ELECTIVE (Finance)

Elective examinations are 3 hours in length. Candidates are given 4 hours to complete the examination, which provides an extra hour for them to formulate their responses. The intention is to reduce the time constraint.

The examinations are made up of a mix of objective-format and medium- to large-sized, moderately complex cases. The split and length may vary across the Electives to adapt to the learning outcomes required.

Elective examinations contain larger and more complex cases than those used for Core 1 and Core 2, requiring a minimum of 60 and a maximum of 120 minutes to complete. The assessment of professional skill is in a multi-competency environment, building on prior learnings, but greater than 50% of assessment opportunities will relate to the Elective area being examined.*

Elective cases require candidates to simulate the "roles" they will play in real life, and, therefore, access is provided to the reference tools they would use, where practical to do so.

Currently capped at 90 minutes (see blueprint).

Case #1 Gentleman's Quarry
(Suggested time: 60 minutes (represents the time judged necessary to complete the simulation))

You, CPA, have been approached by Tarick Pannas, a partner in The Gentleman's Quarry (GQ), a retail store selling affordable men's clothing. Tarick has provided the majority of the funding to get the retail venture started. Pike Jones, is the active partner. Pike makes most of the operational decisions and meets with customers and vendors on a regular basis. Although Pike doesn't have a financial background, he has always been a smooth talker, which is what led Tarick to partner with him in this retail venture. GQ has been in operation since July 1, 2014, and Tarick and Pike have been satisfied with the store's performance to date.

It is January 6, 2015, and although GQ had strong sales during the Christmas season, the retail economy has slowed since the holiday rush. Based on semi-annual cash forecasts, Tarick makes cash calls — additional cash investments that GQ requires to sustain its operations. Tarick initially injected $50,000 into the company, but given the time of year, he expects that more capital will be required to maintain operations. He is asking you to prepare the forecast for the next six months to determine how much the next cash call may be. He wants you to provide an explanation for the sales projections that you use.

Pike remains optimistic about the financial viability of the retail store, but Tarick would prefer a more objective assessment. He has asked you to compare key financial ratios against those of a key competitor, Esquine, to evaluate GQ's performance to date. He specifically asks that you limit your analysis to the most important three ratios. Further notes from your discussion with Tarick are in Appendix I, and summary financial information on GQ is provided in Appendix II.

Tarick also provides you with excerpts from an offer that GQ has recently received to acquire Esquine which is located across the street from GQ (Appendix III). He has asked for your assessment of the proposed price.

Finally, Tarick has reached out to you for advice and suggestions on improving GQ's chances for financial success going forward.

APPENDIX I
NATURE OF BUSINESS

The Gentleman's Quarry is based in Mississauga, Ontario. Sales rose during the first two quarters of operation, and Pike has a strong "gut feel" that there will be a 30% sales increase in the next two quarters. He attributes this increase to the additional networking that he plans to do at two trade shows: one in Las Vegas (March) and one in Orlando (April). The trade shows are estimated to cost $4,000 (Las Vegas) and $8,800 (Orlando), all-inclusive.

In addition, he plans to improve the quality of the apparel by offering higher-end brands than GQ currently sells. This would see an increase in merchandise costs of 15% as a percentage of sales over the December 2014 quarter-end. Tarick, however, is not convinced sales will increase because industry statistics show a peak in sales during the Christmas season and a sharp decline thereafter.

To differentiate itself from the competition, GQ offers payment terms of 60 days to all customers. To Tarick's knowledge, no other competitor in the city offers the same generous payment terms. This strategy seems to be working, since the vast majority of sales have been on credit, although not all customers have been paying by the due date. Another customer service differentiator GQ plans to implement is to operate with a 1:3 staff-to-customer ratio which is an industry best-practice ratio. Based on Pike's analysis, he has suggested hiring one full-time and one part-time salesperson. .

The 300-square-foot retail space is leased. GQ owns the equipment and furnishings. On January 3, 2015, GQ purchased $9,000 in shelving and furnishings with an expected life of five years.

Given that GQ is in its infancy, banks have been hesitant to offer any type of financing. Therefore, Tarick believes he is the only available source of financing. Cash calls are issued every six months based on the forecasted cash required plus a 10% cushion.

APPENDIX II
SUMMARY OF FINANCIAL INFORMATION

	Q2 31-Dec-14	Q1 30-Sep-14
Assets		
Cash	$ 26,250	$ 15,000
Accounts receivable	38,750	26,250
Inventory	32,500	17,500
Property, plant and equipment	13,500	15,000
Liabilities		
Accounts payable	40,000	30,000

	Q2 31-Dec-14	Q1 30-Sep-14
Revenue		
Cash sales	$ 4,375	$ 6,875
Credit sales	37,500	26,250
Expenses		
Merchandise costs	25,625	23,625
Labour (1)	25,250	25,250
Travel	0	0
Meals and entertainment	1,250	1,250
Depreciation	1,500	0
Set-up costs	7,500	12,000
Legal costs	7,500	12,500
Marketing and advertising	1,875	1,875
Lease costs	3,750	3,750
Net income (loss)	$ (32,375)	$ (47,125)

1. Includes three part-time staff and Pike's salary of $80,000 per year. A typical full-time salesperson would be paid $42,000 per year.

APPENDIX III
ACQUISITION OFFER

Stephan Cocobas, the owner of Esquine, a local menswear store, has offered to sell his operation after 30 years of business. He would like a quick sale with full payment up front based on a multiple of five times EBITDA. Pike is excited because this acquisition would mean "one less competitor for GQ."

The retail industry has often used Esquine as a prime example of how a menswear store should be run from both a customer service and a financial perspective.

Mr. Cocobas has indicated that due to the recent stagnation of sales and his deteriorating health, he would like to sell Esquine and move to St. Tropez. The remaining three staff members are all full-time and are siblings of Mr. Cocobas; they do not wish to remain involved in the business.

Recently, Esquine spent $10,000 to repair the roof, extending its life for five years. In addition, a recent theft of $5,000 in merchandise prompted Esquine to consider increasing security. The surveillance company has offered a surveillance system for free during a two-month trial run. The system would cost $1,000 to install and $100 monthly per camera on an ongoing basis. Esquine would need four cameras to cover the 800-square-foot store and another for the storage area. The insurance company offered to increase its coverage to include merchandise theft for $3,000 annually and is offering a 10% discount of this amount if cameras are installed.

Balance Sheet – Extracts	**Fiscal Year 2014** **31-Dec-14**	**Fiscal Year 2013** **31-Dec-13**
Current assets		
Cash	$ 215,000	$ 185,000
Accounts receivable	15,000	15,000
Inventory	110,000	100,000
Non-current assets		
Leaseholds and equipment	120,000	135,000
Current liabilities		
Accounts payable	97,500	95,000

APPENDIX III (continued)
ACQUISITION OFFER

Income Statement – Extracts	**Fiscal Year 2014 31-Dec-14**	**Fiscal Year 2013 31-Dec-13**
Revenue		
Sales	$ 550,000	$ 555,000
Expenses		
Merchandise costs	230,000	238,000
Inventory shrinkage	25,000	18,000
Labour (3 full-time staff)	100,000	101,000
Depreciation	15,000	15,000
Interest	10,000	9,000
Marketing and advertising	15,000	18,000
Lease costs	40,000	40,000
Maintenance costs	65,000	54,000
Net income	$ 50,000	$ 62,000

<u>Case #2 Holodeck</u> **(Suggested time: 90 minutes)**

Today is April 25, 2015. You, CPA, are a senior analyst at Blue Ocean Equity Partners LLP (BOE), a mid-size private equity firm that invests in companies involved in the multimedia and video game industries. Your main responsibilities are to review investment proposals received by the firm and to present recommendations to the firm's investment committee on how to proceed.

You are currently looking at an opportunity for BOE to invest in Holodeck Ventures Inc. (Holodeck), which is owned by entrepreneur Adrian Broody. Holodeck is an emerging leader in the video game industry, targeting science-fiction games for adults. While Holodeck has been profitable, most of its cash flows have been reinvested in developing new products. Adrian has provided you with the most recent financial statements for Holodeck (Appendix I).

BOE typically takes an equity stake of between 20% and 50% in its investee firms or subscribes to a subordinated debenture that is convertible into a comparable equity stake. Publicly listed entities can currently raise capital by issuing convertible subordinated debentures at yields ranging from 5% to 9%. BOE's investment goal is to double the value of an investment within four years.

Alternative for Holodeck: Initial Public Offering (IPO)

As an alternative to a private equity investment, Holodeck is considering an IPO through an investment bank. The investment bank has showed great interest in Holodeck and believes that an IPO would be successful. The investment bank has provided Adrian with a draft plan for an IPO (Appendix II), as well as some financial projections on the basis of their preliminary review (Appendix III).

Use of Funds

Holodeck would utilize the funds generated to buy Next Wave Games Inc. (Next) for $25 million. Next develops and publishes a range of action/adventure and casual games. Currently Next does not generate any cash flow, but it is expected to begin generating cash over the next three years by reducing its research and development (R&D) investment to the industry average of 22% of sales versus the current 40% of sales.

Request

You have been asked by the head of the investment committee to complete the following:

- Discuss three significant advantages and three significant disadvantages for Holodeck to seek private equity financing from BOE rather than undertaking an IPO.
- Using the projections prepared by the investment bank (see Appendix III), develop a free cash flow forecast for Holodeck for the next five years.
- Discuss the reasonableness of the underlying assumptions used by the investment bank (see Appendix III).
- Estimate the weighted average cost of capital for Holodeck assuming an all-equity capital structure. Explain any risk premiums included in your calculations.
- Prepare a discounted cash flow (DCF) valuation for Holodeck as a stand-alone privately held entity.
- Assuming that BOE decides to invest in Holodeck, discuss the advantages and disadvantages of BOE utilizing either equity or a convertible subordinated debenture. Recommend a financing option for Holodeck.

APPENDIX I
HOLODECK'S FINANCIAL STATEMENTS

Income Statement
For the year ended March 31
(in millions of dollars)

	2015	2014	2013
Total revenue	$ 61.5	$ 54.6	$ 47.4
Cost of goods sold	12.3	10.9	10.3
Gross profit	49.2	43.7	37.1
R&D expense	7.0	8.5	7.0
Selling and general admin. expense	21.4	20.2	16.3
EBITDA	20.8	15.0	13.8
Depreciation and amortization	6.2	1.6	1.2
Interest expense	0.8	0.6	0
Income before tax	13.8	12.8	12.6
Income tax	4.2	3.9	4.0
Net Income after tax	$ 9.6	$ 8.9	$ 8.6

APPENDIX I (continued)
HOLODECK'S FINANCIAL STATEMENTS

Statement of Cash Flows
For the year ended March 31
(in millions of dollars)

	2015	2014	2013
Operations			
Operating cash flow before working capital changes	$ 15.8	$ 10.6	$ 9.2
Changes in non-cash working capital items	(7.2)	(2.2)	2.1
Cash flow from operating activities	8.6	8.4	11.3
Investing			
Capital expenditures	(0.4)	(0.5)	(1.6)
Investment in intangibles	(2.9)	(13.3)	(4.5)
Other investing items	0.3	0.1	0.1
Total cash flow from investing	(3.0)	(13.7)	(6.0)
Financing			
Increase/Decrease in stock	(0.9)	(0.2)	(0.6)
Increase/Decrease in debt	0	0	0.2
Other financing items	(2.1)	4.1	(6.0)
Total cash flow from financing	(3.0)	3.9	(6.4)
Other cash adjustments	0.1	0.3	(0.6)
Change in cash	2.7	(1.1)	(1.7)
Cash at beginning of period	5.8	6.9	8.6
Cash at end of period	$ 8.5	$ 5.8	$ 6.9

APPENDIX I (continued)
HOLODECK'S FINANCIAL STATEMENTS

Balance Sheet
As at March 31
(in millions of dollars)

	2015	2014	2013
Assets			
Cash and short-term investments	$ 8.5	$ 5.8	$ 6.9
Accounts receivable	10.2	7.6	5.1
Other receivables	4.4	4.2	3.6
Other current assets	2.8	0.7	1.7
Total current assets	25.9	18.3	17.3
Net property, plant and equipment	2.0	2.6	3.1
Net intangibles*	24.8	27.7	14.5
Other non-current assets	4.2	4.6	5.4
	$ 56.9	$ 53.2	$ 40.3
Liabilities			
Accounts payable	$ 5.8	$ 8.4	$ 9.0
Current debt	0.1	4.1	0.1
Other current liabilities	1.9	1.6	1.1
Total current liabilities	7.8	14.1	10.2
Long-term debt	0	0	0.2
Deferred liabilities	1.6	0.4	0
Total liabilities	9.4	14.5	10.4
Shareholders' equity			
Common stock	3.2	2.8	2.2
Other equity	2.1	3.4	4.2
Retained earnings	42.2	32.5	23.5
Total shareholders' equity	47.5	38.7	29.9
	$ 56.9	$ 53.2	$ 40.3

*This account consists mostly of capitalized R&D expenditures.

APPENDIX II
INVESTMENT BANK'S DRAFT PLAN FOR AN IPO

We are pleased to have the opportunity to provide you with the tentative terms of an IPO. By becoming a publicly listed entity, Holodeck would gain an additional currency beyond cash: it could use its own shares to pursue acquisition opportunities.

From our experience, an IPO typically has the following features and implications:

- Minimum stock market capitalization (post-IPO) is $150,000,000.
- Minimum size of share issue is around $50,000,000 to ensure that there is enough liquidity for post-IPO trading and also to interest institutional investors, who typically invest at least $500,000 each.
- Our IPO fees represent 6% of the gross proceeds from the IPO.
- Legal and accounting costs are $500,000 up front.
- Ongoing costs to remain a publicly listed entity are $1,500,000 per year.
- Holodeck's current internal financial reporting and control systems would require an upfront investment of $1,000,000 to update them so that they could serve a publicly listed entity.
- The firm would need to appoint a formal board of directors and set up an audit committee consisting solely of independent directors.

We have used the following assumptions and parameters to estimate Holodeck's value as a publicly listed entity:

- Risk-free rate (current 10-year Government of Canada bond yield): 2%
- Estimated market risk premium: 5%
- Estimated systematic risk (beta) for the video game sector: 1.75
- Estimated firm-size risk premium: 4%

APPENDIX III
INVESTMENT BANK'S FINANCIAL PROJECTIONS FOR HOLODECK

The following are our financial projections for Holodeck, assuming financing is available and not taking into account incremental costs implied by an IPO.

Projections for Holodeck *(in millions of dollars)*

	2016	2017	2018	2019	2020
Sales	$ 74	$ 89	$ 106	$ 128	$ 153
Gross profit	59	71	85	102	122
R&D expense	7	9	11	13	15
Selling and general admin. expense	25	30	35	42	51
EBITDA	**27**	**32**	**39**	**47**	**56**
Depreciation and amortization	7	9	11	13	15
Interest expense	1	1	0	0	0
Earnings before tax	19	22	28	34	41
Income tax	6	7	8	10	12
Earnings	$ 13	$ 15	$ 20	$ 24	$ 29

Valuation based on 7 times forward EBITDA = $27 × 7 + $8.5 (cash) = $197.5 million.

Assumptions

Growth	20%	per annum
Gross margin	80%	of sales
R&D expenses	10%	of sales
SG&A expenses	33%	of sales
Depreciation expense	20%	growth per annum
Income tax expense	30%	of income before tax
Capital expenditures and intangibles annual investment	6%	of sales
Working capital annual investment	30%	of change in sales