DO NOT REMOVE THE QUESTION PAPER FROM THE EXAMINATION HALL

UNIVERSITY OF LONDON

CENTRE FOR FINANCIAL AND MANAGEMENT STUDIES

MSc Examination
MBA Examination
Postgraduate Diploma Examination
for External Students

91DFM C364

FINANCE (BANKING)
FINANCE (FINANCIAL SECTOR MANAGEMENT)
INTERNATIONAL BUSINESS ADMINISTRATION

Introduction to Valuation

Specimen Examination

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*This is a specimen examination paper designed to show you the type of examination you will have at the end of the year for **Introduction to Valuation**. The number of questions and the structure of the examination will be the same but the wording and the requirements of each question will be different. Best wishes for success on your final examination.*

The examination must be completed in **THREE** hours.

Answer **THREE** questions.

The examiners give equal weight to each question; therefore, you are advised to distribute your time approximately equally between three questions.

PLEASE TURN OVER

Answer **THREE** questions.

1. Next year, Company A's NOPLAT is £500 million, with a growth rate of 3 percent, ROIC of 20 percent, and WACC of 10 percent.

a) Explain the value driver formula and calculate the value of the company.

b) Company B's growth rate is 5%, ROIC is 12%, and WACC is 10%. The corporate tax rate is 30%. Explain and calculate the value-to-EBITA ratio.

2. Given the following financial information

Source of Capital	Proportion of Total Capital	Cost of Capital	Marginal Tax Rate	After- tax Cost of Capital	Contribution to WACC
Equity	35%	10%		?	?
Debt	65%	5%	30%	?	?
WACC					?

a) Complete the table.

b) Discuss in relation to the valuation methods whether the WACC can be assumed constant or not.

3. Given the following company statement, in £ millions:

Accountant's income statement		NOPLAT	
Revenues	80	Revenues	80
Operating costs	(40)	Operating costs	(40)
Depreciation	(16)	Depreciation	(16)
Operating profit	24	Operating profit	24
Interest	(1.6)	Operating taxes	?
Non-operating income	0.4	NOPLAT	?
Earnings before taxes	22.8	After-tax non-operating income	?
Taxes	?	Income available to investors	?
Net income	?		

a) Calculate the NOPLAT information. The marginal tax rate is 30 percent.

b) Discuss how you will assess whether the adjustments are correct.

4. Discuss each of the following topics:

a) the advantages of ROIC in relation to ROE and ROA.

b) the assumptions of a model in assessing the scenario analysis.

c) in the context of the CAPM, the index used to estimate company beta; and the weights to use in WACC

d) the investment incentives of intrinsic investors, traders, and mechanical investors.

5. Complete the following table:

Values	**Year 1**	**Year 2**	**CV**
Revenues	£50	£52	£54
Operating costs			
Operating margin			
Operating taxes			
NOPLAT			
Net investment			
Free cash flow			
Discounted cash flow			
Discount factor			
DCF			

Key value drivers:
Investment rate (net investment as a percentage of NOPLAT) = 40%,
Growth rate = 4%,
Operating costs as per cent of revenues = 70%,
Operating taxes = 30%,
NOPLAT margin (operating margin as per cent of revenues × [1 – tax rate]) = 21%,
ROIC = 12%,
Cost of capital = 10%.

a) Complete the table and calculate the value of operations.

b) Do you think the firm's value would increase if the explicit forecast horizon increases?

c) Discuss the assumptions involved in estimating continuing values.

6. A company has constant costs per unit of $2, no fixed costs and pays no taxes. Your forecasts suggest that in Year 1 sales will be 40 units, in Year 2 sales will be 44 units, and in Year 3 sales will be 48.4 units. Prices per unit (including inflation forecast) in Year 1 will be £10; in Year 2 will be £10.4; and in Year 3 will be £11.0. The capital invested is $4,000, with the rate of reinvestment equal to 50 percent of income.

a) Calculate ROIC for Year 1, Year 2, and Year 3.

b) Discuss whether the results are realistic.

c) Explain how you will assess the sensitivity of your results.

7. Critically discuss whether positive earnings announcements may lead to a higher valuation of a company. Does the variability of earnings matter? Explain your answer.

8. What is meant by behavioural finance? Critically examine the role of noise traders, and discuss under what conditions they could have a destabilising influence in stock markets.

[END OF EXAMINATION]