#### Dosage form design and delivery

## Study guide for Lab Final Exam

# Date: April 9th, 2018Location: Scaife 6Time: 1.00 to 2.30pm

The lab final exam will include questions based on the rules and regulations for compounding, compounding technique, products compounded in the lab, relevant information about compounded products, excipients and their role, labeling requirements, beyond use date calculations for different products, calculations performed during lab compounding and content from prelab video and presentations.

I recommend you to go through the prelab presentations, compounded preparation details and prelab question, Lab introduction lecture.

It will be a 99 point exam with question break up as follows:

## PART 1: 50 MULTIPLE CHOICE - 1.5 points each

## PART 2: 12 CALCULATION PROBLEMS -2 points each (please bring a calculator)

#### Practice questions:

- 1. Pharmacists are the only health professionals formally trained in compounding.
  - A. True
  - B. False

For the next three questions (2 -4) you need this information: Phenylephedrine HCI 0.25% (NaCl Equivalent = 0.32)

Zinc Sulfate 0.5% (NaCl Equivalent = 0.15) Sodium Chloride qs Purified water qs 60mL

- 2. How much phenylephrine HCl is required to compound this product?
  - A. 0.15 g
  - B. 15 g
  - C. 0.30 g
  - D. 15 mg

3. 60. How many grams of zinc sulfate are required for this product?

- A. 3 g
- B. 3 mg
- C. 0.15 g
- D. 0.3 g

- 4. How many grams of Sodium Chloride should be added to make an isotonic solution?
  - A. 0.093 grams
  - B. 0.54 grams
  - C. 0.048 grams
  - D. 0.447 grams
  - E. 0.202 grams
- 5. In the ophthalmic prescription we compounded in the lab, the agent used to adjust tonicity was:
  - A. Cromolyn sodium
  - B. Benzalkonium chloride
  - C. Glycerin
  - D. Polysorbate 20
  - E. None of the above
- 6. What is the correct method to use when hand-punching capsules?
  - A. Punch the capsule into the powder pile once to ensure a tightly packed capsule
  - B. Scoop the powder into the body of the capsule until it looks full
  - C. Press the capsule into the powder pile and rotate slightly
  - D. Use a small metal spatula to pour the powder into both the body and lid of the capsule.
- 7. You are asked to prepare a topical dosage form to prevent aggravation of a skin rash from constant skin against skin friction. What kind of topical dosage form would be best if needed to stay in place after being applied?
  - A. Paste
  - B. Ointment
  - C. Cream
  - D. Gel

# Answers to the questions:

- 1
- A A D 2
- -3 4
- D C C A 5
- 6 7