Two only)
- A [photo ID](#)

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

Skill I	Patient Screening for Pharmacist Consultation and Services (Time: 4 minutes)	Possible		Awarded
1.	Greeted patient and introduced self.	1	0	
2.	Provided patient privacy by verbalizing or moving to a private area.	1	0	
3.	Recorded patient's name and date of birth on the blank screening form to verify patient.	2	0	
4.	<p>**Asked patient to respond to all questions (5 total) related to screening (as identified in scenario).</p> <p style="text-align: center;"><b>- Judge verifies correct questions are asked using screening checklist (student must memorize questions as they will not have access to questions at the event).</b></p> <p style="text-align: center;">- questions do not have to be asked in order</p>	-		
	a. Question #1	3	0	
	b. Question #2	3	0	
	c. Question #3	3	0	
	d. Question #4	3	0	
	e. Question #5	3	0	
5.	Demonstrated NO distracting elements of nonverbal communication including lack of eye contact, inappropriate facial expressions and body position such as closed posture.	2	0	
6.	Avoided the use of medical jargon during discussion with patient.	2	0	
7.	Spoke with appropriate volume, pitch, inflection, pronunciation and diction.	2	0	
8.	Actively listened and did not interrupt while patient was speaking.	2	0	
9.	Questioned the patient as needed to ensure that responses were completely understood.	2	0	
10.	Signed the Patient Screening form.	1	0	
11.	Referred patient to the pharmacist for counseling.	4	0	
12.	Handed the completed Patient Screening form to the Pharmacist (judge) indicating the skill is complete.	2	0	

Items Evaluated	Possible	Awarded
13. Appropriate verbal and nonverbal communication with patient and other personnel.	2 0	
<b>TOTAL POINTS -- SKILL I</b> <b>70% Mastery for Skill I = 26.6</b>	<b>38</b>	

\*\* Step #4: Competitors should ask the patient the questions outlined in the screening checklists on the following pages 6-11 that are applicable to the screening (vaccination x3, late refill, or drug allergy) listed in the scenario received at the time of competition. To prepare, competitors should memorize all 5 questions on each of the 5 screening checklists so they can adequately ask the patients the correct questions.

# PHARMACY SCIENCE

## Skill I Patient Screening for Pharmacist Consultation and Services

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### Screening Checklist for Contraindications to **Injectable Influenza Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

---

1. Is the person to be vaccinated today showing any signs of illness?
2. Does the person to be vaccinated have allergies to any component of the vaccine?
3. Is the patient over the age of 65 resulting in the need for CDC recommended higher dose?
4. Does the person have a severe allergy to chicken eggs?
5. Is the person to be vaccinated younger than 6 months of age?

Reference: Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, latest edition.

***Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.***

# PHARMACY SCIENCE

## Skill I Patient Screening for Pharmacist Consultation and Services

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### Screening Checklist for Contraindications to **Injectable Inactivated Poliovirus Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

---

1. Does the person to be vaccinated have allergies to any component of the vaccine?
2. Is the person to be vaccinated today immune depressed in any way?
3. Does the person to be vaccinated live with anyone who has an immune deficiency disease?
4. Is there a suspected familial immune deficiency?
5. Is there possibility that the person being vaccinated is pregnant?

Reference: Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, latest edition.

***Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.***

# PHARMACY SCIENCE

## Skill I Patient Screening for Pharmacist Consultation and Services

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### Screening Checklist for Contraindications to **Injectable Rubella Vaccination**

For patients (both children and adults) to be vaccinated: The questions asked are developed to determine if the requested vaccination should be given. If you answer “yes” to any of the following questions it, it does not necessarily mean the vaccination will not be given. Additional information will be required.

---

1. Does the person to be vaccinated have allergies to any component of the vaccine?
2. Is the person to be vaccinated today immunosuppressed?
3. Is the person being vaccinated receiving corticosteroids?
4. Has the person being vaccinated been diagnosed with tuberculosis?
5. Is there possibility that the person being vaccinated is pregnant or attempting to become pregnant?

Reference: Moini, Jahangir. The Pharmacy Technician: A Comprehensive Approach. Cengage Learning, latest edition.

***Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.***

# PHARMACY SCIENCE

## Skill I Patient Screening for Pharmacist Consultation and Services

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### Screening Checklist for **Late Refill**

Promoting compliance with prescribed medication is an important role of the pharmacy staff. If the patient is not taking medication as prescribed the following questions may help determine the cause of noncompliance.

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1. How did the prescriber recommend you take this medication?
2. What methods do you use to help remember to take your medication?
3. What side effects have you experienced with the medication?
4. Do you believe the medication helps resolve the issues for which it was prescribed?
5. What are your concerns regarding taking this medication?

Reference: Johnston, Mike. The Pharmacy Technician: Foundations and Practices. Pearson, latest edition.

***Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.***

# PHARMACY SCIENCE

## Skill I Patient Screening for Pharmacist Consultation and Services

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### Screening Checklist for Possible Allergic Reaction

Allergic reactions can be life threatening. Concerns expressed by patient must be investigated. The following questions should be asked to obtain basic needed information.

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1. What medication were you taking when you noticed symptoms of concern?
2. Please describe your symptoms.
3. When did your symptoms begin?
4. Were any other medications taken during this time, including over-the-counter drugs?
5. Have you stopped taking the medication?

Reference: American Academy of Allergy, Asthma, and Immunology. Symptoms and Diagnosis tab. <https://www.aaaai.org/conditions-and-treatments/allergies/drug-allergy>

***Screening Checklist will not be provided during the event. Competitors will need to memorize the questions related to the identified issue.***

# PHARMACY SCIENCE

## Skill I Patient Screening Form for Pharmacist Consultation and Services

This form is given to the competitor during the event. The competitor completes this form as they ask the patient the 5 questions they have memorized for the selected screening checklist. As the competitor asks each question, the competitor should write a note of which question they asked (such as allergies, side effects, methods, concerns, immunosuppressed, etc.) in the blank space provided below. As the patient answers each question, the competitor should check "yes", "no", or "don't know" according to how the patient responds. After asking the 5 questions, the competitor will sign the form (in the form completed by line) and then return it to the judge (Pharmacist) as the final step in the skill.

Screening Checklist for: \_\_\_\_\_

Patient Name: \_\_\_\_\_ Date of Birth: \_\_\_\_/\_\_\_\_/\_\_\_\_

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	Yes	No	Don't Know
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Form completed by: \_\_\_\_\_

Date: \_\_\_\_\_

Form reviewed by: \_\_\_\_\_

Date: \_\_\_\_\_

# PHARMACY SCIENCE

## **Skill II: Verifying the Content of a Controlled Substance Prescription and DEA Number (6 minutes)**

\*\*\* Via the event scenario, the competitor will be given a prescription. Each competitor will also be given a Prescription Verification Form which acts as the rating sheet (page 13 of the guidelines). The prescription in the scenario will have missing information. Competitors must know all the required components (below) of the prescription in order to identify which components are missing. The Prescription Verification Form will be scored by the judges using the points indicated.

When verifying a Controlled Substance Prescription with DEA Number, the below list of items must all be verified.

1. Patient Information
  - a. Name
  - b. Address
2. Prescriber Information
  - a. Name
  - b. Address
  - c. Telephone Number
  - d. License Number
3. DEA Number
  - a. Verified the second letter corresponds to the first letter of the provider's last name
  - b. Added the first, third, and fifth digits of the DEA number.
  - c. Added the second, fourth, and sixth digits of the DEA number. Double the sum.
  - d. Added the sum of b and c.
  - e. Verified that the last digit from step d matches the last digit of the DEA number.
4. When prescribed
  - a. Month
  - b. Day
  - c. Year
5. Drug name and strength
6. Dose and quantity
7. Route of administration
8. Directions (signature or "Sig")
9. Number of refills authorized
10. Product selection was permitted
11. Prescriber's signature
12. No dangerous abbreviations, acronyms, or symbols are used from the Joint Commission's "Minimum" Do Not Use list and Joint Commission's "Recommended" Do Not Use List.

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_

Judge's Initials: \_\_\_\_\_

## Skill II: Verifying the Content of a Controlled Substance Prescription and DEA Number (6 minutes)

### Prescription Verification Form – Rating Sheet

*\*Name brand and generic names will be used in the scenarios.*

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Please list which 5 components are missing from the prescription given to you (below):

1. \_\_\_\_\_ (3 points)
2. \_\_\_\_\_ (3 points)
3. \_\_\_\_\_ (3 points)
4. \_\_\_\_\_ (3 points)
5. \_\_\_\_\_ (3 points)

DEA Number listed on prescription: \_\_\_\_\_

Is the DEA number valid? Yes or No (3 points)

Explain your yes or no answer by showing your work in **five** steps to verify the DEA Number:

1. \_\_\_\_\_ (1 point)
2. \_\_\_\_\_ (1 point)
3. \_\_\_\_\_ (1 point)
4. \_\_\_\_\_ (1 point)
5. \_\_\_\_\_ (1 point)

Are there any dangerous abbreviations, acronyms, or symbols used from the Joint Commission's "Minimum" Do Not Use list and the Joint Commission's "Recommended" Do Not Use List? If yes, **list below**. If no, **write NO** (3 points)

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What other actions are needed or required? \_\_\_\_\_ (2 points)

**Total Points Possible: 28**

**Total Points Awarded: \_\_\_\_\_**

**70% Mastery for Skill II: 19.6**

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_ Judge's Signature: \_\_\_\_\_

***\*Name brand OR generic names will be used in the scenarios.***

<b>Skill III: Withdrawing Liquid from a Vial (Time: 15 minutes)</b>	<b>Possible</b>	<b>Awarded</b>
1. Obtained the medication order.	1	0
2. Obtained needed supplies and placed on transport vehicle.	1	0
3. Performed calculation based on scenario.	4	0
4. Verbalized following proper procedure for dressing with PPE and handwashing.	2	0
<b>CLEAN ROOM PROCEDURE</b>		
5. Verbalized cleaning the hood.	2	0
6. Placed all supply items for the skill into the outer six-inch staging area of the hood.	1	0
7. Placed the vial within the DCA.	1	0
8. Removed the flip-top cap and placed in the discard pile.	1	0
9. Opened an alcohol swab within the DCA and swabbed the rubber top of the medicine vial.	2	0
10. Placed the used swab on the hood's work surface within the DCA.	1	0
11. Placed wrapper in the discard pile.	1	0
12. Aseptically attached a regular needle to the syringe.	2	0
13. Pulled the plunger back on the syringe to slightly less than the amount needed to be drawn up.	1	0
14. Removed the needle cap and placed it onto the alcohol swab.	2	0
15. Used the thumb and forefinger of the nondominant hand, to stabilize the vial against the hood's work surface.	1	0
16. Placed the needle tip bevel up and inserted at a 45-degree angle through the stopper.	1	0
17. Gently pushed the air from the syringe into the vial.	1	0
18. Used nondominant hand holding the vial and the dominant hand to maintain the needle in the vial while inverting the vial so that needle and syringe is below the vial.	1	0
19. Released plunger of air into the vial using thumb of dominant hand.	1	0
20. Allowed fluid to move from the vial to syringe. If needed, pulled back on the plunger until the desired amount withdrawn.	1	0
21. Withdrew needle from vial.	1	0
22. Carefully recapped needle.	1	0

Items Evaluated	Possible		Awarded
23. <i>Judge verified correct amount of liquid withdrawn.</i>	4	0	
24. Placed the completed syringe and other supply items on the transport vehicle.	1	0	
25. Discarded waste items in proper waste container.	2	0	
26. Returned to anteroom and returned unused supply items to proper storage.	1	0	
27. Verbalized removing PPE in correct order.	2	0	
28. Verbalized appropriate handwashing or used alcohol-based handrub.	1	0	
<b>TOTAL POINTS – SKILL III</b> <b>70% Mastery for Skill III = 28.7</b>	<b>41</b>		

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_ Judge's Signature: \_\_\_\_\_

**\*Name brand OR generic names will be used in the scenarios.**

<b>Skill IV: COMPOUNDING AN ORAL SUSPENSION (Time: 15 minutes)</b>		<b>Possible</b>	<b>Awarded</b>
1.	Obtained the completed recipe or completed formula via scenario using the Master Formula sheet.	1	0
2.	Checked the prescribed dosage with the pharmacist (judge).	2	0
3.	Verified the obtained the correct number tablets needed for compounding based on Master Formula sheet and notified the pharmacist (judge). <b>* Judge verified accuracy. Competitor proceeds either way. Points only awarded if the correct number of tablets were obtained.</b>	4	0
4.	Obtained needed equipment	1	0
5.	Used alcohol-based hand sanitizer for hand hygiene.	2	0
6.	Donned sterile, powder-free gloves.	2	0
7.	Triturated or reduced to a fine powder by using mortar and pestle.	1	0
8.	Added a small amount of suspending vehicle to levigate or grind the powder until a smooth paste is formed.	1	0
9.	Continued to add suspending vehicle until product is liquid enough to transfer to a graduated cylinder	1	0
10.	Poured the liquid into a graduated cylinder.	1	0
11.	Rinsed mortar several times with suspending vehicle and added to product in graduated cylinder.	1	0
12.	Verified the amount of the suspension at eye level.	2	0
13.	Poured the compounded suspension into medication bottle.	1	0
14.	Selected the appropriate label from those provided and affixed to the medication bottle. <b>*Judge verified accuracy.</b>	4	0
15.	Selected the appropriate auxiliary label from those provided and affixed to medication bottle. <b>*Judge verified accuracy.</b>	4	0
16.	Cleaned the area and equipment using soap and water and returned equipment to proper place.	2	0
17.	Demonstrated proper handwashing or used alcohol-based handrub.	2	0
<b>TOTAL POINTS - SKILL IV</b>		<b>32</b>	
<b>70% Mastery for Skill IV = 22.4</b>			

\*Compounding directions were obtained from [nationwidechildrens.org](http://nationwidechildrens.org)

**Skill IV - MASTER FORMULA SHEET: NON-STERILE COMPOUNDING**

*\*This form will be completed by HOSA staff prior to the event and will be given to competitors with the scenario.*

**PRODUCT:** \_\_\_\_\_

**Date Prepared:** \_\_\_\_\_ **FINAL PRODUCT CHECKED BY:** \_\_\_\_\_

**EXPIRATION DATE:** \_\_\_\_\_

<b>INGREDIENT</b>	<b>MANUFACTURER</b>	<b>Lot #</b>	<b>MFR EXPIRATION DATE</b>	<b>FORMULA QUANTITY REQUIRED</b>	<b>QUANTITY USED</b>	<b>PREPARED BY</b>	<b>CHK BY</b>
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**EQUIPMENT**

**PRESCRIPTION LABEL**

**AUXILIARY LABELS**

**COMPOUNDING DIRECTIONS :**

**DATE PREPARED:**

**EXPIRATION DATE:**

**STABILITY**

**REFERENCE(S)**

**FINAL APPEARANCE**

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_ Judge's Initials: \_\_\_\_\_ Total Points (45 possible) \_\_\_\_\_

## Skill V: Identify Equipment and Instruments

(Time: 15 minutes)

	Name of Instrument	Points (1 each for name & spelling)	Purpose or Use	Points (1 point for correct purpose/use)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
<b>TOTAL: ID &amp; Spelling (30 poss)</b>			<b>TOTAL: Purpose (15 possible)</b>	

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_ Judge's Signature: \_\_\_\_\_

***\*Name brand OR generic names will be used in the scenarios.***

<b>Skill VI: Filling a Prescription</b>	<b>(Time: 5 minutes)</b>	<b>Possible</b>		<b>Awarded</b>
1. Obtained prescription.		1	0	
2. Reviewed the prescription for legality and correctness.		2	0	
a. Verified the name on the prescription by asking the patient.		2	0	
b. Verified prescription was presented within one year of being written.		1	0	
c. Verified address of the patient.		1	0	
3. Reviewed the original medication order with the judge:		1	0	
a. correct dosage form is included on the prescription		1	0	
b. correct strength is included on the prescription		1	0	
4. Determined if generic substitution is allowed based on the prescription		1	0	
5. Used alcohol-based hand sanitizer for hand hygiene.		2	0	
6. Obtained the correct medication to fill the prescription.		2	0	
7. Checked the medication expiration date		2	0	
8. Calculated the number of tablets or capsules to dispense based on prescription.		4	0	
9. Used the counting tray and spatula to count needed number of tablets or capsules for the current prescription.		4	0	
10. Recounted to ensure the correct number will be dispensed.		2	0	
11. Obtained the correct container (type and shape) for the prescription.		1	0	
12. Obtained the correct label, rechecking the directions and drug strength.		4	0	
13. Affixed auxiliary labels if indicated such as take with meals, shake well, etc.		2	0	
14. Submitted to pharmacist (judge) for final check.		4	0	

Items Evaluated	Possible		Awarded
15. Avoided contamination by not touching medication directly throughout filling process.	2	0	
16. Cleaned counting tray and spatula with an alcohol swab.	2	0	
17. Returned all equipment to appropriate place.	2	0	
18. Appropriate verbal and nonverbal communication with patient and other personnel.	2	0	
<b>TOTAL POINTS - SKILL VI</b> <b>70% Mastery for Skill VI = 30.8</b>	<b>44</b>		

# PHARMACY SCIENCE

Competitor #: \_\_\_\_\_

Judge's Signature: \_\_\_\_\_

<b>Skill VII: Aseptic Garbing, Hand Washing, &amp; Gloving (Time: 10 minutes)</b>	<b>Possible</b>		<b>Awarded</b>
1. Removed any outer garments and jewelry.	2	0	
2. Obtained needed supplies.	1	0	
3. Cleansed your hands with sterile, foamed 70% IPA by holding can so that tip is down into the palm of opposite hand and coating palms, back of hands, and each finger and allow to dry.	2	0	
4. Donned shoe covers one at a time completely covering shoe.	2	0	
5. Reapplied sterile, foamed 70% IPA to hands and allowed to dry.	2	0	
6. Gathered or tied loose hair back and put on the hair cover while completely covering all of the hair.	2	0	
7. Reapplied sterile, foamed 70% IPA to your hands & allow to dry.	2	0	
8. Donned a face mask by positioning the mask securely over nose, mouth and chin. If have facial hair, donned a beard cover.	2	0	
9. TO SINK FOR ASEPTIC HAND WASHING:			
a. Squeezed surgical scrub sponge/brush several times to activate soap suds.	2	0	
b. Opened the packet removing the sterile sponge/brush and held in dominant hand.	2	0	
c. Used the other hand to dispose of wrapper in waste container.	2	0	
d. Pressed the foot pedals if present to begin flow of water. <i><b>*IF NO FOOT PEDALS ARE AVAILABLE ASK JUDGE TO TURN ON THE WATER.</b></i>	2	0	
e. When water was warm wet hands and arms.	2	0	
10. Used the nail pick to clean under each fingernail while still holding the scrub sponge/brush. When completed disposed of pick in wastebasket	2	0	
11. Applied a small amount of water to the scrub sponge/brush.	2	0	
12. Used the brush side of the sterile scrub sponge/ brush under the fingernails of left hand moving from thumb to pinkie. Repeated on right side.	2	0	
13. Repeated step #12 on the right side.	2	0	

Items Evaluated		Possible	Awarded
14.	Used the sponge side to clean each of the four surfaces (top, side, bottom, side) and webbing between beginning with thumb and repeating for each finger on left side.	2	0
15.	Repeated step #14 on the right side.	2	0
16.	Used the sponge to clean the palm of the left hand.	2	0
17.	Repeated step #16 on the right side.	2	0
18.	Cleaned the left forearm in a circular pattern around the arm from wrist to elbow.	2	0
19.	Repeated step #18 on the right side.	2	0
20.	Disposed of scrub sponge/brush without touching waste container or contents.	2	0
21.	Rinsed the left hand and forearm holding your arm with fingers pointed up and rinsing from fingers to elbow.	2	0
22.	Repeated step #21 on right side.	2	0
<b>*Foot Pedal released OR Judge turns off water when handwashing is complete.</b>		-	
23.	Used an aseptic, lint-free paper towel to dry both hands moving from fingers toward the elbow.	2	0
24.	Disposed of paper towel in waste container.	2	0
25.	Opened the sterile gown.	2	0
26.	<b>DONNED STERILE GOWN</b>		
	a. Inserted one arm into open sleeve and pulled it up on shoulder and repeated on other sleeve.	2	0
	b. Secured the gown at the neck and at the waist.	2	0
27.	Sterilized hands with sterile, foamed 70% IPA.	2	0
28.	Opened sterile gloves and placed on clean surface.	2	0
29.	Placed the left glove on the left hand by grasping the inner part of the cuff with the right hand & pulled up onto left hand.	2	0
30.	Repeated gloving process on right hand. <b>*Judge states "skill is completed".</b>	2	0
31.	<b>Removal of PPE</b>		
	a. Grasped cuff of one glove and pulled glove down & off hand.	2	0
	b. While grasping removed glove in gloved hand, grasped the cuff & pulled off the glove of the other hand.	2	0
	c. Disposed of glove bundle in waste container.	2	0
	d. Untied the gown and removed by pulling at shoulders turning the gown inside out and placed in a waste container.	2	0
	e. Removed face mask, hair cover, and shoe covers and discarded in waste container.	2	0
32.	Washed hands or used alcohol-based handrub for hand hygiene.	2	0
<b>TOTAL POINTS - SKILL VII</b>		<b>81</b>	
<b>70% Mastery for Skill VII = 56.7</b>			