



THE UNIVERSITY OF THE WEST INDIES
CAVE HILL

EXAMINATIONS OF APRIL/MAY 2019.

CODE AND NAME OF COURSE: MGMT3090 – ENTREPRENEURIAL FINANCE

DATE AND TIME:

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES: This paper has 6 pages and 7 questions.

**Answer Section A, one (1) question in Section B and ONE (1)
in Section C**

Section A

This section is compulsory.

Read the case carefully and answer ALL questions. (15 marks)

Dr. Maria Collymore graduated from medical school approximately ten years ago and since then she has been working as a paediatrician in group practice while completing additional studies for specialisation in birth complications in infants. The practice allowed Maria to share expenses of the office rent and supplies. She believes that she has sufficient medical knowledge and experience to start her own specialised practice but she thinks that her knowledge of business practices is somewhat lacking.

Dr. Collymore has approached you for advice in starting her new practice.

1. Do you consider Maria to be an entrepreneur? Give TWO (2) reasons for your answer. (4 marks)
2. Give THREE (3) examples of the information that a finance agency would want before agreeing to lend Dr. Collymore the funds to open a new practice. (3 marks)
3. What challenge would Maria encounter if she received a request to estimate the value of her new business? (3 marks)
4. After operating this new business for ten years, she has decided to close the practice to invest her time in medical research. Identify TWO (2) options available as exit strategies and identify the issues which she should consider while making that decision. (5 marks)

TURN OVER

Section B:

Choose ONE question in this section. Each question is worth 40 marks.

1. Tammy's Bike Tours has been operating as a tour company in Barbados for the past two years. Management wishes to expand and has asked you to prepare forecasted statements to submit to their financial institution as part of their business plan.

By the end of March 2019, the business had generated \$125,000 in sales and had the following on their books:

	\$
Cash	10,000
Equipment	30,000
Stock	11,250
Accounts payable	5,000

Required:

Prepare the financial projections for three years using the following assumptions. The statements should include the Income Statements; Cash Flow Statements and Balance Sheets.

- a) Sales are projected to increase by 10% in 2020; 8% in 2021 and 5% in 2022.
- b) Direct costs are estimated to be 35% of sales.
- c) Other expenses for the period ended March 2020 should include insurance \$10,000; salaries \$25,000 and rent \$20,000. These are projected to increase by 3% for the next two years.
- d) The company has included the proposed loan of \$25,000 for the purchase of more equipment in the projections. Interest payments of \$1,500 principal payments of \$5,000 are due yearly.
- e) Depreciation of the new equipment is on a straight-line basis and the salvage value is expected to be \$1,000 at the end of six years. The existing equipment is depreciated at \$7,500 per year.
- f) Corporation tax is 15% and should be paid in the same year in which it becomes due.
- g) The following has been suggested:

Ending inventory	15% of sales
Ending accounts receivable	5% of sales
Ending accounts payable	20% of direct costs

(40 marks)

TURN OVER

2. XYZ Limited has been in operation for 20 years and manufactures a variety of small consumer items. The shareholders are interested in retiring and are seeking an investor. They have been requested to submit financial statements and specific ratios. The information is provided below.

XYZ Limited

Income Statement ('000s)

For the year ended December 31, 2017

	\$
Sales	30,500
Interest income	500
Total revenue	<u>31,000</u>
Costs and expenses	
Cost of goods sold	17,600
Selling and administrative expense	3,550
Depreciation and amortisation expense	1,890
Interest expense	900
Total costs and expenses	<u>23,940</u>
Income before taxes	7,060
Taxation	2,900
Net income	<u><u>4,160</u></u>

TURN OVER

XYZ Limited
Balance Sheet ('000s)
As at December 31

	2017	2016
	\$	\$
Cash	400	500
Investments	500	200
Accounts receivable	3,200	2,900
Inventory	5,800	5,400
Total current assets	9,900	9,000
Property, plant & equipment	7,100	7,000
TOTAL ASSETS	17,000	16,000
Accounts payable	3,700	3,400
Taxes payable	900	800
Accrued expenses	1,700	1,400
Total current liabilities	6,300	5,600
Long-term debt	2,000	1,800
Total liabilities	8,300	7,400
Capital	3,700	3,700
Retained earnings	5,000	4,900
Total shareholders' equity	8,700	8,600
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	17,000	16,000

SELECTED FINANCIAL RATIOS

	XYZ		Current
	2016	2015	Industry Average
Current ratio	1.61	1.62	1.63
Acid-test ratio	0.64	0.63	0.68
Times interest earned	8.55	8.50	8.7
Profit margin on sales	13.2%	12.1%	13.0%
Total debt to net worth	0.86	1.02	1.03
Asset turnover	1.84	1.83	1.84
Inventory turnover	3.17	3.21	3.05

TURN OVER

Question 2 (cont'd)

Required:

- a) Calculate the ratios for 2017 based on the financial statements presented. (14 marks)
- b) Explain the use of each of the seven ratios presented, describing what the investors can learn about XYZ's financial stability and operating efficiency. (21 marks)
- c) Identify TWO (2) limitations of ratio analysis. (5 marks)

Section C

Answer ONE question from this section. Each question is worth 15 marks.

- 1. Small business owners can sometimes underestimate the importance of keeping financial records.
 - a) Identify FOUR (4) items which would assist in the preparation of financial statements. (4 marks)
 - b) What information would the THREE (3) financial statements give about any business? (6 marks)
 - c) Ian Best owns a small bar and has asked for advice when the following cash management issues occur:
 - i. The budget suggests that there is likely to be a shortfall in the month of January.
 - ii. He realizes at the end of a month that he has been unable to collect more than half of the outstanding amounts owed at the end of the previous month(5 marks)

TURN OVER

2. a) Identify the THREE (3) aspects of business which should be researched while performing a feasibility study. Give details on each. (6 marks)
- b) A business plan should include information other than financial. Identify THREE (3) other sections which should be presented in the plan.(6 marks)
- c) Entrepreneurs are encouraged to prepare both a feasibility study and a business plan. What is the difference between the two documents? (3 marks)
3. The following business owners have asked you for advice on choosing the various types of debt or equity to finance their operations. Give a recommendation and explain your reasons for that suggestion.
- a) A small poultry processor has a contract to supply a government-run health institution with 5,000 pounds of chicken every quarter. Funds are required to build a pen, purchase equipment and to provide supplies. (3 marks)
- b) An IT firm has developed a new app to assist individuals in determining which supermarkets offer the most reasonable prices. (3 marks)
- c) Mark has been selling natural juices for the past three years. He plans to purchase commercial equipment and renovate the kitchen to improve the facilities. (3 marks)
- d) Erica has been successfully operating a dance studio in a rented space for the past ten years. She is now interested in purchasing a property and has a satisfactory level of savings accumulated. (3 marks)
- e) The owners of several properties in the hilly part of the island are interested in establishing a zipline over the gullies on their properties. (3 marks)
4. Write a short essay explaining in detail THREE (3) important financial decisions that an entrepreneur should make while opening and operating a business. (15 marks)

END OF QUESTION PAPER