

Exam GHDPC

Date: Monday, May 3, 2021

INSTRUCTIONS TO CANDIDATES

General Instructions

1. This examination has 5 questions numbered 1 through 5 with a total of 40 points.

The points for each question are indicated at the beginning of the question. Questions 2 through 4 pertain to the Case Study.

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, β_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, as long as your work and assumptions are clear to an individual with average Excel experience reviewing the submitted file.
 - 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 five-digit candidate number in the filename.
4. The Word and Excel files that contain your answers must be uploaded before time expires.

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Navigation Instructions

Open the Navigation Pane to jump to questions.

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



CASE STUDY INSTRUCTIONS

The case study will be used as a basis for some examination questions. Be sure to answer the question asked by referring to the case study. For example, when asked for advantages of a particular plan design to a company referenced in the case study, your response should be limited to that company. Other advantages should not be listed, as they are extraneous to the question and will result in no additional credit. Further, if they conflict with the applicable advantages, no credit will be given.

1.

(9 points)

- (a) (1 point) Describe the duties of a pharmacy benefit manager.

ANSWER:

- (b) (1 point) List and describe the components of a pharmacy allowed amount.

ANSWER:

- (c) (1 point) Describe formulary management programs that can impact a plan's expected cost and utilization.

ANSWER:

1. Continued

ABC Insurance provides the following 2020 claims experience and projected 2022 discounts. You are given:

- 0% AWP trend
- 0% utilization trend

Drug	Average Wholesale Price	Dispensing Fee	2020 Discount	2022 Discount	Tier	Scripts per 1,000 members
A	\$50	\$2.00	80%	80%	1	6,000
B	\$60	\$2.00	85%	90%	1	7,200
C	\$250	\$2.00	60%	65%	2	2,400
D	\$300	\$2.00	60%	65%	3	1,800
E	\$400	\$2.00	40%	35%	3	3,600
F	\$10,000	\$2.00	25%	25%	4	36

Tier	Tier Description	Copay
1	Generics	\$5
2	Preferred Brands	\$25
3	Non-Preferred Brands	\$50
4	Specialty	30%

- (d) (3 points) Calculate the change in ABC's allowed cost PMPM from 2020 to 2022. Show your work.

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

1. Continued

ABC is revising its formulary for 2022 to lower its costs. You are given:

- No change in utilization from 2020 to 2022.
- No rebates in 2020.
- Rebates per script for 2022:

Drug	2022 Tier	Rebate per Script
A	1	\$0
B	1	\$0
C	2	\$25
D	2	\$25
E	2	\$25
F	4	\$0

- (e) (2 points) Calculate the change in the 2022 net plan cost PMPM due to the formulary revisions. Show your work.

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

- (f) (1 point) Recommend actions ABC can take to further reduce its costs. Justify your response.

ANSWER:

Question 2 pertains to the Case Study.

2.

(6 points)

- (a) (1 point) Describe characteristics of successful health plan underwriting and rating.

ANSWER:

Royale Health requested that you review a large group product quote one of its analysts developed for Company XYZ. You are given:

- XYZ has 500 enrolled employees
- Policy period will be July 1, 2021 to December 31, 2022
- Current Preferred Provider Organization (PPO) rates are:
 - Employee only coverage: \$300 PMPM
 - Employee and family coverage: \$800 PMPM

The analyst's rate calculation:

Manual Rate:	\$399.50
Industry Factor	1.2
Age Factor	0.9
Sex Factor	1.1
Final Rate	\$474.606

- (b) (2 points)

- (i) Critique the rate calculation.

ANSWER:

- (ii) Propose adjustments to the calculation. Justify your response.

ANSWER:

2. Continued

Royale Health informs you claims data is available from XYZ's current insurer.

- (c) (2 points) Create a data request. Justify each element included in the request.

ANSWER:

- (d) (1 point) Propose adjustments to the rate calculation to incorporate XYZ's claims experience. Justify your response.

ANSWER:

Question 3 pertains to the Case Study.

3.

(10 points) Thunderball has retained Skyfall to evaluate its long-term care (LTC) business.

You are given:

- Valuations are performed as of 12/31/2020
- Exhibits 3 - 5
- Odd numbered policies were issued to females
- Even numbered policies were issued to males
- All premium and claim payments occur at mid-year
- Discount rate is 3.50% per year
- Lapse rate is 1.00% per year
- Deaths and lapses occur at mid-year
- The following mortality rates:

Attained Age	Sex	
	Female	Male
<60	0.002	0.004
60-64	0.005	0.007
65-69	0.008	0.010
70-74	0.012	0.015
75-79	0.020	0.027
80-84	0.037	0.047
85-89	0.071	0.086
90-94	0.121	0.153
95-99	0.200	0.240
100-104	0.304	0.343
105-109	0.391	0.400
110+	1.000	1.000

3. Continued

- (a) (4 points) Calculate for policy numbers 9 and 10 using a 5-year projection period, the:
- (i) Present value of future earned premium
 - (ii) Present value of future incurred claims
 - (iii) Loss ratio

Show your work. State your assumptions.

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

- (b) (1 point) Identify Actuarial Standards of Practice to be considered when projecting and communicating the loss ratio to Thunderball management.

ANSWER:

- (c) (2 points) Describe steps that should be taken to evaluate the financial condition of Thunderball's LTC business.

ANSWER:

3. Continued

Thunderball's management believes a rate increase is justified if the projected future loss ratio exceeds the lifetime loss ratio assumed in the original pricing of the business.

- (d) (1 point) Evaluate Thunderball's assertion. Justify your response.

ANSWER:

Thunderball's management is considering ways to grow its LTC book of business.

- (e) (2 points)

- (i) Compare and contrast the premium and benefit structures of:

- stand-alone LTC products
- the LTC portion of life and LTC combination products

ANSWER:

- (ii) Describe characteristics of LTC combination products that incentivize a consumer to purchase a combination product over a stand-alone LTC product.

ANSWER:

Question 4 pertains to the Case Study.

4.

(9 points)

- (a) *(1 point)* Compare and contrast defined benefit and defined contribution strategies from the employer's perspective.

ANSWER:

- (b) *(2 points)* List and describe considerations for an employer's payroll contribution strategy.

ANSWER:

- (c) *(1 point)* Describe advantages and disadvantages of a spousal surcharge from the employer's perspective.

ANSWER:

4. Continued

Dr. No's Herbal Tea Company (Dr. No) is considering changes to its payroll contribution strategy and has retained Skyfall to assist with this evaluation. You are given:

- Exhibits 1 - 2

Dr. No is considering the following income-based payroll contribution strategy:

Annual Salary	Employer Contribution
<\$35,000	25.0%
\$35,000 - \$50,000	22.5%
\$50,000 - \$80,000	20.0%
> \$80,000	17.5%

(d) (3 points) Calculate the change in Dr. No's average premium contribution per employee relative to the current 2021 subsidy if Dr. No adopts:

- a defined benefit approach where Dr. No contributes 22% toward premium
- the income-based payroll contribution strategy provided above

Show your work. State your assumptions.

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

(e) (1 point) Critique the income-based payroll contribution strategy provided above.

ANSWER:

(f) (1 point) Recommend a payroll contribution strategy for Dr. No. Justify your response.

ANSWER:

5.

(6 points)

- (a) (2 points) List the steps in a functional approach to designing a benefit plan.

ANSWER:

- (b) (1 point) Describe special considerations for small companies when implementing medical insurance benefits.

ANSWER:

- (c) (1 point) Explain reasons why a small employer may choose to not implement a traditional cafeteria plan.

ANSWER:

DEF was founded two years ago and has a small number of young employees. DEF recently hired a new CEO from a different, well established industry. The CEO believes DEF should offer a rich PPO plan, similar to what was offered at her prior company. She wants DEF to pay the entire premium to improve the value of its compensation package.

- (d) (1 point) Critique the CEO's position on benefits.

ANSWER:

- (e) (1 point) Propose an alternative benefit strategy to the CEO. Justify your response.

ANSWER:

****END OF EXAMINATION****