

**INSTITUTE OF BANKERS IN MALAWI**

**ADVANCED DIPLOMA IN BANKING EXAMINATION**

**SUBJECT: INVESTMENTS (IOBM – AD310)**

**Date: Friday, 27th November 2020**

**Time Allocated: 3 Hours (08:00 – 11:00 Hours)**

**INSTRUCTIONS TO CANDIDATES**

1 This paper consists of **TWO** Sections, A and B.

2 Section A consists of 4 questions, each question carries 15 marks. Answer **ALL** questions.

3 Section B consists of 3 questions, each question carries 20 marks. Answer **ANY TWO** questions.

4 You will be allowed **10 minutes** to go through the paper before the start of the examination when you may write on this paper but not in the answer book.

5 Begin each answer on a new page.

6 **Please write your examination number on each answer book used. Answer sheets without examination numbers will not be marked.**

7 All persons writing examinations without payment will risk expulsion from the Institute.

8 If you are caught cheating, you will be automatically disqualified in all subjects seated this semester.

9 DO NOT open this question paper until instructed to do so.

**SECTION A (60 MARKS)**

Answer **ALL** questions from this section

**QUESTION 1**

A zero-coupon bond with face value K5, 000,000 is to mature in 3 years’ time. The current market yield for similar bonds is 10.50%.

**Required**

1. How do zero coupon bonds differ from other types of bond? *(3 marks)*
2. Explain why investors in the recent times have not favoured zero coupon bonds.

*(8 marks)*

1. Based on the above information, calculate the price of this bond. *(4 marks)*

**(Total 15 marks)**

**QUESTION 2**

The Malawi Stock Market listed ICON properties, a property management and development company having various property types under its portfolio.

1. What are the **two** widely accepted methods of investing in property? *(4 marks)*
2. Explain what the investors is likely to encounter if he/ she invest in the following types of property;

i) Commercial property *(2 marks)*

ii) Specific purpose property *(2 marks)*

iii) Residential property *(2 marks)*

1. One of the properties under management of ICON is to give a yearly rental income

Of K12, 000,000 for the next 3 years.

**Required**

Compute the property value if rental income represents a 15-percentage yield.

*(3 marks)*

1. Compute yield on the property if market price moved to K90,000,000. (*2 marks)*

**(Total 15 marks)**

**QUESTION 3**

Derivative markets offer a platform of trading of different types of options and futures contracts.

**Required**

1. Differentiate American option from European option. *(2 marks)*
2. What are the **five** factors that are put into consideration when carrying out premium or valuation of an option? *(5 marks)*
3. Describe **two** circumstances under which share options are said to have value.

*(4 marks)*

1. Briefly explain a Double option derivative instrument.  *(4 marks)* (**Total 15 marks)**

**QUESTION 4**

1. Explain why an investor would prefer investing in shares than in traditional fixed deposits with banks or building societies. *(2 marks)*
2. Compute the real rate of return on a fixed deposit investment if it is earning at 15% per annum during the period where prevailing inflation rate of 13%. The deposit is also subject to a withholding tax rate of 20% *(4 marks)*
3. Assuming no tax and inflation implications, calculate the effective rate of return if the deposit in **(b)** above was compounded monthly during the whole period of one year.

*(5 marks)*

1. A holder of a Treasury bill worthy K2, 500,000 in face value could not wait until maturity of an investment. The bill was for 91 days, calculate the sell proceeds if it was sold in the secondary market after 37 days at an agreed discount rate of 15.50%. *(4 marks)*

**(Total 15 marks)**

**SECTION B (40 MARKS)**

Answer **ANY TWO** from this section

**QUESTION 5**

1. Discuss the cost – carry model of pricing Futures contracts. *(11 marks)*
2. The market price for a specific quantity of oil commodity Future is K500, 000. If the one-year financing cost is 12% while storage and insurance costs for the same period is K45,000.00, compute the following;
3. The Future`s price for a one-year period. *(4 marks)*
4. The Future`s carry rate.  *(3 marks)*
5. Apart from oil, mention any **two** other types of Futures that are best suited for the cost-carry model of valuation. *(2 marks)*

**(Total 20 marks)**

**QUESTION 6**

An agri-based corporation issued a K 7 billion 12% bond for a maturity term of 5 years. The coupon payment is to be paid on yearly basis. A pension fund which applies an aggressive investment strategy subscribed and succeeded on its K15, 000,000 face value application at 92.

1. Calculate the following;

i) Current yield *(5 marks)*

ii) Yield to maturity if the yearly coupon receipts are reinvested at constant rate of

12% *(10 marks)*

1. Describe an aggressive investment strategy. (5 marks)

**(Total 20 marks)**

**QUESTION 7**

1. Discuss Equity valuation. *(12 marks)*

1. A stock has just paid dividend at the rate of K1.50 per share. It is expected that the dividend pay-out rate will constantly grow at 8 % every year in the unforeseeable future.

**Required**

1. Compute the stock price given an investor`s required return of 11.50%.

*(4 marks)*

1. If the investor purchased this stock a year ago at the price of K32.50 per share, compute the rate of return on the investment. *(4 marks)*  **(Total 20 marks)**

**QUESTION 8**

Bank **X** hold a K15, 000,000 worth of a negotiable certificate of deposit (NCD) which has a maturity value of K17, 400,000.On 1 March 2019 the NCD was sold to Bank **Y** where Bank **X** undertook to repurchase on 10 April 2019 and pay Bank **Y** an interest rate of 17.50% per annum.

**Required**

1. Describe a Negotiable Certificate of Deposit. *(8 marks)*
2. Explain **four** roles of secondary markets with reference to Negotiable Certificate of Deposit. *(8 marks)*
3. Calculate the amount of interest that was paid by Bank **X** ona repurchase date.

*(4 marks)* **(Total 20 marks)**

**END OF THE EXAMINATION PAPER**