DP10

Marketing of Financial Services

13 OCTOBER 2000

1.	Time allowed	: Three (3) hours
2.	Total number of questions	: Five (5) questions
3.	Number of questions to be answered	: Four (4) questions [25 marks each]
4.	Begin each answer to a new question on a fresh page.	
5.	Answer **all** questions in **English**.	

ANSWER FOUR (4) QUESTIONS ONLY

1. (a) Describe the main features of the product life cycle. [10]

   (b) Outline the process of the new product development cycle for a financial institution. [15]
   (Total:25 marks)

2. (a) Explain Abraham Maslow's "Hierarchy of Needs" theory. [10]

   (b) Apply Abraham Maslow's "Hierarchy of Needs" theory to products offered by financial institutions. [15]
   (Total:25 marks)

3. (a) Explain the financial services marketing mix. [10]

   (b) Financial services marketing is different from other marketing management concepts such as industrial or consumer marketing. Discuss. [15]
   (Total:25 marks)

4. (a) Describe the 4 Cs that affect pricing strategies in financial institutions. [10]

   (b) Explain the following pricing methods used by financial institutions:

   - Average cost
   - Analysis of cost versus profit
   - Incremental cost
   - Opportunistic [15]

   (Total:25 marks)

5. (a) Consumer banking is becoming popular in Malaysia. Why is there a sudden interest in consumer banking? [10]

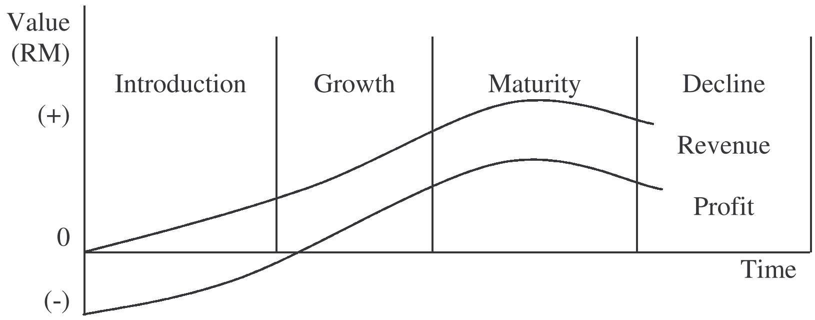
   (b) Explain how technology is changing the landscape of consumer banking. [15]
   (Total:25 marks)

OUTLINE ANSWERS

Question 1

Many candidates attempted this two-part question on product life cycle and new product development cycle. However, only a few managed to pass. A few candidates lost marks when they completely went out of point because they were unable to outline the process of the new product development cycle, such as idea generating, screening, etc.

1. (a)



Introduction
A period of slow growth and possibly negative profit as efforts are made to obtain widespread acceptance for the financial service. Cash flows are typically negative and the priority is to raise awareness and appreciation of the product, with the result that the marketing mix will place a high degree of emphasis on promotion. In the financial services sector it is of considerable importance that new products are introduced quickly and that this phase of the life cycle is shortened, because of the ease with which new intangible product can be copied. Electronic home banking might be regarded as products that are at present in the introductory stage of their life cycle in Malaysia.

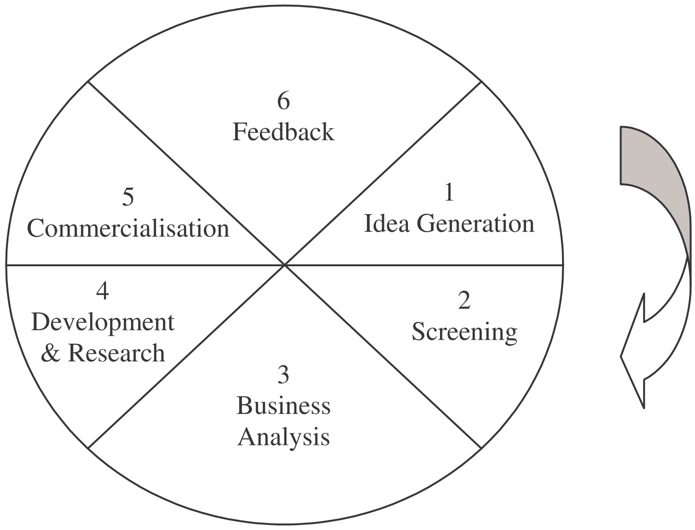
Growth
Sales volumes increase steadily and the product begins to make a significant contribution to profitability. Increase in sales can be maintained by improvements in the features, targeting at more segments or increase price-competitiveness. The new service product will begin to attract significant competition. Growth services include unit trust financing and credit cards.

Maturity
Sales begin to stabilise, with replacement purchases becoming more common than new purchases. The market itself is mature and the marketing campaign and product are well established. It may be necessary to consider modification and rejuvenation of the service to arrest future decline. Bank current accounts and mortgages are products that can be seen as having reached maturity, and in many cases are being modified in attempts to prolong their life cycles.

Decline
Sales begin to drop away noticeably, leaving management with the option of withdrawing the product entirely. Although, often with long-term investment products this may not be feasible; in this case the alternative is a withdrawal of support but maintenance of the product. Alternatively, if the product is seen as one with a potential long-term future, then the appropriate strategy may be one of rejuvenation. In the financial services sector, it should be noted that barriers to product withdrawal are often high; some products such as life insurance cannot simply be withdrawn form the market, because some customers will still be paying premiums. Consequently, the more appropriate strategy may be to minimise the marketing effort rather than formally withdrawing the product.

(b) **New Product Development**

There are six stages in bank product development as depicted in the figure below:



Stage 1 – Idea Generation

A highly creative activity stage, where brainstorming sessions can produce numerous ideas. New product ideas can come from various sources such as management, customers, bank officers and clerks, new technology, competitors and even government regulations.

It is extremely important for bankers to encourage and energise the process. Dynamic leadership is needed to deal with the uncertain and sometimes personal nature of ideas. On the other hand, if the authoritarian approach is used, most initiative or ideas will dry up, especially when subjected to faint criticism, or when one must fight very hard to get his ideas accepted. The correct approach is to conduct a brainstorming session where no suggestion is turned down, no matter how absurd it is.

Stage 2 - Screening

A critical stage where the proposed idea is screened to determine whether it justifies management's commitment (in terms of time, money and resources). There are two methods involved:

- establishing a list of evaluation criteria which enables the comparison of an idea generated, to determine whether it is compatible with the bank's resources and using the weighing, ranking or rating of the idea against the criteria used; and
- a simple checklist of all the bank and market features. The new ideas are checked, to see how it stands out when compared with some vital factors. (e.g. market size, growth, level of service required, competition and trends).

However, it is important to stress that there is no single criteria that is appropriate across the board. The final score should not exclude a large element of collective as well as intuitive judgment of the steering committee, i.e. 'vision of the future'.

Stage 3 – Business Analysis

Undertaking a qualitative analysis of the product and its likely chance of success or failure. Take into account the costing and profitability analysis of the proposed product. Other elements to be taken into account, include the implications of:

- human resources;
- business forecast;
- competitor's reaction;
- Bank Negara and the Association of Banks in Malaysia (ABM) regulations, provisions under the Banking and Financial Institutions Act, 1989 (BAFIA), ethics and social rules and pressures;
- target market segment;
- delivery system to accomplish the marketing goals;

- pricing policies;
- service objective to measure how well a customer should be supplied with what he /she considers of value;
- marketing goals; and
- training

This stage continues throughout product development and should be continually re-appraised and modified as and when necessary before the final implementation of the product by the bank.

Stage 4 – Development and Research

This stage requires the translation of the proposed idea into actual tangible service product. The steering committee agrees to the idea and adopts a pre-defined business development plan. The product specifications are laid-down and customer testing may be required. Total "tangible elements" including product name, packaging (brochures and application forms), advertising and publicity cum promotion materials are to be incorporated to give birth to a new banking product. Special attention shall be accorded to the product's service delivery system' (manual or automated) to ensure a level of professional or satisfactory service.

Market testing of the new service product may not be always possible. However, some bank products would necessitate market survey and research conducted either internally or through the assistance of a market survey and research consultancy firm such as Performance Training and Consultancy Sdn Bhd.

In the course of undertaking the development of a bank product, a network analysis or a timeframe schedule is drawn up. It involves listing down all streams of main or sub-activities, which must be taken to get the product to the market. The relationship of all the activities can be mapped and the sequence of getting the job done is depicted clearly. During the development stage, many departments of a bank may be involved in one way or another and this calls for close collaboration of the various units.

Stage 5 – Commercialisation

The bank is targeting for a full-scale launch of newly developed product or revamped product. There are 10 pointers that would contribute to the successful commecialisation of a banking product:

1. When to introduce it?
2. Where to launch it – local, regional, nationwide or internationally?
3. How to launch it?
4. Who to target it at?
5. Is the service product delivery system (manpower and equipment resources) trained or prepared to support the product effectively?
6. What is the turnover to be achieved over a period of time?
7. Can the exact costing and profitability of the product be determined?
8. Are there effective above-the-line or below-the-line promotional budget and strategies to support the product?
9. Does the product's unique qualities or newness stand out from its competitors?
10. Are there any contingency plans to counteract competitors from catching on with a similar "me too product"?

Stage 6 – Feedback

It is imperative for every new bank product to incorporate the mechanism of feedback. Feedback is usually determined by the acceptability and performance of the bank product against standard benchmark. A bank can also continue to monitor feedback from "front-line" staff, through market surveys and competitor's reactions to its products.

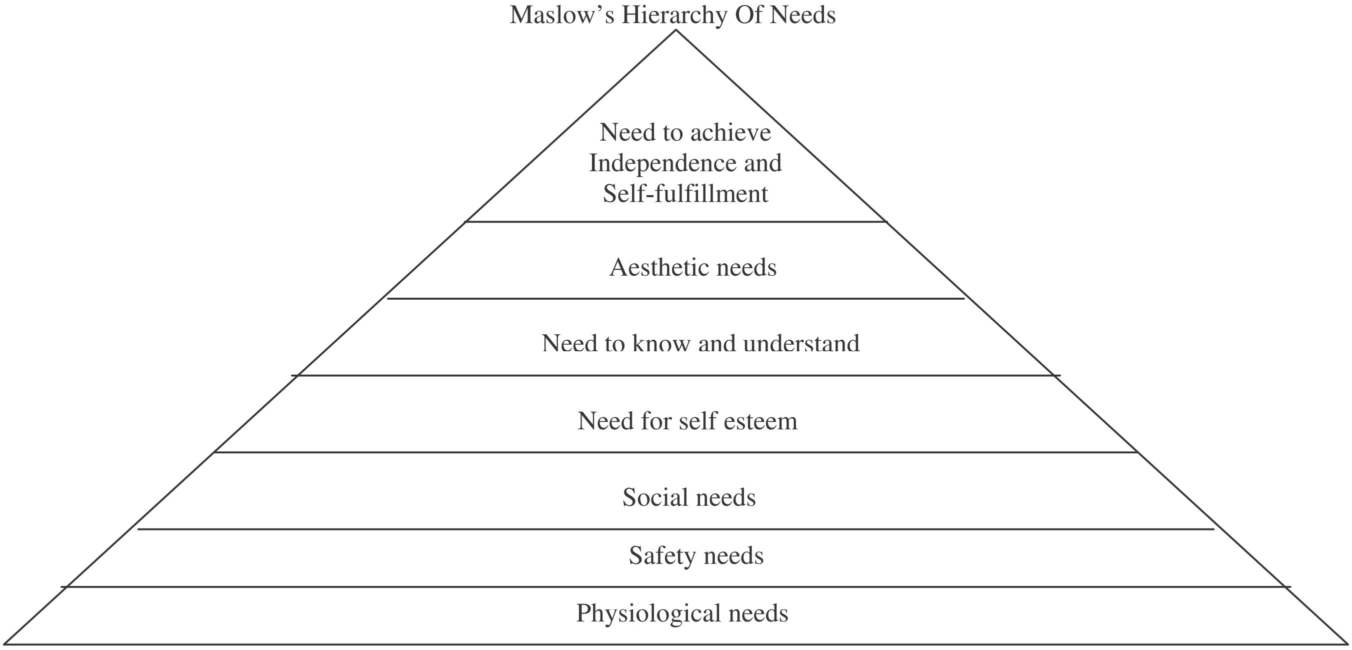
One must be fully aware that regular product improvement from-to-time is necessary to ensure the success and competitiveness of a bank. Proper and timely elimination of bank products is equally important because of the continuous growth of bank products and services and the ever changing scenario of global bank automation in the retail banking marketplace.

Question 2

The most popular question attempted by almost all the candidates was the two-part question on Abraham Maslow's "Hierarchy of Needs" theory. The first part required candidates to explain the theory and the second part was an application question. A few candidates managed to pass this question. Those who failed were unable to apply the theory to products offered by financial institutions.

2. (a) The marketer needs to understand the needs or wants that inspire individual motivation, and give rise to particular forms of purchase behaviour. There are a number of ways in which this can be done, and they include:

Maslow's Hierarchy Of Needs



In this theory, wants and needs are 'pre-potent'. Potential higher level needs emerge and influence purchase behaviour only after there has been an opportunity for the satisfaction of lower level needs.

The most basic motivation stems from the need to eat, rest, have a home, feel secure and wanted, and to have the company of one's fellow men. For these reasons, people buy food and drink, pay rent or buy a house, purchase insurance, and meet up with their friends in social and religious places, professional institutions and so on.

Once these needs are satisfied, the theory suggests that individual motivations will be shaped by behaviour that is associated with:

- The need to gain self-esteem in the eyes of other people, for instance through the possession of prestigious objects such as branded merchandise and quality sporty cars, taking exotic holidays, donations to charity, etc.
- The need to know and understand what is going on around them. This perhaps accounts for the expenditure on new media such as newspapers, teletext etc, and the worldwide radio and television news programs operated by the CNN, Mega TV, Astro.
- The need to have an aesthetically pleasing environment, and to get rid of ugliness, pollution etc. These needs have considerable implications to our environment, for instance pollution or creating visual eyesores. And it has meant that product design has become a major factor in bank product management (e.g.: attractive brochures)
- The need to achieve independence and self-fulfillment. The purchase of the car is a prime example. Its ownership offers freedom and escape from the 'hassle' of taking public transport. Similarly, home ownership offers freedom from interference by others, since the owner does not have a landlord to worry. Self-fulfillment is obtained in many ways. It may come from a beautiful home, leisure activities, sports, hobbies or continuing education.

(b) Candidate can pick any financial services they are familiar with e.g. credit card, ATM card, housing loan, “one-account” for all purposes, Islamic or interest-free product/services.

To whom the particular product/service is targeted at? Possible reasons for satisfaction of certain needs e.g.

<u>Product / Services</u>	<u>Needs Satisfaction</u>
Credit card:	Not for those who can’t satisfy physiological need nor financial security to afford credit facilities. Different category of cards for people at different social (cultural or religious) needs and financial level e.g. normal vs “gold” card (esteem needs), convenience (social, entertainment) needs What security measures are in-built to protect card-holders? (security needs) – call up 24-hours line when card is lost, immediate cancellation of facilities.

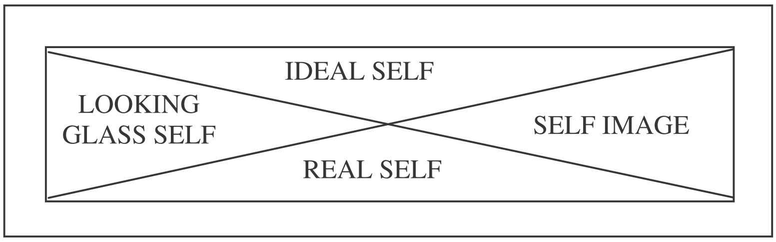
Maslow’s hierarchy isolates need for self-esteem as a separate motivating category. Self-esteem is important for two reasons. Firstly, our culture places a high value on material acquisition and its display, because this reflects hard work and success. Hard work, rewards and the enjoyment of income earned are the hallmark of success.

Secondly, the achievement of self-esteem involves earning the respect of others. It is characteristic of our society to place a high value on achieving self-respect and prestige. Whilst there are many ways in which personal prestige and respect can be obtained, the possession or use of certain types of goods and services are likely to increase individual status. Such goods or services, might include expensive homes and cars, private or higher education, holiday overseas, eating out at quality restaurants and golf club membership.

The ‘self’ is and individual person’s image of himself or herself. Within this self are various drives and motivations, the most important of which serve to maintain and enhance this image. Goods and services may be purchased because they ‘fit’ these particular motivations. For instance many products are promoted as being the ‘in thing’, where consumption will make you ‘one of the crowd’. Others, are purchased because the buyer feels that ownership will confer separateness and status. These are reflected in Priority Banking services and gold credit cards for high net worth individuals offered by various banks. The customer places X amount for deposits, pays Y for monthly fees and obtains special privileges.

Thus, purchaser’s behavior and shopping patterns are seen under this motivation theory to support and enhance personal self-identity. The banker will need to design, promote and finance products in such a way that images produces self-identity, consistent with those sought by prospective customers.

The components of the self-image are illustrated below.



Real Self	-	you as you actually are.
Looking Glass Self	-	you as you think others see you
Ideal Self	-	you the way you would like to be
Self Image	-	you the way you see yourself.

Question 3

Another popular choice amongst most candidates was the question on financial services marketing mix. Many candidates only stated the 4Ps of marketing, and completely omitted the people aspect of the marketing mix. There were, however, a few candidates who managed to explain the concept in detail and even supported their answer with relevant examples. They secured above 70% of the overall mark for this question.

3. (a) The Institute of Marketing Malaysia defines marketing as business. One of the most potent tools available for an organisation is the marketing mix. The marketing mix is attributed to Neil H. Borden, of the Harvard Business School and refers to a set of marketing ingredients used to achieve its objectives. The thrust of a financial industry is more difficult than that of consumer or industrial goods because it is a service industry. Services are intangible and much more difficult to package, sell or be demonstrated to the consumers.

It is important to identify and develop a differential advantage. The differential advantage is to develop a strategy of favourable positioning for services where perception is so important to decision making. It is also important to make the service more tangible (e.g. features of an attractive deposit or housing loan). Such tangible positioning gives the customer a physical association with the service and strengthens the chances of success.

The macro environment, comprises six sectors of influence that needs to be carefully considered when deriving the right marketing mix:

Economy	Influences the ways in which scarce resources, such as personal income and corporate borrowings are used.
Society	Influences the shift in personal values and preferences.
Law	Laws and regulations govern the conduct of business in financial institutions.
Technology	Refers to high technology equipment used to enhance or replace manpower in the provision of services, eg. ATM's.
Politics	Dictates the nature and types of financial services to be made available, e.g. the non-training position for financial services with countries such as Cuba.
Competition	Few organisations are left alone to match their capabilities with customers' wants. Competition comes from similar products or different opportunities, which all compete for the customer's limited financial resources.

Categories of Marketing Mix:

Product

Financial services products include mortgages, saving accounts, fixed deposits, hire purchases, business loans, overdrafts, export finance, foreign exchange, credit cards, insurance, stock brokering, trustee services and mutual funds. These are intangible, difficult to visualize, touch or smell and are usually means to an end.

Place

Most financial services are sold through the 'place' or the branch. As such, financial institutions have invested heavily in bricks and one inherent advantage of branch outlets is that the financial institutions becomes part of the living community, from the social-economic perspective.

Nonetheless, there appears to be a shift from traditional branches to other new accessible retail outlets. Citibank is experimenting with mobile 'petrol kiosks-like outlets' known as Citistations in the USA. Standard Chartered Bank has pioneered drive-in banks in Malaysia, which is still popular with its customers in Kuala Lumpur.

Another well-known technological development which is challenging the nature of the place is the introduction of ATMs as well as shared ATM networks.

The next line of development will be towards homebanking in line with the Multimedia Super Corridor developments.

Promotion
Financial services need promotion in order that the product are made known to the consumers. The methodology of promotion varies with the target audience, the design of the product and the business volume expected. For example, the use of advertising, branch displays utilising posters, desktop flyers, brochures, local promotion at trade exhibitions and seminars and public relations with the press and public. Financial services are now being promoted aggressively through television, radio, and billboards advertising.

Also, emphasis has shifted from conservative image advertising to focusing on new products and features or unique selling points (e.g. Stanchart's Depositlink, Hong Leong's Teleloan, Citibank's Mortgage Power.)

Other new direction for financial services are direct mail campaigns at targeted audiences and the introduction of full-time sales personnel specialising in marketing of financial services.

Price
The bottomline is what counts most in business. For financial institutions, the pricing of products are reflected in the interest rates and service fees. The interest rate is usually reflected in the percentage on top of the bank's base lending rates. Due to regulations, pricing for some banks' products are undifferentiated and the prime examples is the fixed interest rate for priority lending or mortgage for houses below RM100,000 in purchase value. For such mortgage products, pricing in interest rates is not a 'player in the marketing mix'.

For example, the marketing of a gold credit card differs from the normal credit card of the same heritage. Consumers are willing to pay a higher premium on entrance and subscription fees in return for the prestige, better service, greater flexibility and higher credit limits of a gold card.

People
Selling efforts by financial institutions take both a personal and impersonal form. Due to their intangible nature, financial services lack the form and touch of consumer products. The delivery mechanism is through branch staff and the way they deal with customers is an integral part of the product itself. Hence, personal selling and courtesy in conducting the business counts, as the service may be the most important feature of the product being sold.

Financial institutions, therefore, should place equal emphasis on training for their people. Training in product knowledge, selling and the advisory role must be conducted in the utmost professional manner. Personal attention to appearance, courtesy in communication and commitment to serve must be instilled in personnel.

Another important aspect is the standard of service.

(b) Services marketing differ from industrial or consumer marketing in at least four ways. First, services are intangible. They cannot be touched, felt or seen. Second, services are perishable. They cannot be stored. Third, service suffers from heterogeneity. The quality of service depends upon who provides it and when, where and how it is provided. Finally, the consumption and production of services take place simultaneously and are inseparable. These four fundamental differences lead to the following unique characteristics for services.

Nature of the Product: Whereas goods are objects, services are performances.

Customer Involvement in the Production Process: For example, when a customer withdraws money from an ATM, he/she performs several tasks critical to the production of the service (e.g. sliding the card, punching in the personal identification number, providing other information, collecting the cash, receipt and card etc.)

People as part of the Product: Interactions with other customers and the employees. The quality of a customer's experience in the bank is affected by the behaviour of the other customer waiting to be served, and also by that of the bank's personnel.

Quality Control Problems: Due to the heterogeneity problem, the quality of service is difficult to control. The quality of banking service can vary from teller to teller, or for the same teller, from situation to situation depending upon the teller's disposition and fatigue.

Service for customers To Evaluate: The intangibility of service makes it difficult for customers to evaluate the quality of the service before hand. This increases perceived risk. For example, customers find it extremely difficult to evaluate the quality of financial advice or insurance policies.

No inventories For Services: Because of the perishability problem, services cannot be inventoried. This leads to excessive demand at some times, and low demand at others. For example, there are long lines of customers in banks during certain times of the day and week, but idle tellers at other times.

Importance of Time Factor: Many services are delivered in real time. The value of many financial services depends upon the customer's ability to get real-time advice and information. Systems must be put in place to deliver such services.

Different Distribution Channels: Compared to goods, service use non-traditional channel. This is primarily because of inseparability of production and consumption. Distribution of services really implies distribution of production facilities. Thus, banking services are distributed by locating branches and ATM machines close to the consumption point.

Question 4

This question was a two-part question on pricing. Candidates were asked to describe the 4 Cs that affect pricing strategies in part (a) and explain the various pricing methods in part (b). The first part was well answered but many candidates lost marks when they were unable to elaborate on the pricing strategies utilised by financial institutions.

4. (a) Price in financial services industry goes under different names e.g. interest rates, fees, commissions. The 4Cs of pricing are discussed below.

Costs
Cost includes variable and fixed costs associated with producing the service. Variable costs tend to be relatively small compared to fixed cost in most service organisations including financial services. In financial service organisation, the risks associated with lending money or writing an insurance policy could also be included as part of the costs. Higher the risk, higher the "price" needed to cover the "costs".

Customers
The value of the service as perceived by customers determine the maximum price he/she is willing to pay for the service. Obviously, the organisation benefits if they are able to convince customers that the value of their service is extremely high. A strong brand name, company reputation, past performance and reliability are some of the factors that affect the value associated with the service.

Competition
Financial service providers often use competitor's price as benchmarks. Three options are available. Their price can be higher than their competitors (premium pricing), lower than competitor (penetration pricing), or at par with the competitors (party pricing).

Constraints
Financial services in many countries are regulated by the government, and much of pricing is really beyond the control of the individual firm. Similarly, central bank sets the interest rates and the individual bank may not have a lot of freedom in influencing them. The organisation has to take the price as given and work back-wards to cut down its operating cost in order to make profits. The final pricing is the product of these four factors and their interactions.

(b) Financial institutions (FI) have resorted to use the following methods to cost their products and services:

Average cost

The average cost method is easily computed by arriving at the total cost of operating the FI (i.e. costs of funds + operating overheads), with direct costs applied only to the individual service being rendered. Usually, the total cost is divided by the number of transactions to arrive at the average cost per transactions.

Analysis of cost versus profit

Next, there is a relationship between profitability and business volume. If an FI can increase branch transaction volume without increasing its overhead expenditure, any savings become a profit. The key to such a relationship is based on the simple theory of economies of scale. In such a situation where volume can be achieved through price reduction, such a strategy in pricing can result in economies of scale through increased volume that in turn affect profit margin favorably. As such, to analyse profitability, the following formula is suggested:

Profit = Price - (Variable Cost per Transaction x Volume) – Fixed Costs

To recommend any price change, the result contemplated should exceed the current profit level. One way is to analyse alternate pricing levels.

However, in the pursuit to obtain higher business volume the customer service factor must be considered in totality as it may suffer with longer teller lines. Greater loans mean more exposure, and increased customer base though sheer volume may result in the growth of smaller deposits which are more costly to service on a per account basis.

Incremental Cost

In new product development, the incremental costs are the net charges in all bank costs as a result of the new service. However, a new product may be able to utilise existing bank resources without much additional cost. The most important thing to consider in incremental costing is the actual of funds. This cost becomes an incremental cost to the extent that additional funds must be raised to support new asset-based products, such as corporate loans or services, when greater sales volume is the marketing objective.

Opportunistic Pricing Methods

FIs are now exploring the use of cost plus pricing, in which a specific percentage mark-up is added on top of the operating expenses and the relevant cost of funds. This cost-plus method has no apparent relationship to value and it may, if not used carefully, underestimate the price acceptance level of consumers. If so, this may result in FIs missing the opportunity for increased margins.

An example of cost plus pricing can be found in the disbursement of loans in their effective loan rates. This can be measured (i.e. the efficiency of loans pricing) in terms of its yield by a simple formula.

$$\text{Effective Yield} = \frac{\text{Gross Contribution to Income}}{\text{Average Loans Outstanding}}$$

Question 5

The least attempted question was on consumer banking. Candidates performed well in part (a), where they were required to explain the sudden interest in consumer banking. Candidates were however weak in explaining how technology is changing the landscape of consumer banking in part (b). They were more engrossed in describing the tools used, such as, ATM, telebanking, homebanking, Wireless Application Protocol (WAP), etc.

5. (a) Firstly, banks realise that economic development has brought about a growing group of middle-class people, with strong purchasing power and a certain affluence. They want the comfort and prestigious things in life and they are confident of earning more.

Secondly, banks are also experiencing shrinking profit margins from their corporate banking. Thus, they might find it easier to levy higher charges on retail clients. Banks generally price higher lending rates (2% - 3%) on consumer loans than corporate loans.

Thirdly, consumer banking provides a steady source of fund to banks. Not only is there stability in deposit growth, retail deposits are often a cheaper source of fund. It helps the bank to lower the cost of funds and therefore further improve interest margins. This leads to higher profitability.

The shrinking market share of the corporate loans was another reason for a sudden interest in consumer banking. Corporate loans were usually given on low profit margins. The lower contribution from the corporate loans were due mainly to non-expansion of this portfolio, debt restructuring, where partial, or full waiver of interest (up to certain period), interest reduction, etc. thus causing lower profit contribution. This encouraged banks to switch its strategy to focus on consumer banking to compensate the "deficit" income. The consumer sector or retail sector offers relatively safer lending as well as higher profit margins.

(b) In the past, customers could only withdraw cash over the counter at bank branches. Today, they can withdraw cash at ATMS in supermarkets, petrol kiosks and bus terminals at their own convenience. Bank transactions through ATMs are processed on-line and linked to the bank's central mainframe where customer records are updated almost instantaneously. Besides cash withdrawals, consumers can also request for account balance, new cheque books, transfer fund across accounts and even apply for new shares on the screen.

Home and telephone banking also helps consumers to execute their request. One typical example is Citibank's 24-hours phone-banking system. It is a telecommunication system directing customer's enquiries to a specific banking officer or banking facilities, but through a receptionist, but through a centralised computer processing unit. Advances in technology make telephone banking more user-friendly and thus, there will be a push for more electronic products in banking.

As technology is taking consumers into a cashless society, credit cards, debit cards, stored value card and smart cards are commonly used to settle purchases for groceries, air tickets, petrol, bills for meals at restaurants, making telephone calls and even taking public transportation. Such purchasing habit has become a major concern to banks, so much so that those banks that do not follow the trend would seem antiquated and may lose out in the consumer banking battle.

The business activities carried out at bank counters will also be different, with more new products being offered. The major function of the branch will soon be replaced by more consultation and advisory services for financial planning, investment, tax and legal matters. A new generation of skilled and knowledge based employees will be stationed in the branch to answer customer enquiries. Banks have also upgraded the appearance of banking halls to keep up with the customer expectations and to induce an atmosphere of trust and confidence.

Customers are demanding greater convenience, flexibility and accessibility. Changing lifestyles and spending patterns have led to the need for more appropriate distribution channels too. As consumers become more computer literate, they become more sensitive to the speed of product delivery. Thus, increased emphasis is given to automation of delivery systems.

On the supply side, significant economic growth has contributed to the increase in middle class and a more affluent customer base. Singapore, Hong Kong, Japan and Australia enjoy a high level of retail banking products and services. Changes in the mix of delivery systems are further supported by the existence of established infrastructure and communication networks.