

CF01

Introduction to Monetary Economics and the Malaysian Financial System

3 APRIL 2006

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) Answer the following questions on the assumption that a technological advancement reduces the cost of producing computers:
- (i) Using a demand-supply diagram, show the effects of the technological advancement on the price and quantity for computers in the market. [4]
 - (ii) Computers and typewriters are substitutes.
Using a demand-supply diagram, show the effects of the technological advancement on the price and quantity for typewriters in the market. Would typewriter producers be pleased with the technological advancement in computers? [4]
 - (iii) Computers and softwares are complements.
Using a demand-supply diagram, show the effects on the price and quantity for softwares in the market. Would the software producers be pleased with the technological advancement in computers? [4]
- (b) What information do cross-price elasticity and income elasticity of demand convey? What is the significance of the signs on the cross-price elasticity and income elasticity measure? [8]
(Total:20 marks)
2. (a) (i) Why do economists prefer real Gross Domestic Product (GDP) to nominal GDP as a measure of output growth? [4]
- (ii) Explain the difference between GDP and Gross National Product. [4]
 - (iii) What is net factor payment? Briefly explain your answer. [4]
- (b) Briefly explain **four** measures that can be applied to correct a balance of payment deficit. [8]
(Total:20 marks)
3. (a) Differentiate between “structural unemployment” and “frictional unemployment”. [5]
- (b) (i) How does Bank Negara Malaysia (BNM) increase the money supply in the economy through open market operations? [5]
 - (ii) How does BNM reduce the money supply in the economy through reserve requirements? [5]
 - (iii) Can BNM perfectly control the money supply in the economy? Give **two** reasons for your answer. [5]
(Total:20 marks)

PART B

ANSWER THREE (3) QUESTIONS ONLY

4. (a) What is monetary policy? [4]
- (b) Explain the objectives of monetary policy. [4]
- (c) Explain the various types of monetary policy instruments. [4]
- (d) How do monetary policy instruments work? [4]
- (e) Briefly elaborate on the following:
- (i) Overnight policy rate [2]
- (ii) Monetary policy statement [2]
- (Total:20 marks)
5. (a) Briefly explain any **three** of the following financial markets:
- (i) Money market [4]
- (ii) Capital market [4]
- (iii) Foreign exchange market [4]
- (iv) Primary market [4]
- (v) Secondary market [4]
- (b) Briefly explain any **two** of the following financial instruments:
- (i) Malaysian Government Securities [4]
- (ii) Government Investment Certificates [4]
- (iii) Bank Negara Bills [4]
- (iv) Corporate bonds [4]
- (Total:20 marks)
6. (a) Explain the main functions of the following:
- (i) Commercial banks [4]
- (ii) Merchant banks [4]
- (b) Briefly describe the objectives of the following:
- (i) Bank Negara Malaysia [4]
- (ii) Financial Sector Masterplan 2001-2010 [4]
- (iii) The consolidation programme for the domestic banking sector in the post-East Asian financial crisis era [4]
- (Total:20 marks)

7. (a) Briefly explain the activities of the following types of financial institutions:
- (i) Development financial institutions [4]
 - (ii) Savings institutions [4]
- (b) Briefly explain the following Islamic banking principles:
- (i) Al-Wadiah (safe-keeping with guarantee) [2]
 - (ii) Al-Mudharabah (profit sharing) [2]
 - (iii) Al-Musyarakah (joint venture) [2]
 - (iv) Al-Murabahah (cost-plus financing) [2]
- (c) Bank Negara Malaysia announced that the exchange rate of the Ringgit would be allowed to operate in a managed float with effect from 17 July 2005.
- Explain what a “managed float” is. [4]
- (Total:20 marks)

- END OF QUESTION PAPER -

OUTLINE ANSWERS

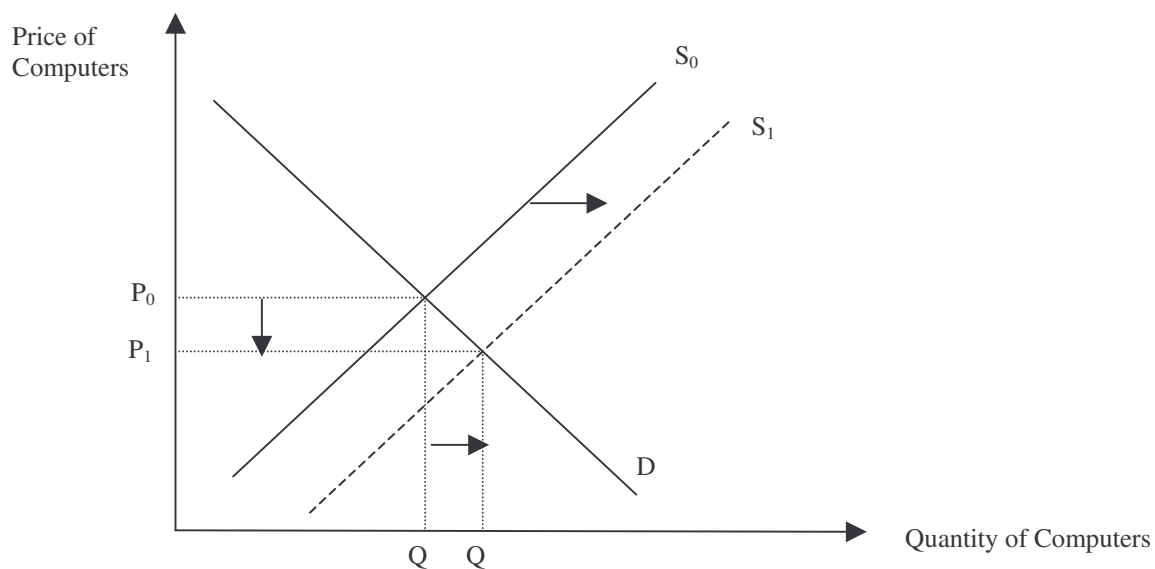
The comments given in the boxes below indicate the areas of weaknesses the examiners have identified and their advice to future candidates.

PART A

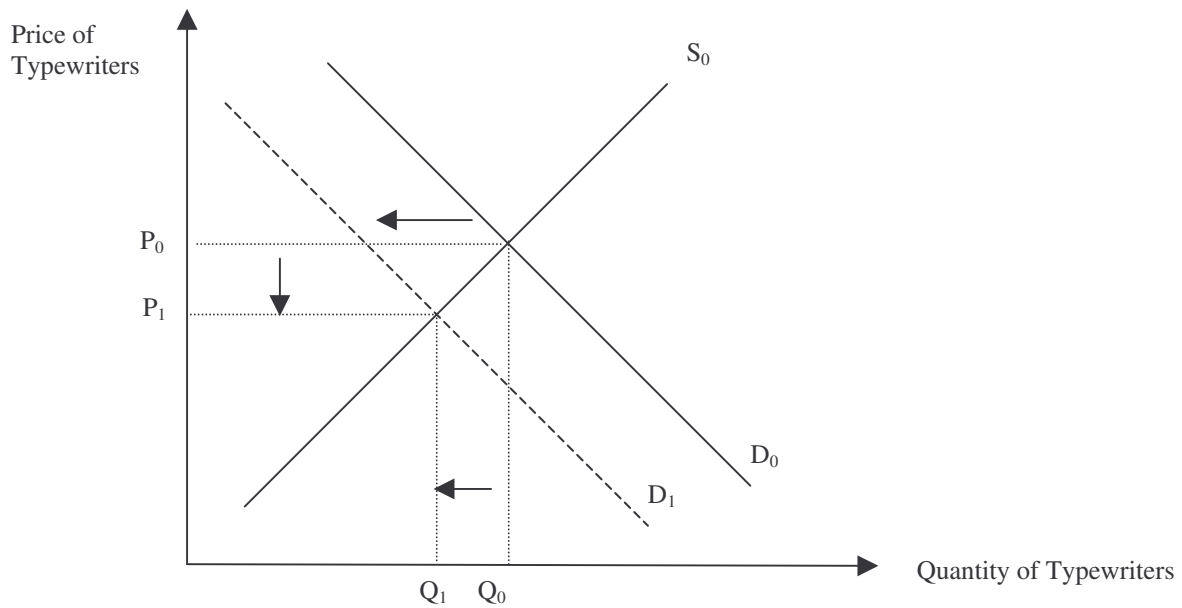
Question 1

- Candidates drew the demand and supply diagrams incorrectly. They had poor knowledge of the concepts tested.
- Candidates showed poor understanding of cross-price elasticity and income elasticity of demand.
- Some candidates did not even attempt this part of the question.
- Understanding the basic concepts is the key to answering this question. Relevant examples should be included in the answer.

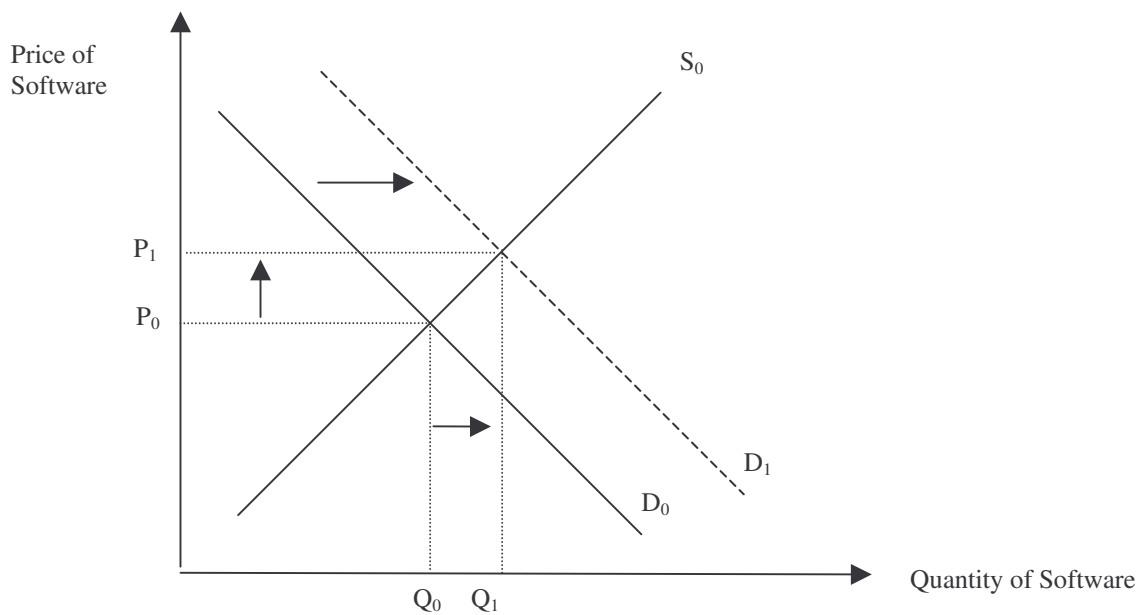
1. (a) (i) The effect of falling production costs in the market for computers results in a shift to the right of the supply curve (from S_0 to S_1). As a result, the equilibrium price of computers declines (from P_0 to P_1) and the equilibrium quantity increases (from Q_0 to Q_1).



- (ii) Since computers are substitutes for typewriters, the decline in the price of computers mean that people substitute computers for typewriters, shifting the demand for typewriters to the left. The result would be a decline in both the equilibrium price and equilibrium quantity of typewriters. Typewriter producers would not be pleased with the technological advancement in computers.



- (iii) Since software and computers are complements, a decline in the price and increase in the supply of computers means that people's demand for software will increase, shifting the demand for software to the right. Software producers would be pleased with the technological advancements in computers.



- (b) Cross price elasticity of demand measures the responsiveness of people to buying one product when the price of another product changes. Income elasticity of demand measures the responsiveness of people's purchases to changes in income.

Cross price elasticity measures the responsiveness of people's demand for goods to changes in the price of another good. The sign of the cross price elasticity coefficient can be used to tell whether a good is a substitute or a complement. Substitute goods have a positive cross-elasticity, i.e. an increase in the price of one good leads to an increase in the quantity demanded for the substitute good. Substitute goods are those that can be substituted or used in place of each other. Complementary goods have a negative cross-elasticity, i.e. an increase in the price of one good will lead to a reduction in the quantity demanded of the complementary good.

Income-elasticity measures whether a good is normal or inferior. A product is a normal good when its income elasticity is positive, meaning that higher income causes people to purchase more of the product. An inferior good, on the other hand, has negative income elasticity because an increase in income causes people to buy less of the product.

Question 2

- Candidates showed poor understanding of the concepts tested.
- The approach to part (b) is to first understand what is meant by a balance of payment deficit before suggesting corrective measures.

2. (a) (i) Nominal Gross Domestic Product (GDP) is the sum of the quantities of final goods and services produced times their current prices. An increase in nominal GDP can be caused by two factors:

- An increase in the total production
- An increase in price

Therefore, we do not know whether nominal GDP is changing because of changes in the amount of goods and services or price.

Real GDP is calculated using the market price from a base year. Therefore it will not bring about problems like the nominal GDP.

GDP is the total value of goods and services produced in a country like Malaysia. The amount would include goods and services produced by both Malaysians and foreigners in Malaysia. On the other hand, Gross National Product takes into account goods and services produced by Malaysians, at home and overseas.

(iii) Net factor payment is the difference between the value of goods and services produced by foreigners in Malaysia and the value of goods and services produced by Malaysians overseas. When the net factor payment is negative, it means that the foreigners in Malaysia are earning more than what Malaysians are earning in foreign countries, and vice versa.

(b) Any four of the following ways can be adopted to correct a balance of payment deficit:

- The government should adopt a policy to encourage exports
- The government should adopt a policy to discourage imports
- Trade agreements could be signed
- By employing a contractionary fiscal policy
- Exchange controls
- Depreciation/devaluation of currency

Please refer to Chapter 8 (Page 8–8) of the CF01 study manual for elaboration of the above points.

Question 3

- Candidates were unable to explain how BNM uses monetary policy tools to increase/reduce the money supply in the economy.
- They had poor knowledge of the process of money creation – an important point to answer this question.

3. (a) Structural unemployment results from the structural decline of industries which are unable to compete or adapt in the face of either changing demand of new products or changing ways of producing existing products. The emergence of new efficient competitors has been a particularly important cause of structural unemployment.

Frictional unemployment results from friction in the labour market, which creates a delay or time lag during which a worker is unemployed when moving from one job to another. In this case, there exists a job vacancy but either geographical or occupational immobility of labour causes friction in the job market.

- (b) (i) If Bank Negara Malaysia (BNM) wants to increase the money supply in the economy through open-market operations, it purchases Malaysian government bonds in the open market. When it makes payment for the purchases, Ringgit in the hands of the public will increase and therefore money supply increases.
- (ii) BNM can reduce the money supply in the economy by increasing the reserve requirements. Reserve requirements are regulations on the minimum amount of reserves that banks must hold against deposits. An increase in the reserve requirements raises the reserve ratio, lowers the money multiplier and therefore reduces the money supply.
- (iii) BNM cannot control the money supply perfectly because BNM does not control:
- the amount of Ringgit that households choose to hold as deposits in banks, and
 - the amount of Ringgit that bankers choose to lend.

The actions of households and banks affect the money supply. As such BNM cannot perfectly control the money supply in the economy.

PART B

Question 4

- Candidates showed poor understanding of the new interest rate framework, particularly the use of the Overnight Policy Rate (OPR) by Bank Negara Malaysia (BNM).
- The OPR is one of the most important monetary policy instruments. Candidates should thus familiarise themselves with the OPR mechanism, particularly how the OPR is set, as well as its implications on consumption, investment, savings patterns. Information on the OPR is available in the BNM 2005 Annual Report or BNM press releases, which can be accessed at the BNM website.

4. (a) Monetary policy dictates or regulates the volume of money supply and credit in the economy. As the nation's monetary authority, Bank Negara Malaysia (BNM) is responsible to the Government for promoting monetary stability and a sound financial system, and to help influence the credit situation to achieve the nation's overall economic objectives. BNM ensures that, over the long term, there is sufficient money supply and credit to meet the Government's objective of sustaining growth with price stability. In the short term, BNM must ensure that the growth of money supply is sufficiently elastic to counter any inflationary situation that may arise without exerting undue pressure on resources.
- (b) Monetary policy has several objectives through which the Government controls certain situations that may arise in the economy from time to time. Primarily they are:
- To maintain price stability – constant price fluctuation can be disruptive to the economy. Prices are allowed to fluctuate within a certain acceptable range in order to maintain economic stability.
 - To achieve a sustainable level of economic growth – this can be achieved when major macroeconomic issues, like unemployment and inflation, are well controlled.
 - To control demand and employment – there must be a balance between aggregate demand and the level of employment in order to achieve a stable economy.
 - To maximise employment of resources – all factors of production should be fully employed for maximum benefits to the economy.
- (c) The basic monetary functions are effected through monetary instruments at the disposal and within the control of BNM. These instruments are standard among central banks around the world. The volume of money and the generation of credit by the central banks and financial institutions are regulated through a range of instruments, including quantitative and qualitative controls. Primarily, these are statutory reserve requirements, money market operations, discount operations, interest rate regulation, centralisation of Government and EPF deposits, credit control and guidelines on lending, moral suasion, liquidity requirements and the limit on SWAP transactions with foreign currency.
- (d) Monetary policy instruments are used to influence the amount of credit and rate of money creation through their impact on the availability of bank reserves. They work through the monetary transmission process, which links the intermediate and final targets of monetary policy. Intermediate targets are usually interest rates, exchange rates and money supply while the final targets are normally output, prices and employment.
- (e) (i) **The Overnight Policy Rate**
- The Overnight Policy Rate (OPR) is the indicator of the monetary policy stance. The OPR has a dual role – as a signalling device to indicate the monetary policy stance and as a target rate for the day-to-day liquidity operations of BNM. Any change in the monetary policy stance would be signalled by a change in the OPR. It serves as the primary reference rate in determining other market rates.

(ii) **Monetary Policy Statement**

Changes in the OPR will be announced in the Monetary Policy Statement (MPS). The MPS is issued at a pre-determined quarterly interval to coincide with the release of Malaysia's quarterly Gross Domestic Product performance. In the intervening period between the fixed scheduled dates, should there be a change in the MPS, an additional MPS would be issued.

Question 5

- Candidates' explanations on the money market, capital market, foreign exchange market, Government Investment Certificates, Bank Negara Bills and corporate bonds lacked depth.

5. (a) (i) **Money market**

The money market deals in short-term funds. The activity in the money market consists of borrowing and lending short-term funds with maturity ranging from overnight to one year. Any other instruments with maturity greater than one year will be traded in the capital market. The financial institutions in the money market are the commercial banks, merchant banks and finance companies. This market mobilises short-term funds for working capital, bridging loans and for any immediate liquidity needs. It can also take the form of conventional borrowings and lending activities on a secured or unsecured basis, e.g. the issue of short-term securities, which can be bought and sold. The money market in Malaysia comprises an interbank money market and a market for short-term funds involving discount houses, money brokers and other intermediaries. The interbank money market deals in short-term funds involving overnight money, 7-day money and funds for periods of one, two, three and six months. A non-bank money market also exists. It deals through the intermediary of discount houses and participation in this market is open to all institutions including the commercial banks. The instruments used in the money market are money market papers, such as treasury bills, bills of exchange, promissory notes and government securities. A money market instrument is negotiable and when traded is transferable.

(ii) **Capital market**

The capital market comprises a primary securities market, in which new issues of government and corporate securities are offered both to the public and the financial institutions, and the secondary market, in which existing government and corporate securities are transacted. This is where medium to long-term funds are mobilised. This means instruments with maturity of more than one year. It is also used to finance long-term investments and capital expenditure for both private and public sectors. The funds raised can be either interest-bearing debt or equity. Interest-bearing debts are commercial papers and bonds, which are short-term and issued by companies directly to the investors. Equity comes in the form of public issues, right issues and convertible shares.

(iii) **Foreign exchange market**

The foreign exchange market is where the exchange of currencies takes place, i.e. buying and selling of currencies. For example when individuals, businesses and the government in one country want to trade, borrow or lend to another country, they must convert their currency to the currency of the country they are dealing with. The exchange rate is the price of one country's currency in terms of another. Market forces determine the exchange rate that prevails for consumers and investors. However, governments through their central banks do intervene in the foreign exchange markets to promote or safeguard their national policy objectives. Traders in commercial banks in many countries trade in international currencies in foreign

exchange markets around the world through computer networks. The transactions in the foreign exchange market determine the rates at which international currencies are exchanged. These exchange rates affect the cost of acquiring foreign financial assets or foreign goods and services. Foreign exchange market transactions are over-the-counter, i.e. there is no single physical location where traders gather to exchange currencies, as there are for many domestic stocks and bonds.

(iv) **Primary market**

In the primary market for short-term funds, the participants are the initial suppliers of funds and the final users. The suppliers of funds are mainly individuals, large enterprises, plantation houses, international trading companies, provident, pension and other trust bodies, and the public authorities and Government departments. They normally keep their surplus money as short-term deposits with the various financial institutions, such as the commercial banks, finance companies and discount houses.

(v) **Secondary market**

The secondary market in short-term deposits relates to the dealing activities of banks and other major financial institutions among themselves. The hub of the activities is the interbank market, which refers to trading in short-term funds among the commercial banks, merchant banks and finance companies. These three major groups of institutions also conduct daily dealings in deposits outside the interbank market. In turn, they are also a source of short-term funds for the discount houses.

(b) (i) **Malaysian Government Securities (MGS)**

These are long-term debt securities issued by the Government with an original maturity of more than one year. Largely financial institutions and pension funds hold MGS. Financial institutions need to hold MGS for compliance purposes, while pension funds, such as the EPF, are investing to comply with statutory requirements and at the same time provide a secured return to contributors in the long run.

(ii) **Government Investment Certificates (GIC)**

These are issued by the Government based on Islamic principles and are also regarded as liquid assets. Islamic banks can invest in the certificates to comply with the stipulated liquidity requirements as well as to park their temporarily idle funds.

(iii) **Bank Negara Bills (BNB)**

This is a short-term paper issued by Bank Negara Malaysia to mop up excess liquidity through its open market operations and to provide financial institutions with an alternative instrument in meeting their liquidity and reserve requirements on their investment portfolios. BNBs are short-term debt securities with maturity of 91, 182 and 364 days.

(iv) **Corporate bonds**

They are intermediate and long-term obligations issued by large corporations to finance plant and equipment investment. Typically, corporate bonds pay interest twice a year and repay the principal amount at maturity. There are many variations, like the convertible bonds where the holders are allowed to convert the debt into equity. The corporate bond market is smaller than the stock market.

Question 6

- Generally, candidates gave brief and insufficient answers.
- Candidates were unable to answer the question on the rationale for the consolidation programme for the domestic banking sector.

6. (a) (i) Commercial banks

Commercial banks enjoy the widest scope of permissible activities. Apart from the prohibition to engage in wholesale and retail trade, and some restrictions on investment in immovable property and shares, commercial banks are able to engage in a full range of banking services.

Traditionally, the main functions of commercial banks are to provide:

- retail banking services such as the acceptance of deposits, granting of loans and advances, and financial guarantees;
- trade financing facilities such as letters of credit, discounting of trade bills, shipping guarantees, trust receipts and bankers acceptances;
- treasury services;
- cross border payment services; and
- custody services such as safe deposit boxes and share custody.

Commercial banks are also authorised to deal in foreign exchange, i.e., to buy, sell, borrow and lend in foreign currencies and are the only financial institutions allowed to provide current account facilities.

(ii) Merchant banks

Merchant banks were formed specifically to service the needs of the corporate sector and to complement the facilities offered by commercial banks which mainly focused on providing short-term credit for working capital and trade financing. As such, the operations of merchant banks hinge mainly on providing advisory and management services to corporations as well as conducting wholesale lending and deposit taking activities.

Specifically, merchant banks play a role in short-term money market and capital raising activities including financing, specialising in syndication, corporate finance and management advisory services, arranging for the issue and listing of shares, as well as investment portfolio management.

Apart from engaging in fee-based activities, merchant banks also extend credit to the economy. As the merchant banking industry's business focuses mainly on the corporate sector, it operates mostly on a wholesale basis and is largely involved in project-based financing. Thus, a large chunk of the merchant banks' total loans are in the form of term loans. However, the industry also provides financing for their corporate clients' operational activities mainly in the form of revolving credits.

(b) (i) Objectives of Bank Negara Malaysia

Bank Negara Malaysia (BNM) was established on 26 January 1959, under the Central Bank of Malaya Ordinance 1958, with the following objectives:

- To issue currency and keep reserves safeguarding the value of the currency

- To act as a banker and financial adviser to the Government
- To promote monetary stability and a sound financial structure
- To influence the credit situation to the advantage of the country
- Responsible for supervision, regulation and development of the insurance industry.

(ii) **Objectives of the Financial Sector Masterplan 2001-2010**

The objective of the Financial Sector Masterplan released by BNM in March 2001, is to develop a more resilient, competitive and dynamic financial system with best practices, that supports and contributes positively to the growth of the economy throughout the economic cycle. It has a core of strong and forward looking domestic financial institutions that are more technology driven and ready to face the challenges of liberalisation and globalisation. The development of domestic institutions that form the core of an efficient, effective and stable financial sector is an important part of this process.

(iii) **Objectives of the merger programme for the domestic banking sector**

The merger programme for the domestic banking sector was initiated in July 1999. The 1997/98 regional currency crisis and the threat from globalisation and liberalisation triggered the initiation of the merger programme. During the financial crisis, it was evident that a fragmented banking sector was highly vulnerable to shocks that could pose systemic risks to it. Growing competition and strong pressures from the external front to further liberalise the banking sector have also clearly shown that the domestic banking sector can no longer remain protected. The financial liberalisation envisaged under the General Agreement on Trade in Services to gradually remove barriers to entry and access among the World Trade Organisation members has highlighted a crucial need. The domestic banking sector must gear itself to be able to meet the challenges and competition arising from increasing globalisation and technological advancements.

Question 7

- Generally, candidates gave brief and insufficient answers. They had poor knowledge of the managed float.
- Candidates are advised to learn about the various types of exchange rate regimes in greater depth.

7. (a) (i) Development finance institutions (DFIs)

Established by the Government to promote development programmes in the agricultural, industrial and international trade and export sectors, DFIs continue to play a complementary role to banking institutions in the intermediation process. They maintain their role as niche providers of specialist capital financing for projects which require medium to long-term financing in the agriculture, industrial and manufacturing sectors. DFIs have traditionally relied heavily on borrowings to fund asset growth as they are not licensed to mobilise deposits from the public. These institutions have access to resources at concessionary rates from the Government and foreign and international institutions.

Examples of DFIs are:

- Bank Pertanian Malaysia
- Bank Industri Malaysia Berhad
- Bank Pembangunan & Infrastruktur Malaysia Berhad
- Export-Import Bank of Malaysia Berhad
- Malaysian Industrial Development Finance Berhad
- Sabah Development Bank Berhad

- Malaysian Industrial Estates Berhad
- Borneo Development Corporation (Sabah) Sdn. Bhd.
- Borneo Development Corporation (Sarawak) Sdn. Bhd.

(ii) **Savings institutions**

Savings institutions complement banking institutions in their role as major deposit-taking institutions. These savings institutions play a particularly important role in promoting and mobilising savings among the middle and lower-income groups, especially in rural areas, which banking institutions do not adequately serve. Savings institutions source funds, mainly from deposits, largely to extend loans and investments.

Examples of savings institutions are:

- Bank Simpanan Nasional
- Bank Rakyat
- Other co-operative societies

(b) (i) **Al-Wadiah (safe-keeping with guarantee)**

Refers to goods or deposits, which have been deposited with another person, who is not the owner, for safekeeping. As wadiah is a trust, the depository becomes the guarantor and, therefore guarantees repayment of the whole amount of the deposits, or any part thereof, outstanding in the accounts of depositors, when demanded. Depositors are not entitled to any share of the profits but the depository may provide returns to the depositors as a token of appreciation.

(ii) **Al-Mudharabah (profit sharing)**

Refers to an agreement made between a party (who provides the capital) and another party (entrepreneur) to enable the entrepreneur to carry out business projects, which will be on a profit-sharing basis, according to a pre-determined ratio agreed upon earlier. In the case of losses, the losses are borne by the provider of the funds.

(iii) **Al-Musyarakah (joint venture)**

Refers to a partnership or joint venture for a specific business with a profit motive, whereby the distribution of profits will be apportioned according to an agreed ratio. In the event of losses, both parties will share the losses based on their equity participation.

(iv) **Al-Murabahah (cost-plus financing)**

Refers to the sale of goods at a price, which includes a profit margin as agreed to by both parties. Such sales contracts are valid on condition that the price, other costs and profit margin of the seller are stated at the time of the agreement of sale.

(c) A managed float implies that the value of the Ringgit will be determined by economic fundamentals. BNM will monitor the exchange rate against a currency basket to ensure that the exchange rate remains close to its fair value. The central bank would intervene in the foreign exchange market to smoothen short-term fluctuations. Thus, for example, the central bank would sell Ringgit if there is a strong demand for the currency and buy Ringgit if there is excess supply. This does not necessarily mean that there is a band within which the currency would oscillate. Even if there is a band for operational purposes, it could remain unknown to the market, lest currency speculators test the will and strength of the central bank to defend the band's ceiling or floor. A managed float provides a middle ground where one can have the benefit of exchange rate flexibility without excessive instability.