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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2020/2021 ACADEMIC YEAR FOUR**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF BUSINESS AND ECONOMICS**

**FOR THE DEGREE OF BACHELOR OF BUSINESS MANAGEMENT**

**COURSE CODE: BBM 415**

**COURSE TITLE: MANAGEMENT OF FINANCIAL INSTITUTIONS**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 05/04/2021 TIME: 3.00-5.00 PM**

**INSTRUCTION TO CANDIDATES**

* **The examination has FIVE (5) questions**
* **Question ONE (1) is COMPULSORY**
* **Choose any other TWO (2) questions from the remaining FOUR (4) questions**
* **Use sketch diagrams to illustrate your answer whenever necessary**
* **Do not carry mobile phones or any other written materials in examination room**
* **Do not write on this paper**

**This paper consists of FOUR (4) printed pages *please turn over***

**QUESTION ONE (COMPULSORY)**

1. If an investor observes that the price of a stock trading in one exchange is different from the price in another exchange, what form of arbitrage is applicable, and how can the investor participate in that arbitrage? **[2Marks]**
2. In what ways have changes in the investment banking industry mirrored changes in the commercial banking industry? **[3Marks]**
3. You can obtain a loan for Ksh.100,000 at a rate of 10 percent for two years. You have a choice of either paying the principal at the end of the second year or amortizing the loan that is, paying interest and principal in equal payments each year. The loan is priced at par.
4. What is the duration of the loan under both methods of payment? **[9Marks]**
5. Explain the difference in the two results? **[2Marks]**

(d) Portfolio A consists of a one-year zero-coupon bond with a face value of Ksh.2,000 and a 10-year zero-coupon bond with a face value of Ksh.6,000. Portfolio B consists of a 5.95-year zero-coupon bond with a face value of Ksh.5,000. The current yield on all bonds is 10% per annum (continuously compounded)

* 1. Show that both portfolios have the same duration. **[3Marks]**
  2. Show that the percentage changes in the values of the two portfolios for a 0.1% per annum increase in yields is the same. **[3Marks]**
  3. What are the percentage changes in the values of the two portfolios for a 5% per annum increase in yields?**[3Marks]**

**(e).Absa** bank offers one-year loans with a 9 percent stated or base rate, charges a 0.25 percent loan origination fee, imposes a 10 percent compensating balance requirement, and must pay a 6 percent reserve requirement to the Central Bank of Kenya. The loans typically are repaid at maturity.

1. If the risk premium for a given customer is 2.5 percent, what is the simple promised interest return on the loan? **[1 Marks]**
2. What is the contractually promised gross return on the loan per dollar lent? **[2 Marks]**
3. Which of the fee items has the greatest impact on the gross return? **[2 Marks]**

**QUESTION TWO [20MARKS]**

1. Forward, futures, and option contracts had been used by **FIs** to hedge risk for many years before swaps were invented. If **FIs** already had these hedging instruments, why do they need swaps?

**[10Marks]**

1. You are provided with the following five general areas of FI specialness that are caused by providing various services to sectors of the economy. Write short notes on each area and explain how FIs assist in each area
2. Transmission of monetary supply **[2 Marks]**
3. Credit allocation **[2 Marks]**
4. Intergenerational wealth transfers **[2 Marks]**
5. Payment services **[2 Marks]**
6. Denomination intermediation **[2 Marks]**

**QUESTION THREE [20MARKS]**

1. suppose that a bank has Ksh.10 billion of one-year loans and Ksh.30 billion of five-year loans. These are financed by Ksh.35 billion of one-year deposits and Ksh.5 billion of five-year deposits. The bank has equity totaling Ksh.2 billion and its return on equity is currently 12%. Estimate what change in interest rates next year would lead to the bank’s return on equity being reduced to zero. Assume that the bank is subject to a tax rate of 30%. **[3Marks]**
2. **(**An investment bank pays Ksh.23.50 per share for 4 million shares of Brookside Ltd. It then sells those shares to the public for Ksh.25 per share.

**Required:**

How much money does Brookside Ltd. receive? **[2Marks]**

What is the profit to the investment bank? **[2Marks]**

What is the stock price of Brookside Ltd.? **[2Marks]**

1. Distinguish between a swap buyer and a swap seller? In which markets does each have the comparative advantage? **[2Marks]**
2. A commercial bank has Ksh.200 million of floating-rate loans yielding the T-bill rate plus 2 percent. These loans are financed by Ksh.200 million of fixed-rate deposits costing 9 percent. A savings bank has Ksh.200 million of mortgages with a fixed rate of 13 percent. They are financed by Ksh.200 million of CDs with a variable rate of the T-bill rate plus 3 percent.
3. Discuss the type of interest rate risk each FI faces. **[2Marks]**
4. Propose a swap that would result in each FI having the same type of asset and liability cash flows  **[2Marks]**
5. Show that this swap would be acceptable to both parties. **[3Marks]**
6. What are some of the practical difficulties in arranging this swap?  **[2Marks]**

**QUESTION FOUR [20MARKS]**

1. Use the data in the Table below for banks in the two asset size groups:

(1) Ksh.100 million-Ksh.1 billion and;

(2) More than Ksh.10 billion; to answer the following questions:

**ROA and ROE of Banks by Size,2010-2018**

P**ercentage Return on Assets (insured commercial banks by consolidated assets)**

**Year All**

**Banks Ksh.0–Ksh.100Million Ksh.100 Million–Ksh.1 Billion Ksh.1 Billion–Ksh.10 Billion Ksh.10 Billion+**

2010 0.49% 0.79% 0.78% 0.76% 0.38%

2011 1.17 1.18 1.25 1.28 1.10

2012 1.19 1.01 1.28 1.29 1.16

2013 1.16 0.91 1.20 1.31 1.13

2014 1.33 1.02 1.26 1.53 1.32

2015 1.40 0.94 1.27 1.46 1.42

2016 1.31 0.99 1.28 1.46 1.30

2017 1.31 1.01 1.32 1.37 1.31

2018 1.37 1.03 1.28 1.35 1.39

Percentage Return on Equity (insured commercial banks by consolidated assets)

**Year All Banks Ksh.0–Ksh.100Million Ksh.100 Million–Ksh.1 Billion Ksh.1–Ksh.10 Billion Ksh.10 Billion+**

2010 7.64% 9.02% 9.95% 10.25% 6.68%

2011 14.68 11.37 13.48 15.04 15.60

2012 14.07 9.09 13.56 14.57 14.42

2013 13.10 8.07 12.24 13.77 13.43

2014 14.53 9.08 12.85 14.88 15.06

2015 15.31 8.19 12.80 14.00 16.37

2016 13.82 8.46 12.88 13.48 14.24

2017 12.91 8.28 13.03 12.74 13.07

2018 13.36 8.12 12.60 12.01 13.84

(i). Why were ROA and ROE strong for both groups over the 2010-2018 period? **[3Marks]**

(ii). Identify and discuss the primary variables that affect ROA and ROE as they relate to these two size groups. **[3Marks]**

(iii). Why is ROA for the smaller banks generally larger than ROA for the large banks  **[3Marks]**

(iv). Why is the ratio for ROE consistently larger for the large bank group? **[3Marks]**

2. What are the three major segments of deposit funding?  **[3Marks]**
3. How are these segments changing over time and why? **[2Marks]**
4. What strategic impact do these changes have on the profitable operation of a bank?

**[3Marks]**

**QUESTION FIVE [20MARKS]**

1. Explain how securities firms differ from investment banks. In what ways are they financial intermediaries?  **[2Marks]**
2. What are the risk implications to an investment bank from underwriting on **a** **best-efforts basis** versus **a firm commitment basis**? **[2Marks]**
3. If you operated a company issuing stock for the first time, which type of underwriting would you prefer and why?  **[2Marks]**
4. What factors may cause you to choose the alternative? **[2Marks]**
6. What is venture capital? **[2Marks]**
7. What are the advantages and disadvantages to a new or small firm of getting capital funding from a venture capital firm?  **[4Marks]**
8. How do the operating activities, and thus the balance sheet structures, of securities firms differ from the operating activities of depository institutions? **[3Marks]**

How are the balance sheet structures of securities firms similar to depository institutions? **[3Marks]**