CF01

Introduction To Monetary Economics And The Malaysian Financial System

9 OCTOBER 2000

1.	Time allowed	: Three (3) hours
2.	Total number of questions	: Seven (7) questions
3.	Number of questions to be answered	: Five (5) questions Part A : Two (2) questions [20 marks each] Part B : Three (3) questions [20 marks each]

4. Candidates must obtain a minimum of 30 marks in Part B as well as pass the paper as a whole.

5. Begin each answer to a new question on a fresh page.

6. Answer **all** questions in **English**.

PART A

ANSWER TWO (2) QUESTIONS ONLY

1. (a) Using diagrams, explain the differences between "change in demand" and "change in quantity demanded" for a product. [8]

   (b) Explain, using examples, **four** factors affecting changes in demand for a product, other than the price of the product. [12]

   (Total:20 marks)

2. (a) Money supply in Malaysia is defined into **three** categories, M1, M2 and M3. Define M1, M2 and M3. [6]

   (b) Explain the process of credit creation, stating any assumptions made. [14]

   (Total:20 marks)

3. (a) Describe the main components of the current and capital accounts in the balance of payments. [10]

   (b) (i) What is meant by a merchandise trade surplus in the balance of payments? [4]

   (ii) Will a merchandise trade surplus always lead to a surplus in the overall balance of the balance of payments? [6]

   (Total:20 marks)

PART B

ANSWER THREE (3) QUESTIONS ONLY

4. In early August 1998, Bank Negara Malaysia began easing monetary policy to support the recovery of the Malaysian economy. Outline any **five** monetary measures implemented by Bank Negara Malaysia during August 1998 to the end of 1999.

   (Total:20 marks)

5. (a) Briefly describe the structure of the Malaysian financial system. [10]

   (b) Outline the **two** major roles played by the Malaysian financial system. [10]

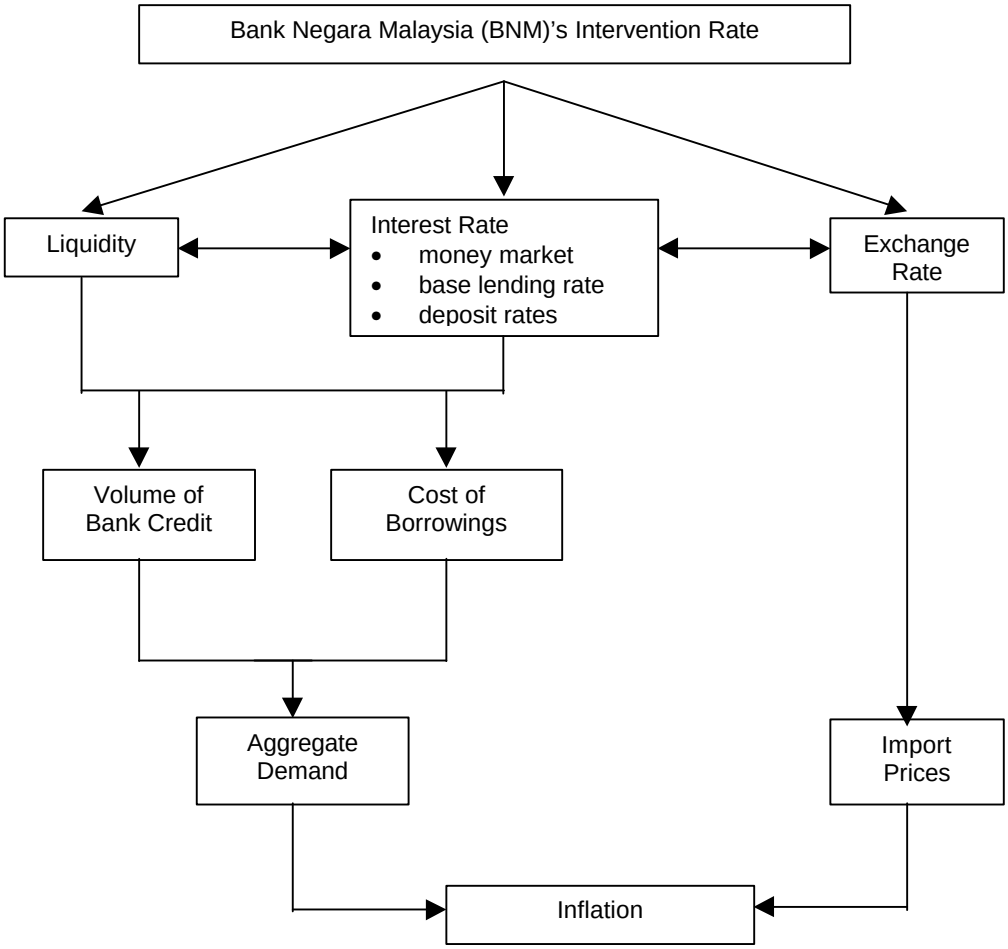
   (Total:20 marks)

6. (a) Bank Negara Malaysia applies the "CAMEL" framework to evaluate the overall financial and general condition of a banking institution. Elaborate on the **five** "CAMEL" components. [10]

   (b) Islamic banking and conventional banking offer deposit accounts facilities. Describe **two** types of deposit accounts facilities available under Islamic banking. [10]

   (Total:20 marks)

7. (a) Using the figure below, explain how monetary policy is transmitted to affect output growth and inflation. [10]



(b) Briefly explain the merger programme for financial institutions in Malaysia, focusing on the nature and rationale of the consolidation exercise. [10]

(Total:20 marks)

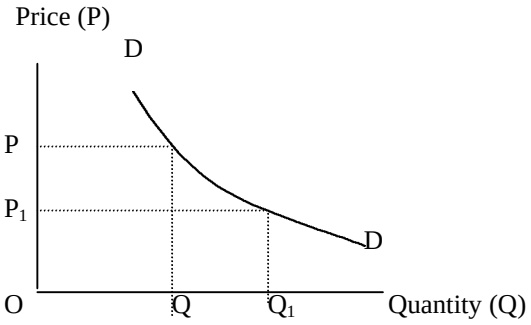
OUTLINE ANSWERS

PART A

Question 1

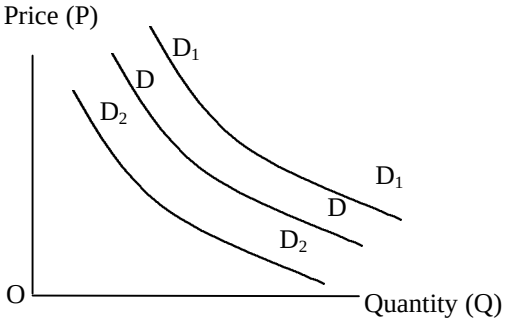
This compulsory question on demand curves was generally well answered. Some candidates, however, lost marks when they could not distinguish between "change in demand" and "change in quantity demanded". For the second part of the question, several candidates failed to give sufficient explanation and illustrations on the factors affecting the elasticity of demand.

1. (a) Demand is a schedule showing the relationship between price and quantity demanded. If a graph is drawn to show the relationship between price and quantity demanded, it is a demand curve which is downward sloping from left to right as shown below.



In the above diagram when the price is OP, the quantity demanded is OQ and when the price falls to OP_1, the quantity demanded increases to OQ_1. Therefore, changes in price will only lead to changes in quantity demanded. There will be no change in demand, as the demand curve remains the same.

On the other hand, "change in demand" means a shift of the demand curve, which is caused by changes in factors other than changes in price. For example, changes in the prices of other related goods, income or tastes. Change in demand can be shown in the diagram below.



In the above diagram, DD is the original demand curve. If the demand curve moves to the right (D_1D_1), it represents an increase in demand. If it moves to the left (D_2D_2), it represents a fall in demand. As was mentioned earlier, changes in demand can be caused by several factors other than price itself.

(b) Change in demand means a shift of the demand curve either to the right, representing an increase in demand or to the left, representing a decrease in demand. The four factors affecting change in demand are as follows:

(i) **Change in population**

An increase in the population will cause an increase in the demand for most goods while a decrease in population will cause a decrease in the demand for most goods. For example, the demand for houses today is much more than ten years ago because the population today is much more than ten years ago.

(ii) **Change in prices of related goods**

Related goods are complementary goods or substitutes. For example, bread is a complementary good to butter and margarine is a substitute for butter. If the price of bread increases, fewer people will buy bread and therefore, the demand for butter and margarine will fall. However, if the price of margarine increases, fewer people will buy margarine and more people will buy butter even if the price of butter remains the same. The demand curve for butter will shift to the right, which means that, there is an increase in demand for butter.

(iii) **Taste**

Taste refers to, for example, fashion and design. In the 1950s and 1960s, people buy cars for functional reasons but today, people do not only buy cars for functional purpose, but also for prestige reason. Therefore, the demand for functionality of cars in the 2000s falls compared to that in the 1960s.

(iv) **Income**

For normal goods, an increase in people's income will lead to an increase in demand while a decrease in people's income will lead to a fall in demand. For inferior goods, it is the reverse. For example, with a rise in the real per capita Gross Domestic Product (GDP), the demand for restaurant food will increase while the demand for roti canai and instant noodle will fall.

Question 2

A well answered question on money supply. Most candidates managed to define the three categories of money and explain the process of credit creation generally well. However, a few candidates lost marks when they illustrated the process wrongly by drawing up a balance sheet which did not show the assets and liabilities correctly.

2. (a) M1: Currency in circulation and demand deposits of the private sector.

M2: M1 plus quasi-money [consisting of private sector holdings of fixed and savings deposits with the commercial banks plus repurchase agreements (repos) and net issues of Negotiable Certificates of Deposit (NCDs)].

M3: M2 plus private sector fixed and saving deposits (including repos) placed with the finance companies, merchant banks, discount houses and Bank Islam Malaysia, excluding the placements of funds.

(b) The process of credit creation can be explained by first making two assumptions:

(i) It is a closed economy.
(ii) There is only one bank in the banking system.

The above two assumptions are made so that both internal and external cash drain will not affect the credit creation process.

Assume that Mr A deposits RM1,000 with Bank X. With a further assumption of a cash ratio of 20%, Bank X will have excess cash reserve of RM800. The partial balance sheet of the bank is shown below:

Liabilities		Assets	
Deposits – Mr A	RM1,000	Cash	RM1,000

Next, assume that Bank X gives a loan of RM800 to Mr B. This is represented only by a book entry and there is no movement of cash as shown in the balance sheet below:

Liabilities		Assets	
Deposits – Mr A	RM1,000	Cash	RM1,000
Deposits – Mr B	RM800	Loans – Mr B	RM800

The money supply is now RM1,800. The excess cash reserve is RM1,000 - RM360 = RM640 (or 80% x RM800).

Assume that a loan of RM640 is given to Mr C. The balance sheet of Bank X is shown below:

Liabilities		Assets	
Deposits – Mr A	RM1,000	Cash	RM1,000
Deposits – Mr B	RM800	Loans – Mr B	RM800
Deposits – Mr C	RM640	Loans – Mr C	RM640

The money supply is now RM 2,440.

The process of credit creation can continue until the total deposit is RM5,000 which is 5 times the initial or primary deposits. 5 is the money multiplier, which is 1/r, where r is the cash ratio. Since r is 20% i.e. 0.2, the money multiplier is 1/0.2 = 5.

In today's monetary system, the principles of credit creation is the same except that there are two additional ratios i.e. liquidity ratio and statutory reserve ratio which will affect the power of credit creation of the banking system. Apart from these factors, the external cash drain will also affect the credit creation power of the banking system.

Question 3

Many candidates managed to obtain the passing mark for this descriptive question on balance of payments. A few candidates, however, lost marks when they failed to provide sufficient explanation as to whether a merchandise trade surplus would always lead to a surplus in the overall balance of the balance of payments.

3. (a) The main components of the **current account** are:

- The merchandise account, also known as the visible trade balance, consists of visible export of goods and visible import of goods.

- The services account consists of export of services and import of services. Example of export of services is inbound tourism (when foreigners visit Malaysia) and import of services is outbound tourism (when Malaysians visit other countries).

- Transfers which refers to transfer or receipt of fund to and from other countries for non-trade or non-commercial transactions, e.g. cash grants received from other countries or cash grants given to other countries.

The **capital account** consists of both private and public long and short-term capital movement in and out of the country.

(b) (i) The merchandise trade account or balance of trade is one of the components of the current account and it consists of visible export of goods and visible import of goods. When the export revenue is more than the import payment, then the merchandise trade balance is a "surplus" and if the export revenue is less than the import payment, then the merchandise trade balance is a "deficit".

(ii) The overall balance of the balance of payments is made up of the current account, capital account, and errors and omissions. Since the merchandise trade balance is only part of the current account of the balance of payments, a merchandise trade surplus need not necessarily lead to a surplus in the current account itself and therefore the overall balance of the balance of payments. Even if the merchandise trade surplus leads to a surplus in the current account, it may not lead to a surplus in the overall balance of the balance of payments, as there may be greater deficit in the capital account.

PART B

Question 4

This question tested candidates' knowledge on the use of monetary policy instruments used to support economic recovery. An important topic which has been asked in every sitting but despite its frequency, candidates lacked understanding in the subject matter. Although candidates are aware of the monetary instruments, they fail to understand their proper application. For example, in the case of the statutory reserve ratio (SRR), candidates merely explained what SRR is and how it could be adjusted. They were unable to state clearly that SRR was reduced to promote economic recovery and how it affects the level of liquidity and interest rate in the system. This shows that most candidates "blindly" memorise the topics and, therefore, do not have the ability to think critically.

4. Monetary measures implemented by Bank Negara Malaysia (BNM) in August 1998 - 1999 and the rationales of implementation are as follows:

(a) **Reduction of Intervention Rate**

In early August 1998, with improvement in the medium-term inflation prospects, BNM reduced its three-month intervention rate in three steps from 11.00% to 10.50% on August 3, to 10.00% on August 10 and a further 9.50% on August 27. Following the introduction of the new exchange control measures, the three-month intervention rate was further reduced to 8.00% on September 3, to 7.50% on October 5 and to 7.00% on November 9. Another three-step reduction was effected in 1999, that is, to 6.50% on April 5, 6.00% on May 3 and 5.50% on August 9.

(b) **Introduction of Selective Exchange Controls**

Specifically, only the following items are controlled:

(i) Ringgit-denominated transactions among non-residents via non-resident external account.
(ii) Outflows of short-term capital by requiring such inflows to remain in the country for a minimum period of one year.
(iii) Imports and exports of Ringgit by travellers, both residents and non-residents, and
(iv) Malaysian investments abroad which require approvals.

On September 2, BNM announced that the exchange rate for the Ringgit has been fixed at RM3.80 against the United States dollar.

(c) **Revision to the Base Lending Rate (BLR) Framework**

The calculation of the BLR is based on the BNM three-month intervention rate instead of the KLIBOR. In addition, to ensure that borrowers benefit from the higher level of operational efficiency within the banking industry, the flat administrative margin of 2.5 percentage points was reduced by 25 basis points to 2.25 percentage points. The maximum margin over the quoted BLR was also reduced from 4.0 percentage points to 2.5 percentage points.

(d) **Relaxation on Lending to Property**

Lending for the construction or purchase of residential properties costing up to RM250,000 were exempted from the 20% limit on lending to the broad property sector. In addition, effective October 5, 1998, the 60% maximum margin of financing was abolished for the purchase of non-owner occupied residential properties costing RM150,000 and above, the purchase of shophouses costing RM300,000 and above which are not for the conduct of own business, and the purchase of land lots.

(e) **Raising the Ceiling on Lending for Purchase of Shares**

The ceiling on loans for the purchase of shares and unit trust was also raised from 15% to 20% of total outstanding loans for commercial banks and finance companies. The limit for merchant banks remains at 30%. The increase in the limit was aimed at promoting long-term investment in the stock market.

(f) **Raising Margin of Financing for Purchase of Motor Vehicles**

The margin of financing for all passenger cars was raised from 70% to 85% on April 23, 1998 and the restriction on the maximum repayment period was removed on July 28. The margin of financing of 85% was abolished on November 21, and banks are free to determine the percentage of financing based on their credit assessment of the borrower.

(g) **Reducing the Minimum Repayment on Credit Cards**

Effective November 20, the minimum monthly repayment on credit cards was reduced from 15% to 5% of the outstanding credit card balances in order to ease the cash flow burden of credit card holders. To ensure that the charges imposed on credit card holders are reasonable, banking institutions that issue credit cards are required from December 30, to impose a maximum finance charge of not more than 1.5% per month or 18% per annum and that late payment charges should not be more than 1% of the amount in default. However, banking institutions are allowed to charge a minimum penalty of RM5.

(h) **Restriction on Lending to High-end Properties**

In view of the need to clear the backlog of properties, effective January 5, 1999, banks were not allowed to finance the development of new residential properties and shophouses where the individual unit costs more than RM250,000 each. In addition, banking institutions were not allowed to provide financing to develop hotels, resorts, office buildings, golf courses, clubs and shopping complexes.

(i) **Other Measures**

To ease liquidity in the banking system and make available more loanable funds to borrowers at a lower rate, the statutory reserve requirement was reduced from 8% to 6% on September 1, 1999 and further to 4% on September 16. As of September 3, commercial banks were no longer required to maintain vostro balances of foreign banking institutions with BNM. To ensure that there was sufficient funds to finance the economic recovery process, banking institutions with the capacity to lend, continued to be encouraged to achieve a minimum annual loan growth of 8% by the end of 1999.

Question 5

A popular question amongst candidates was on the structure and roles of the Malaysian financial system. Despite its popularity, only a few candidates managed to obtain the passing mark. Although most candidates could describe the structure of the Malaysian financial system, there was a common weakness in the answers, as candidates could not differentiate financial institutions controlled and supervised by BNM with the rest. Many candidates also failed to include the financial markets and the list of non-bank financial intermediaries. For the second part of the question, a majority of candidates provided answers that delved on specific products/services offered by financial institutions instead of explaining on the major roles played by the Malaysian financial system.

5. (a) **Structure of the Malaysian Financial System**

The Malaysian financial system comprises the banking system, the non-bank financial intermediaries and the financial markets.

The banking system in Malaysia, which is the major component of the financial sector consists of Bank Negara Malaysia (BNM), serving as the central bank. As at end 1999, there were 33 commercial banks, two Islamic banks, 22 finance companies, 12 merchant banks, seven discount houses and 38 foreign banks' representative offices, all of which are regulated and supervised by BNM.

The non-bank financial institutions are mainly supervised by other Government agencies. These institutions can be divided into five major groups consisting of development finance institutions, savings institutions, provident and pension funds, insurance companies and a group of other financial intermediaries comprising building societies, unit trusts and several special investment agencies, leasing companies, etc.

The financial markets refer to the money and foreign exchange markets, the capital market, derivatives markets and offshore market. Capital market refers to the market in longer-term financial assets, comprising all public and private debt instruments with maturities exceeding one year, corporate stocks and shares (for which there is no fixed maturity period) and commodity futures. Primary market refers to new issues of Government and corporate securities offered directly to the investors. Secondary market is where transactions in Malaysian Government securities are conducted mainly through the money market, while secondary market trading of corporate securities is carried out in the Kuala Lumpur Stock Exchange (KLSE).

(b) **Role of the Malaysian Financial System**

The financial system performs an important intermediation function in the economy and it also plays a critical role in the payments system. A well functioning and efficient system is vital in ensuring effective and efficient conduct of monetary policy.

(i) Financial Intermediation

The intermediation function of the Malaysian financial system can be examined by analysing the sources and uses of funds of the financial system. The sources of funds highlight the major financial instruments, such as deposits, used by the financial system to mobilise the financial resources in the economy. Meanwhile, the uses of funds shows the assets held by the financial institutions, highlighting how the financial institutions allocate and channel the funds that they have mobilised.

(ii) Payment Systems

The financial institutions also provide quality clearing, settlement and payment services. In the light of globalisation of financial markets and rapid technological advancements within the financial sector, an efficient and effective payment system would facilitate financial institutions in being more innovative and efficient in their banking products and services. The four major modes of payment instruments are

cash, cheques, card-based payment instruments and electronic-based payment mechanism.

Question 6

A generally well answered question that assessed candidates' knowledge on the "CAMEL" framework. More than half of the candidates that attempted this question managed to pass. However, several candidates fared badly as they failed to elaborate on their answers.

6. (a) **CAMEL**

(i) Capital adequacy

Capital is a measure of financial strength and it would be used to cushion operational and abnormal losses. A banking institution should have adequate capital to support its risk assets in accordance with the risk-weighted capital ratio framework.

(ii) Asset quality

It has direct impact on the financial performance of a banking institution. The quality of assets particularly, loan assets and investments, would depend largely on the risk management system of the institution. The value of loan assets would depend on the realisable value of the collateral while investment assets would depend on the market value.

(iii) Management quality

The performance of the other four CAMEL components will depend on the vision, capability, agility, professionalism, integrity and competence of the management. As sound management is crucial for the success of any institution, management quality is accorded greater weightage in the assessment of the overall CAMEL composite rating.

(iv) Earnings performance

The quality and trend of earnings of an institution depend largely on how well the management manages the assets and liabilities of the institution. A banking institution must earn reasonable profit to support asset growth, build up adequate reserves and enhance shareholders' value. Good earnings performance would inspire the confidence of depositors, investors, creditors and the public at large.

(v) Liquidity position

A banking institution must always be liquid to meet depositors' and creditors' demand in order to maintain public confidence. There needs to be an effective asset and liability management system to minimise maturity mismatches between assets and liabilities and to optimise returns. As liquidity has inverse relationship with profitability, a banking institution must strike a balance between liquidity and profitability.

(b) Deposit Accounts under Islamic Banking:

Current or demand deposit accounts

Current deposit is accepted under the Al-Wadiah principle. Depositors are given cheque books and offered other services related to current accounts. The balance in the account can be withdrawn at any time through the use of cheques. The bank can obtain depositors' permission to use their funds in the current accounts, but the profits subsequently obtained belong to the bank.

Savings deposit account

The deposits are accepted under the Al-Wadiah principle. Depositors can withdraw their balances at any time through the use of savings books. The credit balances in the savings

accounts can be used by the bank after it has obtained the permission of the depositors. As in the case of current accounts, all profits generated from the use of the funds belong to the banks. However, in the case of the savings account, the bank can use its own discretion to share part of its profits with its depositors from time to time.

Investment deposit account

This type of deposit differs significantly from the other types. Deposits made into the account can only be withdrawn at maturity as agreed beforehand. The investment deposit account operates under the "Mudharabah" principle whereby the bank acts as the entrepreneur whereas the depositor is the financier. The management of the investments is run by the bank and the depositors do not participate in it. The two parties agree beforehand, among others, on the sharing of profits. On the contrary, if there is any loss resulting from the investment, the depositors alone will have to bear it.

Question 7

Despite the provision of a chart, candidates failed to explain the transmission of monetary policy accurately due to the lack of understanding on the linkage between monetary policy and the economy. Hence, a majority failed this question. Candidates were also blur on the rationale of the merger exercise although they portrayed an understanding of its nature.

7. (a) **Transmission Mechanism of Monetary Policy**

In Malaysia, monetary policy operates through short-term interest rates to achieve its ultimate objective of price stability. The level and direction of interest rates are influenced through liquidity management and its signaling impact. BNM conveys its policy intention to the market through its daily tender operations and the intervention rate. A change in policy rate will trigger a chain of events that affect the whole range of market rates. More specifically, changes in BNM's policy rate will have a direct impact on lending rates, which will affect the cost of funds in the system.

Changes in interest rates in turn will affect the private sector's financial assets and liabilities position and, hence asset prices. It will also affect decisions to consume or save, and invest which involves both domestic and external goods and services. These factors will ultimately influence aggregate demand, and finally prices. Generally, the objective is to ensure aggregate demand is in line with potential output to contain inflationary pressures. Price stability will lead to efficient resource allocation, improve investment sentiment, provide incentive to save and enhance economic welfare. More importantly, price stability will foster sustainable long-term economic growth.

(b) **Merger Programmes for Financial Institutions**

The merger programme initially only covered the finance companies industry since the industry became highly vulnerable amidst the rising interest rate environment and slowdown in the economic activities. The merger programme for the finance companies was initiated in January 1998 to consolidate and rationalise the industry and was part of the overall pre-emptive strategy to increase the resilience of the finance companies to withstand risks arising from the economic slowdown.

The merger programme was subsequently extended to include all domestic banking institutions in July 1999 which required them to form their own merger groups, subject to the requirement that the minimum shareholders' funds (unimpaired by losses) of each merged banking groups should not be less than RM2 billion. Banking groups which already have shareholders' funds of more than RM2 billion were also encouraged to participate in the merger programme in order to achieve greater mass and maintain their competitiveness and market share.