**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF COMMERCE**

**DEPARTMENT OF BANKING AND FINANCE**

**INVESTMENT ANALYSIS AND PORTFOLIO MANAGEMENT BS240/BS419**

**FINAL EXAMINATION**

**DURATION: THREE HOURS**

NOV 2023

INSTRUCTIONS TO CANDIDATES

- Answer question 1 and any other 3 questions.
- Start the answer to each question on a fresh page in the answer sheet provided.
- All calculations to be presented in good style and all workings should be shown.
- Questions may be written in any order, but must be numbered accurately and legibly.

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## QUESTION ONE

a) Differentiate the following terms as used in derivative trading:

i. Futures option (2)

ii. Forward contract (2)

b. Explain difference between writing a call and buying a put option. (4)

c. Explain how over diversification may create problems for a firm. (5)

d. A 20 years band with a par value of 1000 pays Annual coupon of 20% per year, payable semi-annually; required rate of return is 18%.

Requires

i. Calculate the value of the bond now. (8)

ii. Explain why you would expect the bond to sell at a premium. (4)

**[25 Marks]**

## QUESTION TWO

Suppose the expected rate of return on equity securities is 45% with a standard deviation of 30%. The rate of return on money market securities is 20%, you invest 60% of your funds in equities and the balance on the money market.

a) Calculate the standard deviation and expected return of this portfolio. **(3)**

b) If the equity part of your portfolio consists of Barclays (30%), Standard chartered (50%) and Colcom (20%), what are the proportions of these securities in the total portfolio, including money market securities? **Hint** use a pie chart. **(3)**

c) Identify and explain the three forms of the efficient market hypothesis. **(9)**

d) What are the advantages of short term investments in investments cycle? **(4)**

e) Outline and explain three main assumptions of efficient market hypothesis. **(6)**

**[25 Marks]**

## QUESTION THREE

a) What levels of correlation would you expect in the rates of return for domestic and foreign securities? Explain using diagrams. **(6)**

a. What major additional risks must you consider besides yield changes within the country when you invest in Zimbabwe bonds? **(8)**

b. Distinguish between Technical analysis and Fundamental analysis? **(5)**

A portfolio has an expected rate of return of 35% and a standard deviation of 25%. T-bills have a rate of return of 15%.

c. Which investment would you select if your risk aversion index is:

i. $A = 4$ **(3)**

ii. $A = 8$ **(3)**

**[25 marks]**

## QUESTION FOUR

a. Explain the following in relation to term structure of bond interest rates:

i) Expectations hypothesis; **(3)**

ii) Liquidity Preference Hypothesis **(3)**

iii) Market segmentation hypothesis **(3)**

'Mr Gomo, a Harare based vendor has recently won a lottery. He approached you as a former finance student seeking advice on how he can invest his funds.'

b. Write detailed notes advising Mr Gomo of available vehicles for investments in Zimbabwe. **(11)**

c. Distinguish between Capital and Money market giving examples. **(5)**

**[25 marks]**

## QUESTION FIVE

Mr Stephen a business operator has approached you with the following information about securities A and B. He is not sure which security to invest in or he should invest in both as a portfolio.

| **Security A** | | Security B | |
|---|---|---|---|
| RETURN | PROBABILITY | Return | Probability |
| 8% | 20% | 5% | 15% |
| 10% | 20% | 15% | 50% |
| 12% | 50% | 25% | 25% |
| 14% | 10% | 30% | 10% |

a) Further to the above you are told that Mr. Stephen intends to invest 60% of his funds in security A and 40% in security B. calculate the standard deviation of the portfolio AB **(10)**

b) What additional information should you consider before investing your money in portfolio A B and why? **(10)**

c) Which security between A and B is the best option for Mr. Stephen to invest in? State reasons why you recommend the selected security. **(5)**

**[25 marks]**

## QUESTION SIX

a) Write brief notes on the following investment strategies:

  i. Passive management strategy (2)

  ii. Indexing strategy (3)

b) List and explain the reasons why Zimbabwe market is failing to effectively embrace Bit Coin. (5)

c) Identify and explain briefly four risks associated with futures contract. (10)

d) Using examples explain the differences between the discount rate and simple interest rate? (5)

**[25 marks]**

**END OF PAPER**