

# Exam GH 201-U

**Date:** Tuesday, March 24, 2026

## INSTRUCTIONS TO CANDIDATES

### General Instructions

1. This examination has 6 questions numbered 1 through 6 with a total of 50 points.

The points for each question are indicated at the beginning of the question.

2. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions provided in this document.

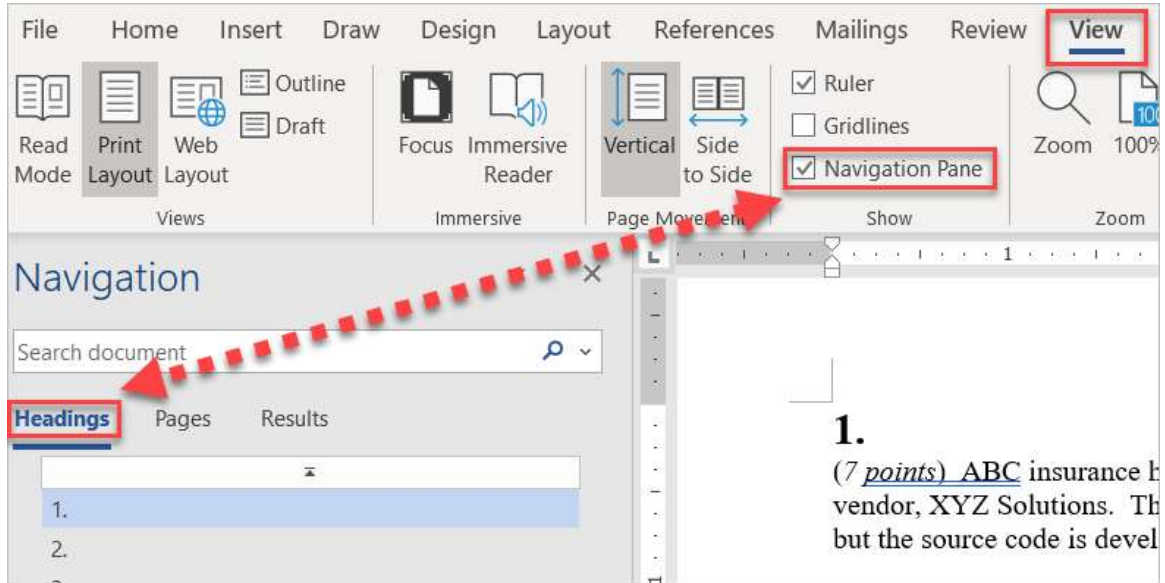
### Written-Answer Instructions

1. Each question part or subpart should be answered either in the Word document or the Excel file as directed. Graders will only look at work in the indicated file.
  - a) In the Word document, answers should be entered in the box marked ANSWER. The box will expand as lines of text are added. There is no need to use special characters or subscripts (though they may be used). For example,  $\beta_1$  can be typed as beta\_1 (and ^ used to indicate a superscript).
  - b) In the Excel document formulas should be entered. Performing calculations on scratch paper or with a calculator and then entering the answer in the cell will not earn full credit. Formatting of cells or rounding is not required for credit.
  - c) Individual exams may provide additional directions that apply throughout the exam or to individual items.
2. The answer should be confined to the question as set.
3. Prior to uploading your Word and Excel files, each file should be saved and renamed with your unique candidate number in the filename.
4. The Word and Excel files that contain your answers must be uploaded before time expires.

## Navigation Instructions

Open the Navigation Pane to jump to questions.

Press Ctrl+F, or click View > Navigation Pane:



*The Excel spreadsheet has  
additional data and information applicable to this question*

**1.**

(9 points) You are a benefit consulting actuary for Company ABC.

- (a) (2 points) Describe four methods for estimating claim reserves.

ANSWER:

ABC provides a dental plan to its employees and has asked you to estimate their IBNR claims for the period from September 1, 20X2 to August 31, 20X3.

In the Excel spreadsheet, you have been provided with ABC's dental paid claims.

You used the age-to-ultimate development method based on the average lag factors of the last 12-month period from September 1, 20X1 to August 31, 20X2 to calculate the IBNR.

- (b) (4 points) Calculate the dental IBNR as of August 31, 20X3. State any assumptions and show your work.

*The response for this part is to be provided in the Excel spreadsheet.*

- (c) (1 point)

- (i) (0.5 points) Explain reasons for adding a provision for adverse deviation.

ANSWER:

- (ii) (0.5 points) Recommend a provision for adverse deviation that should be recorded as of August 31, 20X3. Justify your response.

ANSWER:

- (d) (2 points) List and describe considerations for estimating incurred claims based on ASOP 5.

ANSWER:

**2.**

(8 points) You are an actuary for Avalor Health, a large managed care organization. Your chief actuary has asked you to support a contract negotiation with the Elena Physicians, a small physician practice.

- (a) (1 point) List and describe provider liabilities for which payers establish a reserve.

ANSWER:

Avalor Health expects 10,000 members to be attributed to Elena Physicians during the contract period.

Elena Physicians performs four main services at their practice with the following expected costs for calendar year 20X1 for the attributed members:

Service Category	# of Expected Procedures	Medicare Unit Cost	Current Contracted Unit Cost
Office visits	9,000	\$100	\$110
Lab services	5,000	\$50	\$75
X-ray services	4,000	\$75	\$100
Minor surgeries	50	\$1,000	\$1,500

- (b) (3 points)
- (i) (2 points) Calculate the expected total payments to Elena Physicians under each of the following reimbursement arrangements. Show your work.
- A capitation agreement of \$125 per member per year (PMPY)
  - A fee-for-service (FFS) scheme paid at 125% of the Medicare rate
  - A bundled payment of \$175 per office visit
  - A bonus structure where Elena Physicians is paid FFS at the current contracted unit cost and receives a 20% bonus if the cost is less than \$190 PMPY
  - A capitation and withhold structure where 5% of a \$150 PMPY cost is withheld and returned if costs are below \$140 PMPY

*The response for this part is to be provided in the Excel spreadsheet.*

## 2. Continued

- (ii) (1 point) Describe the advantages and disadvantages of the bonus structure to both parties.

*The response for this part is to be provided in the Excel spreadsheet.*

- (c) (1 point) List and describe ways Elena Physicians can increase their revenue or decrease their exposure to risk.

ANSWER:

- (d) (1 point) Identify considerations when estimating provider related liabilities according to ASOP 42.

ANSWER:

- (e) (2 points) Identify whether each of the following statements is true or false. Justify your answer.

- Economic problems of medical care can be explained as uncertainties in disease incidence and treatment outcome leading a patient to seek transfer of their financial risk and agency.
- Regardless of the severity of a medical condition, consumers can shop around for the best price.
- Medical costs tend to be elastic.
- A US major medical plan covers substantially more services than a Canadian Medicare plan.
- The increase in supply of physicians is not instantaneous.
- Most hospitals compete over patients rather than physicians.

ANSWER:

*The Excel spreadsheet has  
additional data and information applicable to this question*

**3.**

(9 points) You are reviewing the actuarial elements of an HMO's NAIC SAP basis financial statements on behalf of an external auditor. You have already reviewed the HMO's GAAP basis financial statements.

- (a) (2 points) Describe the primary differences in the actuarial items between the SAP basis financial statements and the GAAP basis financial statements.

ANSWER:

- (b) (1 point) Describe the obligations you (the reviewing actuary) have to the responding actuary who prepared the HMO's financial statement information.

ANSWER:

- (c) (1 point) List items the responding actuary should be prepared to discuss with the reviewing actuary.

ANSWER:

In the Excel spreadsheet, you are provided with premium and claim information.

- (d) (4 points) Calculate the loss ratios for 20X1 based on the "accounting view" and the "actuarial view". Show your work.

*The response for this part is to be provided in the Excel spreadsheet.*

The responding actuary for the HMO believes the loss ratio for 20X1 on both the accounting view and actuarial view is 80%.

- (e) (1 point) Construct a response that describes key components that support your calculation.

ANSWER:

*The Excel spreadsheet has  
additional data and information applicable to this question*

**4.**

*(6 points)*

- (a) *(1 point)* Contrast an experience-rated refund with a premium stabilization reserve.

ANSWER:

- (b) *(1 point)* Describe the two main methods used to account for experience-rated refund contracts during the middle of the contract period.

ANSWER:

ABC Insurance has established a new experience-rated refund contract with a large employer.

In the Excel spreadsheet, you are provided additional information.

- (c) *(3 points)* Calculate the experience-rated refund balance for all four quarters of the prior year using both methods in part (b). Show your work.

*The response for this part is to be provided in the Excel spreadsheet.*

- (d) *(1 point)* Recommend which method to use. Justify your response.

ANSWER:

**5.**

(9 points)

(a) (6 points)

(i) (3 points) State the protected population for each listed law or regulation.

(ii) (3 points) Describe the purpose for each listed law or regulation.

Provide your answer in table format below.

Law/Regulation	Protected Population	Purpose
Newborns' & Mothers' Health Protection Act		
The Family Medical Leave Act (FMLA)		
Womens' Health and Cancer Rights of 1998		
Michelle's Law		
Genetic Information Nondiscrimination Act (GINA) of 2008		
Patients' Right to Know Drug Prices Act of 2018		
Transparency in Coverage Rule		
The Coronavirus Aid, Relief and Economic Security (CARES) Act		

(b) (3 points)

(i) (1 point) Define each aspect of the healthcare system as it pertains to prescription drugs.

(ii) (2 points) Construct an example on how each federal agency listed below regulates each aspect as it pertains to prescription drugs.

Provide your answer in table format below.

Aspect	Definition	Food and Drug Administration (FDA)	Centers for Medicare & Medicaid Services (CMS)
Access			
Quality			
Cost			

*The Excel spreadsheet has additional data and information applicable to this question*

**6.**  
(9 points)

(a) (2 points)

(i) (1 point) Contrast the pricing considerations under Medicare Part C and Part D by completing the following table:

	Part C	Part D
Risk Management		
Eligibility		
Benefit Structure		

(ii) (1 point) Contrast the regulatory considerations under Medicare Part C and Part D by completing the following table:

	Part C	Part D
Risk Management		
Eligibility		
Benefit Structure		

(b) (2 points) Describe two risk-sharing mechanisms that influence premium setting for Part D prescription drug plans.

ANSWER:

An insurer is evaluating the financial impact of a prescription drug benefit within a Medicare Advantage plan.

In the Excel spreadsheet, you are provided information about the insurer.

(c) (2 points) Calculate the insurer's total drug cost liability under the defined standard benefit for all member groups. Show your work.

*The response for this part is to be provided in the Excel spreadsheet.*

(d) (2 points) Calculate the percentage change in the insurer's Part D margin after the Part D risk corridor. Show your work.

*The response for this part is to be provided in the Excel spreadsheet.*

**6. Continued**

- (e) *(1 point)* Recommend an adjustment to the pricing or benefit design to mitigate the insurer's financial risk. Justify your response.

ANSWER:

**\*\*END OF EXAMINATION\*\***