

BASIC FINANCE

Time allowed: 90 minutes

Answer all 4 Questions in Section 1 and 2 Questions from Section 2. Section 1 is worth 60% of the final mark. Marks for each question in Section 1 are shown in brackets. Each question in Section 2 is worth 20% of the final mark.

Notes are not permitted in this examination.

Section 1**Question 1**

You have an expected liability (cash outflow) of \$500,000 in 10 years, and you use a discount rate of 10%. Assume annual compounding.

- i. How much would you need right now as savings to cover the expected liability?
- ii. How much would you need to set aside at the end of each year for the next 10 years to cover the expected liability?

[15 marks]

Question 2

What is the value of stock in a company that currently pays out \$1.00 per share in dividends, and expects these dividends to grow 15% a year for the next 5 years, and 6% a year forever after that? (You can assume that investors require a 12.5% return on stocks of equivalent risk.)

[10 marks]

Question 3

(a) Consider the following information:

State	Probability	ABC Inc. returns (%)
Boom	0.2	15
Normal	0.5	8

Slowdown	0.2	4
Recession	0.1	-3

What is the expected return, variance and standard deviation? [15 marks]

(b) You invest £600 in Stock M and £300 in Stock N. What is the risk and return on your portfolio if the correlation coefficient between returns on Stock M and Stock N is 0.25 and:

	Returns	Standard Deviation of Returns
Stock M	15%	37%
Stock N	8%	23%

[10 marks]

Question 4

The market risk premium is 10% and the risk-free rate is 3%. The beta of Asset A is 0.4. What is the expected return on Asset A under the CAPM?

[10 marks]

Section 2

Question 5

How money can be created in economy? What are the measures of money supply? Discuss.

Question 6

What is monetary policy? What is fiscal policy? Discuss the instruments of those policies and their implications.

Question 7

What is risk and how is it measured in finance? Discuss different types of risk, how are they measured, and what is the relation between different measures of risk? Explain what is diversification and diversification benefits in finance. What those benefits depend on?