



ZIMBABWE EZEKIEL GUTI UNIVERSITY

FACULTY OF BUSINESS, ECONOMICS AND ACCOUNTING

DEPARTMENT OF ACCOUNTING AND FINANCE

EXAMINATION PAPER

COURSE CODE : CAC 209
COURSE TITLE : FINANCIAL MANAGEMENT
DURATION : 3 Hours
DATE :

INSTRUCTIONS TO CANDIDATES:

1. No cell phones are allowed in the examination venue.
2. Use of silent, non-programmable calculators is allowed.
3. Answer all questions.
4. Begin each question on a new page.
5. The number of marks for each question or part question is shown in brackets.

Question One

Stick Ltd is a manufacturing company and is evaluating four independent investment projects. The company is subject to stringent capital rationing and the company's capital budget is limited to \$30 million for the year. The company is unable to defer any of the projects. The cost of capital is 12%.

\$000	0	1	2	3	4
Project X	-15 000	6 200	6 200	6 200	6 200
Project Y	-20 000	6 000	6 000	10 000	10 000
Project Z	-15 000	6 000	8 000	7 000	6 000
Project T	-10 000	5 000	5 000	5 000	5 000

Required:

- Calculate the Profitability Index of each project? **[15 marks]**
- State the projects that should be selected in order to maximise the total NPV? **[6 marks]**
- If projects are perfectly divisible, how would this change the total NPV? **[4 marks]**

Question Two

The following information on annual returns is available for two shares listed on the ZSE

Year	Hifli	Lowfli
2011	18	16
2012	22	12
2013	36	10
2014	12	18

Despite the limited number of readings, a normal distribution of returns may be assumed. In addition, past performance is considered to reflect expected future performance.

Required:

- a) Calculate the average return and standard deviation of each share. **[6 marks]**
- b) Calculate the covariance of returns for a portfolio comprising shares in both Hifli and Lowfli. **[4 marks]**
- c) Calculate the correlation co-efficient of returns in a portfolio of shares of Hifli and Lowfli. **[4 marks]**
- d) Assume you have \$10 000 available to invest. If you wanted to buy either Hifli or Lowfli, which one would you buy? Explain your conclusion. **[3 marks]**
- e) If you choose to invest \$3 000 in Hifli and \$7 000 in Lowfli, calculate your expected return from the portfolio and a measure of risk. **[5 marks]**
- f) Explain briefly the rationale for investors choosing to hold portfolios of shares rather than individual shares. **[3 marks]**

Question Three

Part A

- i. You wish to travel to Europe in 5 years' time and you will need \$30 000 at the time. If you currently have \$15 000, what interest rate must you earn each year to reach \$30 000? **[3 marks]**
- ii. A student borrowed \$5 600 at the beginning of each year at 8% p.a. simple interest. Calculate the amount owed at the end of her third year? **[3 marks]**
- iii. A bank agrees to lend you \$10 000 today in return for your promise to pay the bank \$18 380 in nine years' time. What rate of interest is the bank charging you? **[3 marks]**
- iv. What is the present value of \$500 received in 5 years if the interest rate is 10%? **[2 marks]**
- v. You have just received an inheritance of \$329 760. You plan to put the entire amount in an account earning 8% compounded annually and to withdraw \$40 000 at the end of each year. Calculate the number of years can you continue to make the withdrawals. **[6 marks]**

Part B

A dictionary defines risk as ‘the chance of bad consequences’, and uncertainty as ‘not to be depended on’.

Required:

- i. Discuss these terms in the context of financial management. **[4 marks]**
- ii. Identify the relationship between estimated risk and expected return, with respect to a financial investment. **[4 marks]**

Question Four

- a. Describe the various forms of Efficient Market Hypothesis (EMH) and explain whether it is possible for institutions to outperform the market. **[15 marks]**
- b. Shareholders and the suppliers of loan finance both have a right to the operating income of the company. Explain the differences between these rights and the most preferable from the company’s point of view? **[10 marks]**

End of Paper