



The Pharmacy Examining Board of Canada

Le Bureau des examinateurs en pharmacie du Canada

Pharmacy Technician Qualifying Examination - Part I (MCQ) - Sample Questions

The sample questions that follow are **NOT** intended or designed to be a sample examination and do **NOT** represent an exact model of the Qualifying Examination-Part I, in terms of difficulty and proportion of topics. However, **individually, these examples are intended to be representative in format and phrasing style** of the types of questions found in the Qualifying Examination-Part I. They also illustrate a variety of the competency areas contained in the examination blueprint.

[Click here](#) for the answers to the sample questions.

1. RY is an 85 year old male, living alone, who takes 12 different medications. For the past week, he has telephoned the pharmacy every day to ask the pharmacy technician if he should be taking 1 or 2 tablets of his diuretic (this medication looks similar to another tablet that he takes). He calls again today with the same question. After answering his question, the most appropriate pharmacy technician action would be to:

- a. call RY's family doctor to suggest changing the diuretic to a medication that looks different.
- b. suggest that RY have the labels on his prescription bottles changed to a bigger font for easier reading.
- c. recommend that the pharmacy use a blister packaging Dosett® to dispense RY's medications.
- d. suggest that RY write down the answer to his question so that he does not need to telephone again.

Competency: 2.3

2. Auxiliary labelling for clarithromycin suspension should include which of the following?

- a. Shake gently before using.
- b. Take with plenty of fluids.
- c. Avoid prolonged exposure to sunlight.
- d. Keep refrigerated.

Competency: 2.3

3. For which of the following medications would it be most appropriate to affix the auxiliary label "Take on an empty stomach" to the prescription vial prior to dispensing?

- a. Naproxen
- b. Levothyroxine
- c. Prednisone
- d. Nitrofurantoin

Competency: 2.3

4. According to the Narcotic Control Regulations of the Controlled Drugs and Substances Act, which of the following practitioners may **NOT** prescribe narcotic drugs?

- a. Chiropractors
- b. Nurse practitioners
- c. Podiatrists
- d. Midwives

Competency: 1.1

5. The ethical principle of veracity requires that pharmacy technicians:

- a. respect the rights of others to make choices.
- b. do good to patients, placing the benefit of the patient over other factors such as cost.
- c. act with fairness, to allow people to receive that to which they are entitled.
- d. act with honesty and without deception.

Competency: 1.2

6. When processing a prescription refill, the pharmacy technician notices that the prescription had been previously filled incorrectly. When the patient is shown the prescription product, he says that the tablets have a different appearance than the medication he was provided. Which of the following is the most appropriate initial pharmacy technician response?

- a. Acknowledge that the medication being dispensed does look different, but explain that there is no reason for concern.
- b. Ask the pharmacy technician who dispensed the prescription previously to address the patient's concern.
- c. Refer the patient to the pharmacy manager to address the concern and provide the manager with a completed incident report.
- d. Explain to the patient that an error was previously made.

Competency: 9.1

7. Which of the following drugs does **NOT** require witnessed destruction?

- a. Ketamine
- b. Meperidine
- c. Diazepam
- d. Gabapentin

Competency: 1.1

8. The Canada Health Act (1984) embodies all of the following principles, **EXCEPT**:

- a. affordability.
- b. accessibility.
- c. portability.
- d. universality.

Competency: 1.4

9. ST is no longer satisfied with the service she has been getting at Pharmacy X, so she comes to Pharmacy Y requesting a refill on a prescription for mirtazapine that she originally had filled at Pharmacy X. What is the correct procedure for Pharmacy Y to obtain the remaining refills?

- a. Pharmacy Y must contact Pharmacy X to get the prescription refills transferred, and document the transfer appropriately.
- b. Pharmacy Y cannot refill this prescription without telephoning the prescribing physician.
- c. Pharmacy Y may refill the prescription and notify Pharmacy X within 24 hours that this has been done.
- d. Inform ST that the prescription resides at Pharmacy X and she must return there for refills.

Competency: 3.1

10. Which of the following examples shows a legally correct refill designation on a written prescription for dexamphetamine?

- a. Repeat twice.
- b. Repeat monthly at 30 day intervals
- c. Repeat twice as required.
- d. Repeat twice at 14 day intervals.

Competency: 1.1

11. According to the Benzodiazepine and Other Targeted Substances Regulations, what is the expiry date for a prescription for lorazepam?

- a. One month from the date written
- b. Six months from the date written
- c. One year from the date written
- d. Two years from the date written

Competency: 1.1

12. A pharmacy technician is giving a presentation on medication adherence and the compliance packaging services offered by the pharmacy to a group of clients. Which of the following would be an indicator of the effectiveness of the presentation for an individual client?

- a. Increase in number of prescriptions filled per month
- b. Reduced number of prescriptions filled per month
- c. Reduced number of prescription fill dates per month
- d. Prescription fill dates closer to expected fill intervals

Competency: 2.3

13. All of the following are appropriate suggestions for a pharmacy technician to give to a patient with allergic rhinitis from multiple environmental triggers, in order to minimize exposure to possible allergens, **EXCEPT** :

- a. open windows to get fresh air into the home.
- b. clean and vacuum on a regular basis.
- c. use mattress and pillow covers.
- d. remove any carpets, if possible.

Competency: 6.1

14. A biological safety cabinet would be the best choice when preparing a parenteral formulation of:

- a. aminophylline.
- b. doxorubicin.
- c. magnesium sulfate.
- d. nitroglycerin.

Competency: 3.3

15. A patient is currently taking 220 mg of anhydrous zinc sulfate. To receive the equivalent amount of elemental zinc, how many milligrams of zinc sulfate heptahydrate ($\bullet 7 \text{ H}_2\text{O}$) would the patient have to take? (Molecular weights: zinc 65, ZnSO_4 161, H_2O 18)

- a. 220 mg
- b. 300 mg
- c. 392 mg
- d. 545 mg

Competency: 3.1

16. In the International System of Units (SI), most drug levels are to be reported in the units of micromoles/litre ($\mu\text{mol/L}$). The therapeutic concentration range for theophylline (molecular weight 180) is 10-20 mcg/mL. The SI equivalent would be:

- a. 27 - 55 $\mu\text{mol/L}$.
- b. 55 - 110 $\mu\text{mol/L}$.
- c. 110 - 220 $\mu\text{mol/L}$.
- d. 180 - 360 $\mu\text{mol/L}$.

Competency: 3.1

17. Given that 30 g of a mild corticosteroid ointment covers the entire surface of any adult for one application, how much ointment (in grams) should be dispensed for an 18 year old patient who requires treatment on approximately 20% of her body with twice daily application for 14 days?

- a. 64 g
- b. 84 g
- c. 124 g
- d. 168 g

Competency: 3.1

18. BV is a 62 year old, obese female who visits a walk-in-clinic while her physician is away on vacation. She presents the following prescription:

Omeprazole 30 mg
M: 30
Sig. i daily

The pharmacy technician knows that this product is only available in 10 mg and 20 mg strengths and that BV's profile shows that she was previously on the 20 mg strength of this medication. The most appropriate pharmacy technician response is to:

- a. tell BV that the physician has made a prescribing error.
- b. ask BV why she visited the clinic today and what the physician told her about the prescription.
- c. fill the prescription using omeprazole 10 mg and adjust the quantity and dose accordingly.
- d. recommend to BV that she wait to fill the prescription until she sees her regular physician.

Competency: 3.1

19. During a busy period in the pharmacy, a patient comes in for refills of amlodipine, hydrochlorothiazide and atorvastatin. Inadvertently, the vial he receives for atorvastatin contains atenolol instead. If this error is not identified and corrected, what is the most likely effect to be experienced by this patient?

- a. Diarrhea
- b. Heartburn
- c. Blurry vision
- d. Lightheadedness

Competency 9.2

20. Which of the following is **LEAST** appropriate to consider when a hospital pharmacy manager is assigning responsibilities to a pharmacy technician?

- a. Communication and interpersonal skills of the individual
- b. Advanced training or credentials of the individual
- c. Individual's record of sick days taken over the past year
- d. Willingness of the individual to upgrade learning and skills

Competency: 4.1

21. Which of the following pharmaceuticals is regulated federally under the Precursor Control Regulations of the Controlled Drugs and Substances Act, as a precursor chemical for illicit drug production?

- a. Dextromethorphan
- b. Dimenhydrinate
- c. Diazepam
- d. Pseudoephedrine

Competency: 1.1

22. A patient has been taking an opioid analgesic for the past three months. All of the following behaviours might indicate a developing addiction disorder, **EXCEPT**:

- a. reported incidents of lost prescriptions by the patient.
- b. frequent requests for early refills.
- c. the patient presenting prescriptions written by different prescribers.
- d. the patient expressing concerns regarding side effects.

Competency: 3.1

23. A pharmacy manager would like to delegate a new project to a pharmacy technician. All of the following pharmacy manager actions would be appropriate, **EXCEPT**:

- a. discussing suggested steps to accomplish the project.
- b. negotiating a deadline date for completion of the project.
- c. providing support and follow-up as required.
- d. changing staff schedules without consulting with dispensary staff.

Competency: 4.1

24. Which financial statement should be used to determine the total value of prescription drug sales for a pharmacy for a period of a year?

- a. Balance sheet
- b. Statement of investments
- c. Statement of changes in financial position
- d. Income statement

Competency: 4.2

25. Which of the following criteria should be assessed when considering adding a medication to a hospital formulary?

- a. The amount of samples provided to hospital physicians
- b. Research funds donated to the hospital by the pharmaceutical company
- c. National adverse drug reaction reports
- d. If the product is available as a gluten-free oral formulation

Competency: 4.2

26. When deciding if a medication is appropriate for inclusion into a hospital formulary, the hospital must consider the drug's efficacy, safety, acquisition cost and associated workload. Several new intravenous antifungal agents (Drug A, Drug B, and Drug C), all with equal efficacy and safety to Drug D, have recently become available. Currently the hospital stocks Drug D, which has been available for several years. Data for the medications are as follows:

Drug	Cost/day	Dosing Frequency	Treatment Duration (days)
A	\$2.50	bid	14
B	\$2.25	once daily	14
C	\$5.00	bid	7
D	\$2.25	bid	7

The most appropriate choice for the hospital is:

- a. Drug A.
- b. Drug B.
- c. Drug C.
- d. Drug D.

Competency: 4.2

27. While assisting a patient to select an ultrasonic humidifier, what type of water should the pharmacy technician recommend be used with the product?

- a. Bottled mineral water
- b. Tap water
- c. Distilled water
- d. Carbon-filtered water

Competency: 2.3

28. A patient presents a prescription for "Metronidazole suspension 150 mg po q8h x 7 days". The pharmacy uses a metronidazole suspension compounding recipe which provides a final product concentration of 3750 mg / 250 mL. How much of this suspension would be required for the prescription?

- a. 70 mL
- b. 140 mL
- c. 210 mL
- d. 280 mL

Competency: 3.3

29. A prescription is received for:

Hydrocortisone 1% cream and clotrimazole 1% cream (2:1)
M: 30 grams

What quantity of hydrocortisone cream is required?

- a. 5 grams
- b. 10 grams
- c. 15 grams
- d. 20 grams

Competency: 3.3

30. Two patients with the same last name and age are admitted to adjacent rooms on a patient care unit. Both patients are prescribed the same intravenous antibiotic, but at a different dose. The patients' antibiotic doses are to be stored in their respective bins, each labelled with the patient's name. Which medication safety practice would be most effective to prevent a medication error?

- a. Store the patients' bins far apart from each other.
- b. Store the patients' bins close together.
- c. Place an alert sticker on each patient's bin.
- d. Place an alert sticker on each patient's medication.

Competency: 9.1

31. When conducting a medication history with a patient in a preoperative clinic, the pharmacy technician is told by the patient that she is allergic to fluconazole, which is sometimes given to patients as prophylaxis after the surgery. Which of the following actions should the pharmacy technician do next?

- a. Advise the patient that the low dose used for prophylaxis will not cause a problem.
- b. Verify if the patient has received other antifungals in the past without incident.
- c. Document the reported allergy in the patient's record.
- d. Inform the physician of the potential allergy.

Competency: 1.5

32. A patient requests a refill of a medication which is backordered from the manufacturer. A new brand name of the same medication is available but is not yet covered on the provincial formulary. What is the most appropriate action for the pharmacy technician to take?

- a. Request that the physician change the prescription to an alternate therapy.
- b. Suggest that the patient find another pharmacy that still has stock of the backordered medication.
- c. Fill the prescription with the new brand and advise the patient that it is not covered.
- d. Contact the provincial drug program to determine if the new brand is being temporarily covered.

Competency: 3.2

33. A pharmacy technician is asked by PW, a diabetic patient, for reliable sources of information about dietary modifications for patients with diabetes mellitus. How should the pharmacy technician respond to this request?

- a. Advise PW to consult the website of the Canadian Diabetes Association.
- b. Provide PW with information from the pharmacy's patient information resources.
- c. Inform PW that the best source of this information would be a dietitian.
- d. Suggest that PW discuss dietary issues with his physician.

Competency: 8.1

The next section is an EXAMPLE OF THE CASE SCENARIO FORMAT, in which there are two or more questions in sequence, which are related to the patient information provided in the bolded stem information shown at the top of the case.

QUESTIONS 34 TO 35 INCLUSIVE REFER TO THE FOLLOWING:

SM is a 34 year old female who, while vacationing in Mexico, began prophylactic treatment for travellers' diarrhea. Shortly thereafter she complained of a feeling of fullness in her ears, black stools and a black tongue.

34. Which of the following drugs could be the cause of SM's complaints?

- a. Bismuth subsalicylate
- b. Cotrimoxazole
- c. Diphenoxylate
- d. Loperamide

Competency: 2.3

35. Which of the following antibiotics could be prescribed for her to treat travellers' diarrhea?

- a. Ciprofloxacin
- b. Tetracycline
- c. Erythromycin
- d. Amoxicillin

Competency: 3.1

Answers to Sample Questions

1. (c)	19. (d)
2. (a)	20. (c)
3. (b)	21. (d)
4. (a)	22. (d)
5. (d)	23. (d)
6. (d)	24. (d)
7. (d)	25. (c)
8. (a)	26. (d)
9. (a)	27. (c)
10. (d)	28. (c)
11. (c)	29. (d)
12. (d)	30. (d)
13. (a)	31. (c)
14. (b)	32. (d)
15. (c)	33. (c)
16. (b)	34. (a)
17. (d)	35. (a)
18. (b)	