UNIVERSITI MALAYSIA TERENGGANU

FINAL EXAMINATION

SEMESTER I SESSION 2025/2026 (BACHELOR DEGREE)

COURSE	**:**	**FINANCIAL MARKETS AND INSTITUTIONS**
COURSE CODE	**:**	**FNC4223/FNC3201**
DURATION	**:**	**3 HOURS**

MATRIC NO.	**:**	______________________
PROGRAMME	**:**	______________________
SEAT NO.	**:**	______________________

INSTRUCTIONS TO CANDIDATES

i. This paper consists of **TWO (2)** parts; Part A and Part B. Part A consists of 20 multiple choice questions while Part B consists of 7 structure questions. Answer **ALL** questions.

ii. All answers must be written in answer booklet provided.

DO NOT OPEN THE QUESTION PAPER UNTIL INSTRUCTED

THIS QUESTION PAPER CONSISTS OF NINE (9) PRINTED PAGES

PART A (30 Marks)

Please choose the most appropriate answer for each question in this part.

1. Identify the main purpose of establishing a mortgage market in an economy. (1.5 marks)

   A. To increase government revenue through property taxes
   B. To provide long-term financing for property purchases and support housing development
   C. To encourage short-term investment in financial derivatives
   D. To reduce interest rate volatility in the bond market

2. Which of the following **correctly** identifies the relationship between financial intermediaries and federal agencies in the mortgage market? (1.5 marks)

   A. Financial intermediaries lend directly to federal agencies
   B. Federal agencies sell mortgages to intermediaries to raise capital
   C. Financial intermediaries sell mortgages to federal agencies to gain liquidity
   D. Federal agencies collect deposits from households to fund mortgages

3. Determine the **correct** sequence of financial flows from households leading to property purchases. (1.5 marks)

   A. Households → Institutional Investors → Financial Intermediaries → Property Purchases
   B. Households → Financial Intermediaries → Mortgage Loans → Property Purchases
   C. Federal Agencies → Households → Property Purchases → Institutional Investors
   D. Institutional Investors → Households → Financial Intermediaries → Property Purchases

4. Which of the following does **NOT** illustrate the role of commercial banks and savings institutions in the mortgage market? (1.5 marks)

   A. They originate mortgage loans to households and businesses for property purchases.
   B. They act as financial intermediaries that pool deposits to fund mortgage lending.
   C. They purchase mortgage-backed securities from federal agencies to enhance liquidity.
   D. They regulate the issuance of mortgage loans and set national housing policy.

5. Which of the following statements does **NOT** accurately reflect the relationship between creditworthiness and borrower risk? (1.5 marks)

   A. Creditworthiness reflects the borrower's financial ability and willingness to repay the loan.
   B. When borrowers make larger down payments, the loan-to-value ratio is lower, which increases the borrower's exposure to loss if default occurs.
   C. Borrowers whose income levels are low relative to their loan repayment obligations have a higher probability of default.
   D. Borrowers with a poor credit history present greater credit risk to lenders compared to those with a good credit record.

6. A young couple takes out a mortgage loan that starts with small monthly payments for the first few years. Over time, their payments increase regularly according to a set schedule. Which type of mortgage **best** fits this situation? (1.5 marks)

   A. Fixed-Rate Mortgage
   B. Graduated Payment Mortgage
   C. Adjustable-Rate Mortgage
   D. Growing-Equity Mortgage

7. A borrower with a weak credit score and high default risk is offered a mortgage at a higher interest rate compared to standard borrowers. Which classification of mortgage **best** fits this case? (1.5 marks)

   A. Conventional Mortgage
   B. Subprime Mortgage
   C. Jumbo Mortgage
   D. Adjustable-Rate Mortgage

8. Which of the following scenarios **best** demonstrates the *"pass-through"* feature of securitization? (1.5 marks)

   A. A bank keeps all interest income from borrowers.
   B. A trustee reinvests mortgage payments into new securities.
   C. A financial institution collects borrower payments and distributes them to investors.
   D. Investors directly collect payments from borrowers.

9. An investment product is created by pooling together mortgage loans and dividing the cash flows into several tranches. Each tranche receives principal and interest payments at different times — investors in the first tranche are paid their principal first, while investors in later tranches must wait until earlier tranches are fully repaid. Which type of mortgage-backed security does this structure describe? (1.5 marks)

   A. Mortgage Pass-Through Security
   B. Collateralized Mortgage Obligation (CMO)
   C. Mortgage-Backed Bond
   D. Commercial Mortgage-Backed Security (CMBS)

10. When market interest rates decline, many homeowners refinance their mortgages to obtain lower rates. As a result, lenders receive early principal repayments and can only reinvest those funds at the new, lower rates, reducing expected income. Identify the type of risk that best explains this situation. (1.5 marks)

   A. Prepayment risk
   B. Credit risk
   C. Interest rate risk
   D. Systemic risk

11. In the workflow of a mutual fund, which of the following best describes the role of the fund house? (1.5 marks)

   A. It invests directly in securities like stocks and bonds on behalf of the investor.
   B. It acts as an intermediary that pools money from investors and appoints a fund manager.
   C. It guarantees fixed returns on investments regardless of market performance.
   D. It directly manages the investor's portfolio without delegation.

12. If a mutual fund discloses that its portfolio manager has been recently replaced, which analytical concern should an investor consider based on the prospectus information? (1.5 marks)

   A. The fund's investment objective might have changed.
   B. The fund's minimum investment requirement will increase.
   C. The fund will automatically reduce its management fees.
   D. The fund's historical performance data will remain unaffected.

13. A mutual fund invests primarily in short-term debt securities such as Treasury bills, commercial papers, and certificates of deposit. It aims to preserve capital and provide liquidity, offering investors relatively low risk and modest returns. Identify the type of mutual fund described. (1.5 marks)

    A. Stock Fund
    B. Bond Fund
    C. Money Market Fund
    D. Hybrid Fund

14. An investor purchases units of a mutual fund directly from the fund company. Later, the investor redeems the units at the current net asset value (NAV) determined at the end of the trading day. No secondary market trading is involved. Identify the type of mutual fund described. (1.5 marks)

    A. Closed-end fund
    B. Open-end fund
    C. Exchange-traded fund (ETF)
    D. Hedge fund

15. An investor wants to invest in an ETF that tracks the overall performance of the U.S. stock market by mimicking the S&P 500 Index. He wants a fund that offers broad diversification across multiple sectors. Identify the type and example of ETF that fits this description. (1.5 marks)

    A. A global ETF such as PowerShares QQQ
    B. A broad-based ETF such as SPDR (Spider)
    C. A sector ETF focused on technology companies
    D. A regional ETF tracking Asian emerging markets

16. A manufacturing company manages a defined-benefit pension plan for its employees. The company promises to pay a fixed amount to retirees based on years of service and final salary. However, future interest rates, employee turnover, and investment returns are uncertain, making it difficult to predict how much money must be set aside today. Identify the aspect that creates the greatest uncertainty for the sponsoring firm in this type of pension plan. (1.5 marks)

    A. The investment decisions made by individual employees.
    B. The number of benefits to be paid to retirees.
    C. The number of employees who will join the pension plan in the future.
    D. The number of contributions needed to meet future pension obligations.

17. Before 1974, many private pension plans in the U.S. lacked clear rules for funding, vesting, and fiduciary responsibility. Employees who changed jobs often lost all accumulated pension benefits, and some companies failed to set aside sufficient funds to pay retirees. In response, the federal government introduced new legislation to protect employee retirement security and ensure responsible plan management. Identify the primary purpose of the Employee Retirement Income Security Act (ERISA) of 1974. (1.5 marks)

    A. To provide federal insurance for government-sponsored pension plans.
    B. To require all companies to offer defined-benefit pension plans to employees.
    C. To transition all private pensions from defined-benefit to defined-contribution models.
    D. To establish minimum standards for vesting, funding, and prudent investment practices in private pension plans.

18. A pension fund manager anticipates potential losses in the stock market over the next month. To protect the fund's equity portfolio from a possible market downturn, the manager sells stock index futures and buys put options on major holdings. Which strategy does this represent? (1.5 marks)

    A. Risk-seeking investment strategy
    B. Hedging pension fund portfolio risk
    C. Aggressive growth strategy
    D. Sector rotation strategy

19. A pension fund expects a series of annual benefit payments to retirees over the next 20 years. To ensure each payment is fully covered when due, the manager selects bonds whose coupon and maturity cash flows coincide exactly with the timing of those payments. Which funding strategy is the manager implementing? (1.5 marks)

    A. Projective funding
    B. Matched funding
    C. Underfunded plan
    D. Defined-contribution plan

20. Identify which investment strategy is considered a passive approach to pension fund management? (1.5 marks)

    A. Investing in an indexed mutual fund that mirrors the stock market.
    B. Engaging in interest rate swaps to hedge portfolio risk.
    C. Using futures contracts on stock indexes for speculative purposes.
    D. Changing the asset allocation of the fund in response to the investment environment.

PART B (70 Marks)

Please answer all questions.

1. Nadia, a salaried engineer, saves part of her income in Bank Negara Savings Institution, making her a surplus unit as she provides funds to the financial system. In contrast, TechPro Manufacturing, which borrows from Allied Commercial Bank to expand its operations, is a deficit unit. Commercial banks primarily allocate funds to business loans and credit facilities for profit generation, whereas savings institutions focus on providing household financing, such as mortgages and personal loans, emphasizing consumer and residential needs.

   a. Compare the roles of surplus and deficit units within the financial system by explaining their meanings and providing examples of each. (4 marks)
   b. Examine the primary uses of funds for commercial banks and savings institutions, highlighting the key differences in how each type of financial institution allocates its funds. (6 marks)

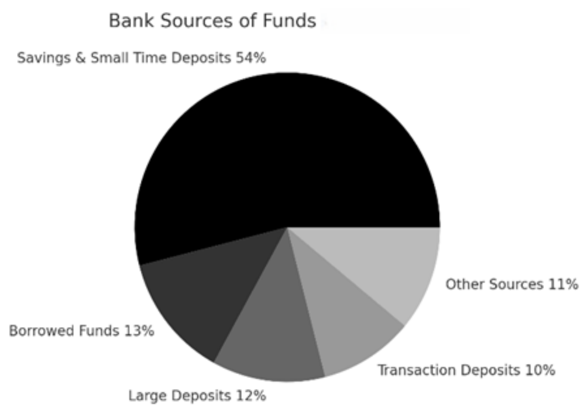
2. In response to rising inflation and concerns about household debt, Bank Negara Malaysia (BNM) decided to increase the Overnight Policy Rate (OPR) by 0.25%. Following the announcement, commercial banks raised their lending and deposit rates. As a result, the cost of borrowing for housing loans and business financing increased, causing consumers to reduce spending and businesses to delay expansion plans. Meanwhile, savers benefited from higher deposit returns. Over time, the slower pace of spending and investment helped ease inflationary pressures and stabilize prices, though economic growth moderated slightly.

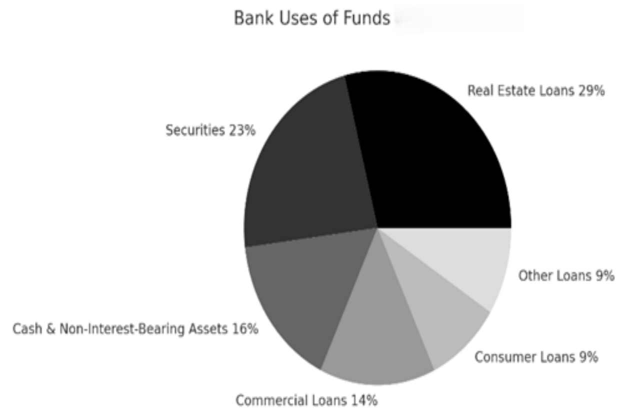
   a. Elucidate how Bank Negara Malaysia's monetary policy affects economic conditions? (6 marks)
   b. Determine **two (2)** indicators of economic growth. (4 marks)

3. In 2023, Malaysian interest rates declined after Bank Negara Malaysia reduced the OPR. As a result, many homeowners refinanced their housing loans at lower rates. Investors holding Cagamas-issued mortgage-backed securities (MBS) noticed that their expected returns arrived sooner than projected, as early loan repayments shortened the maturity of their MBS portfolios.

   a. Point out on how mortgage-backed securities (MBS) are created and used within the financial system. (3 marks)
   b. Elucidate how the maturity of mortgage-backed securities can be affected by interest rate movements. (3 marks)
   c. Compare the secondary market activity in Malaysia for mortgages to the activity for other capital market instruments (such as stocks and bonds). Provide a general explanation for the difference in the activity level. (4 marks)

4. Pie charts below illustrate the typical composition of a commercial bank's sources of funds (liabilities) and uses of funds (assets) (source: Madura, J. F., (2021).





a. Differentiate between a bank's Borrowed Funds (e.g., Federal funds purchased, Repurchase agreements) and its core Deposit Accounts (e.g., Savings deposits, Transaction deposits) as sources of funds. (4 marks)
b. Analyze how a bank's strategic decision to rely more heavily on deposit accounts would likely influence the composition of its assets, specifically its mix of Bank Loans and Investment in Securities. (6 marks)

5. Bank regulators use the CAMELS rating system to monitor the overall health of banks, while the Basel Accords (I, II, and III) set international standards for capital requirements.

a. Differentiate between the primary objective of the CAMELS rating system and the primary objective of the Basel Accords. (3 marks)
b. Analyze how a bank’s strategic decision to hold assets with higher risk weights under the Basel I framework (e.g., highly leveraged loans) could directly influence a regulator's assessment of three specific components of its CAMELS rating. (7 marks)

6. There are several types of investment funds, including open-end mutual funds, closed-end funds, and exchange-traded funds (ETFs).

a. Differentiate between open-end mutual funds and closed-end funds based on their share structure and redemption process. (4 marks)

b. Analyze how the fundamental structural differences (identified in part a) cause the pricing and liquidity of Exchange-Traded Funds (ETFs) and closed-end funds to behave differently from those of traditional open-end mutual funds. (6 marks)

7. There are distinguished differences between the two primary types of pension plans: Defined-Benefit (DB) and Defined-Contribution (DC). In connection with that, "underfunding" has been identified as a significant problem in planning and executing pension plans, particularly for public DB plans.

   a. Differentiate between a Defined-Benefit plan and a Defined-Contribution plan in terms of who bears the investment risk, the certainty of the final payout, the benefit amount and the contribution amount. (4 marks)
   b. Analyze how the fundamental structure of a Defined-Benefit plan creates the risk of "underfunding", and why this specific problem is structurally impossible in a Defined-Contribution plan. (6 marks)

End of Question Paper