25. (1.75 points)

Given the following information for a company:

5.00	12-Ultimate Gross Paid Claims Development Factor
3.30	24-Ultimate Gross Paid Claims Development Factor
12,000,000	Accident Year 2018 Paid Gross Claims @ 12 Months

Incremental Gross Industry Payment Pattern for 12 to 24 Months, by Quarter				
Age	12-15	15-18	18-21	21-24
Percent Paid	50%	35%	10%	5%

1,450,000	Accident Year 2018 Actual Net Paid Claims for 15-18 Months

- The company maintains a quota share reinsurance agreement where they cede 30% of the business.
- Ultimate losses are estimated using the paid development technique.

a. (1.25 points)

Calculate the accident year 2018 expected net paid claims for the period 15 to 18 months, based on the following:

i) claims emerge uniformly between evalution points.
ii) the industry payment pattern.

b. (0.5 point)

Recommend whether to change the net estimated unpaid based on the actual results for accident year 2018 in the 15-to-18 month period.

END OF EXAMINATION

QUESTION 25	
TOTAL POINT VALUE: 1.75	**LEARNING OBJECTIVE(S): B8**

SAMPLE ANSWERS

Part a: 1.25 points

Sample 1

Unpaid = 12,000,000 x (5-1) = 48,000,000
Gross Expected Paid 12-24 = 48,000,000 x (1/3.3 – 1/5) / (1 – 1/5) = 6,181,818
i) Net Expected Paid 15-18 = 6,181,818 x 0.7 x 25% = 1,081,818
ii) Net Expected Paid 15-18 = 6,181,818 x 0.7 x 35% = 1,514,545

Sample 2

Gross Expected Paid 12-24 = 12,000,000 x (5/3.3 – 1) = 6,181,818
i) Net Expected Paid 15-18 = 6,181,818 x 0.7 x 25% = 1,081,818
ii) Net Expected Paid 15-18 = 6,181,818 x 0.7 x 35% = 1,514,545

Part b: 0.50 point

Sample 1

Industry factors may be distorted as the industry factors are not a perfect match to company development. I would not raise the projection.
I would also not lower the projection based on company factors. Unless the reason for the discrepancy is due to a change that has happened since the original projections, such as a large loss recovery.

Sample 2

I do not recommend changing the net estimated unpaid based on the actual results of the company. The actual and estimated are close to each other. The variation can be because of the leveraged development factors of paid claims at early maturities. The industry estimates may not be appropriate for the company because of differences in policy types, claim settlement methods and development.

Sample 3

No, industry pattern reflects typical payment pattern (more development earlier in year) and is a better assumption than even development by quarter. The estimate using this method is very close in line to the actual net emergence of $1.45M.

EXAMINER'S REPORT

Candidates were expected to calculate the projected net payments for the 15-18 month period under the two scenarios provided (Uniform and Industry emergence patterns within the 12-24 month interim periods). Candidates were expected to recommend and justify whether or not to change the unpaid projection.

Part a
Candidates were expected to calculate the projected net payments within the 15-18 month period using each of the assumptions provided (Uniform and Industry emergence patterns within the 12-24 month interim periods). Common mistakes included: • Not applying the 70% quota share. • Calculating the emergence for the wrong period (ex. 12-15 months). • Only providing a response under one assumption (Uniform/Industry) but not both.
Part b
Candidates were expected to recommend and justify whether to change the unpaid projection. Candidates were expected to provide justification by comparing actual to expected and evaluating the appropriateness of the uniform/industry assumptions. Common mistakes included: • Providing only a recommendation but no justification. • Citing changes in case adequacy (the question uses paid data).