PEBC PHARMACY TECHNICIAN QUALIFYING EXAMINATION – PART II (OSPE)

VIDEO SAMPLE STATION #3

Non-Interactive Station (Sterile Compounding Video)

TITLE: Preparing an IV Minibag

OBJECTIVES

- To identify and document actions performed, that are necessary for accurate, sterile compounding of intravenous medications including:
  - Select, decontaminate and place needed materials inside the decontaminated laminar flow hood before starting preparation, maintaining a sterile environment
  - Reconstitute antibiotic and added medication to IV minibag; labelled correctly
  - Use appropriate techniques and maintain sterility – prepare/handle vials, syringes, needles and minibag correctly reconstituting the medication accurately, using the correct diluent.
- To identify errors and omissions (missed steps).

COMPETENCIES TESTED

Competency 3 Product Distribution

Unit 3.3 Prepare and compound non-sterile and sterile products according to recognized guidelines and standards of practice.

CANDIDATE'S INSTRUCTIONS

You are a pharmacy technician working in a hospital and are supervising a new pharmacy technician in a sterile compounding room, with a laminar flow hood. The **video** you are about to view shows the new pharmacy technician preparing one dose of the following order:

Timentin 3.1 g in 50mL D5W IV q4h; infuse over 30 minutes.

Items used for preparation:

- Timentin 3.1 g vial
- Sterile Water for Injection, single use vial
- 20 mL syringe
- 20G 1½ inch needle

The **product label** and **reconstitution instructions** are shown below.
The **minibag label** prepared by the pharmacy technician is on the Candidate Answer Sheet (page 3).

You are to assess the new pharmacy technician's prepared minibag label and performance as shown on the video, and **complete the Candidate Answer Sheet**, **indicating:**

ACCURACY of the prepared MINIBAG LABEL (see Candidate Answer Sheet)

- If accurate, fill in the bubble beside "accurate" ***– OR –***
- If NOT accurate, fill in the bubble beside "NOT accurate".

ACTIONS PERFORMED by the technician

- If the action was performed correctly, fill in the **column A** bubble ("DONE CORRECTLY").
- If an error in measurement or technique was made while performing the action, fill in the **column B** bubble ("DONE INCORRECTLY").
- If the action was NOT performed (i.e. if omitted), fill in the **column C** bubble ("NOT DONE").

Note: Expiry dates are not considered in this station.

PRODUCT LABEL AND RECONSTITUTION INSTRUCTIONS

TIMENTIN © **DIN 01916939**

sterile ticarcillin disodium and clavulanate potassium, USP / ticarcilline disodique et clavulanate de potassium stérile USP

ANTIBIOTIC / ß-LACTAMASE INHIBITOR
ANTIBIOTIQUE ET INHIBITEUR DE ß-LACTAMASES

3.1 g

Each vial contains 3 g ticarcillin, 100 mg clavulanic acid
Une fiole content 3 g de ticarcilline,
100 mg d'acide clavulanique
For IV infusion only / Pour perfusion intraveineuse seulement

Reconstitute with 13 mL of Sterile Water for Injection, USP. **Shake well**. Provides ticarcillin 200 mg/mL and clavulanic acid 6.7 mg/mL. Resulting solution stable for 6 hours at 21-24°C or 72 hours under refrigeration (4°C). Further dilute with one of the suitable IV solutions to a desired volume. Diluted solutions are stable for 8 to 16 hours at 21-24° C or for 24 to 48 hours under refrigeration (4° C). For dosage, administration and directions for use, consult package insert. Product Monograph available on request. Store dry powder at or below 24°C.

TO DO THE EXERCISE:

1. Read the Candidate Instructions on page 1 thoroughly.
2. Print the Candidate Answer Sheet on page 3.
3. Check the Minibag Label at the top of the Candidate Answer Sheet for accuracy and answer the questions about label accuracy.
4. Watch Part 1 of the video and answer questions 2 to 7.
5. Watch Part 2 of the video and answer questions 8 to 13.
6. Watch Part 3 of the video and answer questions 14 to 18.

CANDIDATE ANSWER SHEET

1. MINIBAG LABEL is:

❍ accuracte
❍ NOT accurate

City Hospital	456123	3B-456
WILSON, Ronald		Current date
Timentin 3.1 g IV q4h		Due 1100 h
Ticarcillin / clavulanic acid in		3.1 g / 15.5 mL
Dextrose 5% inj		100 mL
Infuse IV over 60 minutes.		
Exp 1837 h		IV use

ACTIONS PERFORMED	A DONE CORRECTLY	B DONE INCORRECTLY	C NOT DONE
VIDEO PART 1 (Items 2 to 7)			
2. Selected required types and sizes of needles, syringes, sterilizing spray and swabs.	❍	❍	❍
3. Placed items well inside hood, allowing for proper air flow	❍	❍	❍
4. Sterilized stoppers of all diluent and medication vials before use	❍	❍	❍
5. Prepared needle and syringe for use	❍	❍	❍
6. Withdrew diluent from vial	❍	❍	❍
7. Measured required amount of sterile water for injection	❍	❍	❍
VIDEO PART 2 (Items 8 to 13)			
8. Decontaminated all additional articles placed in the hood	❍	❍	❍
9. Injected diluent into medication vial	❍	❍	❍
10. Swirled vial to dissolve the medication	❍	❍	❍
11. Selected required IV solution and minibag size	❍	❍	❍
12. Sterilized minibag port	❍	❍	❍
13. Sterilized medication vial stopper	❍	❍	❍
VIDEO PART 3 (Items 14 to 18)			
14. Prepared needle and syringe to withdraw dissolved medication	❍	❍	❍
15. Withdrew dissolved medication from vial	❍	❍	❍
16. Injected dissolved medication into minibag	❍	❍	❍
17. Mixed final preparation gently	❍	❍	❍
18. Inspected and labelled prepared intravenous solution	❍	❍	❍

STATION SPECIFIC OUTCOME RATING GUIDELINES:

ANSWER KEY – the correct answers are as follows:

1. Minibag Label is: NOT accurate

Part 1	Item	Correct Answer
	2	A
	3	A
	4	C
	5	B
	6	B
	7	B
Part 2	Item	
	8	C
	9	B
	10	A
	11	A
	12	A
	13	A
Part 3	Item	
	14	B
	15	B
	16	A
	17	C
	18	C

Note: Answers to items 2 to 18 are based on the standards found in USP Chapter 21. Workplace guidelines may vary slightly from workplace to workplace.