FINAL EXAMINATION

GROUP III

(SYLLABUS 2008)

SUGGESTED ANSWERS TO QUESTIONS

JUNE 2012

Paper- 13 : MANAGEMENT ACCOUNTING – STRATEGIC MANAGEMENT

Time Allowed : 3 Hours **Full Marks :** 100

The figures in the margin on the right side indicate full marks.
Working Notes should form part of the answer.
(Please answer all parts of the question at one place.)

Section - I (60 Marks)
(Strategic Management)

Answer **Question No. 1** *and* **any other two** *more from the rest in this section.*

Q. 1. (a) In each of the cases/statements given below, one of four alternatives is correct. Indicate the correct answer : [1×10]

(i) McCarthy's marketing mix refers to
(A) Price, push, pull and product
(B) Price, promotion, place and product
(C) Price, profit, promotion and product
(D) Price, promotion, profits and product

(ii) Pepsi's "Nothing Official About it" would be an example of
(A) Mission
(B) Vision
(C) Strategic intent
(D) Policy

(iii) Which of the following market structures would be commonly identified with FMCG products?

(A) Monopoly

(B) Monopolistic competition

(C) Oligopoly

(D) Perfect competition

(iv) Judy Strauss and Raymond Frost's e-marketing model defines e-business as

(A) EB = EC + SCM + ERP

(B) EB =EC + BI + CRM + SCM + ERP

(C) EB =EC+BI+CRM

(D) EB = CRM + SCM + ERP

(v) The competitive advantage through market share approach is derived from

(A) Economies of scale

(B) Experience

(C) Market power

(D) All of the above

(vi) The introduction of 'Nano' by Tata Motors could be viewed as a good example of

(A) Price leadership

(B) Cost leadership

(C) Product leadership

(D) Technology leadership

(vii) ABC involves

(A) Innovative approach to reduction of cost

(B) Process analysis, cost drivers and innovative approach to reduction of cost

(C) Process analysis and innovative approach to reduction of cost

(D) Process analysis and cost drivers to reduction of cost

(viii) The Product Market Matrix comprising of Strategies of Penetration, Market development, Product development and Diversification was first formulated by

(A) Ansoff

(B) Drucker

(C) Porter

(D) Andrews

(ix) In the words of Michale Dell, CEO, Dell Computer Corporation, "No advantage and no success are ever permanent. The winners are those who keep moving." This requires the firm to have

(A) Focus

(B) Strategic flexibility

(C) Ability to diversify

(D) Ability to enter new emerging business

(x) Nine-cell GE Matrix is the same as the

(A) BCG Matrix

(B) Directional Policy Matrix

(C) PIMS Matrix

(D) 3 x 3 Competitive Positioning Matrixes

(b) State whether the following statements, based on the quoted terms, are 'TRUE' or 'FALSE' with justifications for your answer. If any statement is false, you are required to give the correct terms, duly quoted. No credit will be given for any answer without justification: [1×5]

(i) 'Forward Integration' means in-house production of critical inputs for the main business.

(ii) 'Dogs' are the products in a high growth market where they have a low market share.

(iii) 'Debt recovery' is an arrangement to have debts collected by a factor company, which advances a proportion of the money it is due to collect.

(iv) 'Management buy-in' refers to the purchase of all or part of a business firm from its owners by the managers.

(v) 'Acquisition' is nothing but the joining of two separate firms to form a single firm.

(c) Define the following terms (in not more than two sentences) : [1×5]

(i) Tax Haven.

(ii) Franchise.

(iii) Corporate appraisal.

(iv) Market segmentation.

(v) Loss-Leader.

Answer 1. (a)

(i) **(B)** — Price, promotion, place and product.

The marketer, E. Jerome McCarthy, proposed the four Ps classification in 1960, which has since been used by marketers throughout the world.

(ii) **(C)** — Strategic intent.

Simple and catchy phrase accompanying a logo or brand, that encapsulates a product's appeal and becomes an important component of its identification or image.

(iii) **(B)** — Monopolistic competition.

Fast moving Consumer Goods are the products used by individuals or households which are used or replaced very fast by the customers over a period of weeks, months of within a year. Due to product differentiation, every producer has to incur some additional expenditure in the form of selling cost. This is feature of monopolistic competition. For example soap, soft drinks etc.

(iv) **(B)** — EB = EC + BI + CRM + SCM + ERP.

Judy Strauss and Raymond Frost's e-marketing model defines e-business as a continuous optimization of a firms business through digital technology.

EB = EC + BI + CRM + SCM + ERP

Where, EB is electronic business, EC is electronic commerce, BI is business intelligence, CRM is customer relationship management, SCM is supply chain management and ERP is enterprise resource planning.

(v) **(D)** — All of the above.

A competitive advantage is an advantage over competitors gained by offering cunsumers greater value, either by means of lower prices or by providing greater benefits and service that justifies higher prices. Economies of scale, experience, market power are all essential.

(vi) **(B)** — Cost leadership.

Cost leadership, means the losest cost of operation in the industry. So low cost 'nano' is example of cost leadership.

(vii) **(B)** — Process analysis, cost drivers and innovative approach to reduction of cost.

The ABC analysis suggests that inventories of an organization are not of equal value. Thus, the inventory is grouped into three categories (**A, B,** and **C**) in order of their estimated importance.

(viii) **(A)** — Ansoff.

Ansoff (1965) demonstrates the choices of stragetic direction open to a firm in the form of a matrix (Figure).

Product / **Market**	**Present**	**New**
Present	1. Market Penetration	3. Product/Service development
New	2. Market Development	4. Diversification

Ansoffs (Product-Market) Expansion Matrix

(ix) **(B)** — Strategic flexibility.

Strategic flexibility is key in a changing world. For years, many organizations had a sound and healthy business model. Nowadays, as a result of drastic changes, organizations find out that their current business model does not work anymore. The financial crisis, changing consumer behaviour, the Internet and (free) access to information and knowledge changed the rules of doing business. Traditional business models become outdated and create the urge for new and innovative business models.

(x) **(B)** — Directional Policy Matrix.

This matrix measures the health of the market and enterprise's strength to pursue it. The results indicate the direction for future investment. The recommendation may be to invest, grow, harvest or divest.

Answer 1. (b)

(i) False — The correct term is 'Backward Integration'.

(ii) False — The correct term is 'Question Marks'.

(iii) False — The correct term is 'Factoring'.

(iv) False — MB occurs when a manager or a management team from outside the company raises the necessary fund, buys it, and becomes the company's new management.

(v) False — The correct term is 'Merger'.

Answer 1. (c)

(i) A 'Tax Haven' is a place where certain taxes are levied at a low rate or not at all.

(ii) **Franchise** generally means a right or privilege. It may refer to :

- Suffrage, the civil right to vote
- Franchising, a business method that involves licensing of trademarks and methods of doing business, such as :
  - Chain store, retail outlets which share a brand and central management
  - An exclusive right, for example to sell branded merchandise
- Media franchise, ownership of the characters and setting of a film, video game, book, etc.,
- A television franchise, a right to operate a television network.
  - A cable franchise, a right to operate a cable television network.

(iii) The Corporate appraisal involves critical assessment of SWOT in relation to the internal and external factors affecting a firm.

(iv) Market segmentation is the division of market into fairly homogenous subsets, where each subset can be chosen, reached and served by its own tailored marketing mix.

(v) 'Loss leader' means a product or services sold at market at lower-than-normal margins (i.e., probably at a loss) in order to attract customers who might then buy other items of the same company at normal prices.

Q. 2. (a) What do you understand by the term 'Strategic Positioning'?

(b) Write the meaning of 'Throughput Accounting'. In which sector this accounting is mostly applied?

(c) Mr. Abraham has recently joined as the Production Manager of Super Food Products Ltd., an Indian subsidiary of a multinational food manufacturer and having an annual turnover of ₹ 500 crores. His first major assignment in the company was to give a new marketing thrust to the several leading known brands of the company whose market share was continuously eroding in the face of growing competition.

To start with, he decided to concentrate on two major brands, Power-pack Instant Milk Powder for family and Tomato Ketchup with an annual turnover of ₹ 80 crores and ₹ 100 crores respectively. These accounted for a market share of 47% and 28% respectively for the financial year 2011-12 as compared to 68% and 45% for the financial year 2008-09. In spite these slide in the market shares; these brands could retain higher consumer preference and loyalty vis-a-vis other competitive brands.

With a view to having a better appreciation of promotional themes, Mr. Abraham convened a meeting with the advertising agency, Progressive Advertising Ltd. The meeting generated several new ideas on how to push brands up in the consumer recall and preference.

In the light of the above, answer the following questions :

(i) List out the possible reasons why the company has suffered a fall in its market share?

(ii) If you were the Product Manager, what would be your marketing strategy for arresting the trend of slackening sales in the light of the meeting with the advertising agency?

[5+5+(5+5)]

Answer 2. (a)

The logic of the strategic positioning is that competitive strategy which is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value. In other words, 'the essence of strategy is in the activities - choosing to perform activities differently or to perform different activities than rivals'.

Types of positioning - According to Porter, strategic options emerge from three distinct sources, which are not mutually exclusive and often overlap. These are as follows :

(i) Variety based positioning - the focus, essentially, is on product or service varieties and not on customer segments.

(ii) Need based positioning - the focus is on all or most of the needs of a particular group of customers. This strategy comes closer to the strategy of targeting a particular segment of customers. This strategy is appropriate when there are groups of customers with differing needs and when a tailored set of activities can serve these need based.

(iii) Access based positioning - it is applicable when the needs of different sets of customers are similar but the best ways of accessibility are different due to factors like geography or customer scale.

Answer 2. (b)

Throughput Accounting (TA) is a principle-based and comprehensive management accounting approach that provides managers with decision support information for enterprise profitability improvement. TA is relatively new in management accounting. It is approach that identifies factors that limit an organization from reaching its goal, and then focuses on simple measures that drive behaviour in key areas towards reaching organizational goals.

Throughput Accounting uses three measures of income and expense :

Throughput (T) is the rate at which the system produces "goal units." When the goal units are money (in for-profit businesses), throughput is net sales (S) less totally variable cost (TVC), generally the cost of the raw materials (T = S – TVC).

- Investment (I) is the money tied up in the system. This is money associated with inventory, machinery, buildings, and other assets and liabilities. In Theory of Constraints (TOC) documentation, the "I" was interchanged between "inventory" and "investment." The preferred terms is now only "investment." Note that TOC recommends inventory be valued strictly on totally variable cost associated with creating the inventory, not with additional cost allocations from overhead.

- Operating expense (OE) is the money the system spends in generating "goal units." For physical products, OE is all expenses except the cost of the raw materials. OE includes maintenance, utilities, rent, taxes and payroll.

Throughput = Revenue – Purchased material cost.

Answer 2. (c)

(i) Possible reasons for fall in the market share are :
- Increased domestic and foreign competition
- Shifts in consumer tastes
- Increasing price cutting and better dealer margins by rivals
- Complacency on the part of the top management, taking leadership position in the market for granted
- Technological advances through better R&D by competitors

(ii) As a product manager, I would focus on the following marketing strategy :
- Find new users - convince people who do not consume milk powder and tomato ketchup to start using the same under market penetration strategy
- New users - discover and promote new uses for the products
- Continuous innovation through better R&D
- Increase distribution effectiveness
- Maintain price level or reduce the same through cost cutting

Q. 3. (a) Demand forecast can be made using (i) Delphi technique, (ii) Time series analysis, and (iii) Regression analysis.

Highlight the strengths of these techniques and also indicate the situations where these techniques will be relevant.

(b) What are the "key success factors" for a business enterprise? How would you determine them? Compare and contrast the different types of standards which can be used for evaluation and control of strategy? [(3+3+3)+(3+4+4)]

Answer 3. (a)

(i) **The delphi**, devised in the 1950s, was first used as a procedure for prediction. More recently, the delphi has been used in a variety of different forums including land-use planning, regional policy making in areas such as transportation, social service programming in education and health care, and in organizational restructuring. These applications stem from one of the delphi's main objectives-to obtain a reliable consensus of opinion from a group of "experts."

Strengths. The delphi is used when it is important to have pooled judgment, following the maxim "two heads are better than one." The delphi has three important strengths. First, anonymous, individual responses are at the heart of the procedure. The delphi is used to bring participants together without bringing them into the same room, avoiding the costs and hassles of travelling to and from meetings; travelling 100 miles into a neighboring country can be disruptive, even in good weather! In addition, by not bringing the participants together in the same room, the delphi reduces the effect of dominating individuals (the status problem) and allows the group to share responsibility. Shared responsibility is a tonic for developing consensus. Shared responsibility also promotes satisfaction through participation in and ownership of the resulting decision(s).

Second, controlled feedback through several rounds of the procedure reduces direct confrontation and the disadvantages that conflict leads to-quickly accepting or dismissing other opinions, focusing on personalities rather than the issues at hand, or closing-off discussion of novel or different ideas are recognized as serious problems for interacting groups.

Third, statistical group response, or the tallying of each participant's valuation of the delphi responses, ensures that each person's opinion is reflected in the final response. This contributes to the shared responsibility for not only the outcome of the delphi, but also in the process that eventually provides the outcome. These three features of the delphi make it a useful procedure for developing ownership and consensus, or at minimum, finding out whether there is any common ground for anchoring consensus.

(ii) **Times Series :** This is a short term sales forecasting tool, useful only as a micro tool at the level of company product. The basis of such analysis is that the future value is a recombination of its past performance, at least into near future, by decomposition into the components of trend, cycle, season and erratic events. This is useful only as a micro tool.

(iii) **Regression analysis** is the statistical technique that identifies the relationship between two or more quantitative variables: a dependent variable whose value is to be predicted, and an independent or explanatory variable (or variables), about which knowledge is available. The technique is used to find the equation that represents the relationship between the variables. A simple regression analysis can show that the relation between an independent variable X and a dependent variable Y is linear, using the simple linear regression equation $Y = a + bX$ (where a and b are constants). Multiple regression will provide an equation that predicts one variable from two or more independent variables, $Y = a + bX_1 + cX_2 + dX_3$.

Strengths of the approach

- Regression analysis provides an opportunity to specify hypotheses concerning the nature of effects (action theory), as well as explanatory factors.

When it is successfully executed (with a statistically valid adjustment), regression analysis can produce a quantitative estimate of net effects.

Circumstances in which it is applied

This statistical technique is most commonly used in programme evaluation to estimate effects. The net effects of the programme under evaluation can be assessed using regression analysis, by attributing part of the changes observed to explanatory variables, while the remaining effects are attributed to the programme. For this reason, regression analysis is useful in ex-post evaluation, to determine the net impact of the programme. However, this technique can also be applied in forecasting and ex-ante evaluation.

In the case of panel data analysis, a large number of quantitative observations is required, ideally between 2,000 and 15,000 units (for example, trainees, businesses, farms etc ..), to use regression analysis. Data must be available on each unit, for all the variables of the explanatory model. However, for time series data much less is needed, for example 50-100 observations.

Answer 3. (b)

Key variables, key success factors or critical success factors are most important for a successful strategy for a business enterprise. A typical list of such factors for a business organisation is given below :

(i) **Marketing :** sales order book position, market share, gross margin or repeat order.

(ii) **Production :** capacity utilisation, cost of production, timely deliveries.

(iii) **Assets management :** inventory turnover, sundry debtors, ROI.

(iv) **Personnel :** employee turnover, absenteeism, man-days lost in strikes, etc.

It is to be noted that the key variables for designing the system of evaluation and control differ from business (and thus organisation) to business. Also in a large multi-business organisation, they may vary from one organisation unit level to another. Knowledge of key characteristics of industry in which the business falls is imperative and useful for identifying key success factors. Some of the key variable on the other hand will emerge from the company's functional strategies. For instance, if a company has proposed aggressive strategies, the number of new products introduced in a period will be a key success factor.

The guidelines for identifying key variables may be as under :

- Is it important in explaining the success or failure of the organisation?
- Is it volatile and can change quickly, often for reasons not controllable by the managers?
- Is it significant enough to require prompt action when a change occurs?
- Is it not easy to predict changes in key variables?
- Can the variables be measured, either directly or via a surrogate?

The next important issue is to set the standards against which actual performance is to be measured. That standard of performance could be any of the following three types;

(i) **Historical standards :** In this type of standards, comparison of present performance is made with the past performance.

(ii) **Industry standards :** In this type of standards, the comparison of a firm's performance is made against similar other firms in the industry. The difficulty here-is that all the firms may not be exactly the same for purposes of comparison.

(iii) **Present standards :** The goals/targets are decided by the firm's management to be achieved in a particular period. The present standards convey the aspiration levels and take into account environmental conditions, if properly derived. These are more realistic and also consider the organisation's capacity to achieve the same. These, however, require tremendous analysis. Absence of such analysis may lead to reverse results. However, for a company developing a conscious strategy, present standards provide the best alternative.

Q. 4. Answer the following in brief : [5×4]

(a) What do you understand by the term "Life Cycle Cost"?

(b) Write a note on "Risk Gap" as applicable in corporate business planning.

(c) How the BOD as corporate governance mechanism can control and monitor managerial decisions?

(d) How a firm's vision and mission help to achieve organisation's goal?

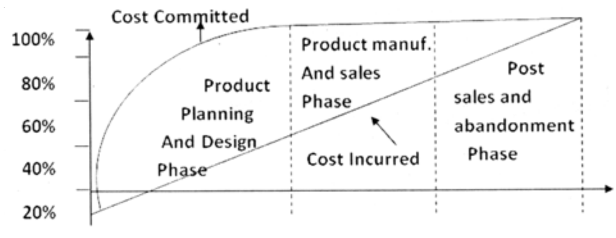
Answer 4. (a)

It focuses on total cost (**capital cost** + **revenue cost**) over the products life including design. **CIMA** defines life cycle costing as the practice of obtaining over life time, the best use of physical asset at the lowest cost of entity.

"The term "**Life Cycle cost**" has been defined as follows, "It includes the costs associates with acquiring, using, caring for and disposing of physical asset including the feasibility studies, research, design, development, Production, maintenance, replacement and disposal as well as support, training and operating costs, generated by the acquisition use, maintenance and replacement of permanent physical assets."

1. **Life cycle costing** estimates and accumulates costs over a product's entire life cycle.
2. The objective is to determine whether costs incurred at different stages of development, (planning, designing, & testing) manufacturing (conversion activities) and marketing (advertising distribution, & designing, & testing) manufacturing (conversion activities) and marketing (advertising distribution, & warranty) of the product will be recovered by revenue to be generated by the product over its life cycle.
3. **Life cycle costing** provides an insight, useful for understanding and managing costs over the life cycle of the product.
4. In particular it helps to evaluate the viability of the product, decides on pricing of the product at different stages of product life cycle and often helps to estimate the value of the product to its user.
5. When used in conjunction with target costing, life cycle costing becomes a important tool for cost management.
6. Life cycle costing estimates and accumulates costs over a products entire life cycle in order to determine whether the profits earned during the manufacturing phase will cover the costs incurred during the pre-and post manufacturing stages.
7. Identifying the costs incurred during the different stages of a product's life cycle provides an insight into understanding and managing the total costs incurred throughout its life cycle. In particular, life cycle costing helps management to understand the cost consequences of developing and making a product and to identify areas in which cost reduction efforts are likely to be most effective.
8. Most accounting system report on a period-by-period basis, and product profits are not monitored over their life cycles. In contrast product life cycle reporting involves tracing costs and revenues on a product- by-product basis over several calendar periods throughout their life cycle.
9. A typical pattern of cost commitment and cost incurrence during the three stages of a product's life cycle-the planning and design stage, the manufacturing stage and the service and abandment stage.
10. Committed or locked in cost are those cost that have not been incurred but that will be incurred in the future on the basis of decisions that have already been made. Costs are incurred when a resource is used or sacrificed.
11. Costing system record costs-only when they been incurred. It is difficult to significantly alter costs after they been committed. For example the product design specifications determine a product's material and labour inputs and the production process. At this stage costs become committed and broadly determine the future costs that will be incurred the manufacturing stage.
12. That approximately 80% of a product's costs are committed during the planning and design stage. At this stage product designers determine the product's design and the production process. In contrast the majority of costs are incurred at the manufacturing stage, but they have already become locked in at the planning and design stage and are difficult to alter.

Cost Management can be most effectively exercised during the planning and design stage and not at the manufacturing stage when the product design and processes have already been determined and costs have been committed.



Answer 4. (b)

In corporate business planning, some amount of risk always to be anticipated and strategically accepted. There is a proverb 'No Risk, No gain'. Thus to avail of opportunities and achieve gain, certain risky ventures may have to be undertaken provided such risks can be tackled properly to turn these in favour of the business.

Many uncertain risks may open up lot of business opportunities. Attitude towards risks exerts considerable influence on strategic decision. These attitudes vary from merger risk taking to strong aversion to risk and they influence the range of available opportunities and strategic decisions.

Where attitudes favour risk, the range and diversity of strategic choices expand. In making a strategic decision, a risk-oriented managers leans towards opportunistic strategies with high pay offs. However, any gap between the anticipated risk with strategic decision and actual happening of such risk with material result need be measured for the interest of the organization. These help in future risky ventures with innovation, organizational strength and operating potential.

Answer 4. (c)

The BODs, elected by shareholders, is composed of insiders, related outsiders, and outsiders. The BODs is a governance mechanism shareholders expect to run the firm in such a way as to maximise shareholder wealth/value. Outside directors are expected to be more independent of a firm's top executives than are those who hold top management positions within the firm. A board with a significant percentage of insiders tends to be weak in monitoring and controlling management decisions. BODs have been criticised for being ineffective, and there is a movement to more formally evaluate the performance of boards and their individual members. A firm's BODs has the responsibility of determining the degree to which executive compensation succeeds in controlling managerial behaviour.

Answer 4. (d)

The firm's vision is a picture of what it wants to be and what it wants to ultimately achieve. The firm's mission is based on its vision. It specifies the business(es) in which the firm intends to compete and the customers to intends to serve. The value of having a vision and mission is that they inform stakeholders what the firm is, what it seeks to accomplish, and who it seeks to serve? A successful vision is inspirational. The mission is more concrete and guides employees' behaviour as they achieve the firm's vision. Research shows that an effectively formed vision and mission positively impacts firm performance in terms of growth in sales, profits, employment, and net worth.

Section - II (40 Marks)
(Risk Management)

Answer **Question No. 5** *and* **any other two** *more from the rest in this section.*

(Please answer all parts of the question at one place.)

Q. 5. (a) In each of the cases/statements given below, one of four alternatives is correct. Indicate the correct answer : [1×5]

(i) Financial Risk arises out of

(A) The nature of the financial transaction

(B) Conduct of business and investment

(C) Both (A) and (B)

(D) Increase of competition

(ii) Types of risk does not include

(A) Business Risks

(B) Market Risks

(C) Interest Rate Risks

(D) Uncertainties

(iii) Which of the following does not relate to EVA?

(A) Customer satisfaction

(B) Operating profits

(C) Tax

(D) Cost of capital

(iv) Which of the following does not relate to BPR?

(A) Reverse engineering

(B) Gap analysis

(C) Process focus

(D) Ambition

(v) Motorola learning lessons from Domino's Pizza and Federal Express, to improve the speed of delivery for its cellular phones, comes under

(A) Strategic Benchmarking

(B) Functional Benchmarking

(C) Process Benchmarking

(D) Performance Benchmarking

(b) State whether the following statements, based on the quoted terms, are 'TRUE' or 'FALSE' with justifications for your answer. If any statement is false, you are required to give the correct terms, duly quoted. No credit will be given for any answer without justification : [1×5]

(i) Physical risk arising out of social, political, legal and economic environments is often identified through the performance of lead indicators.

(ii) Physical hazard is a condition stemming from material characteristics of an object.

(iii) Risk cannot be avoided through insurance but may be considered as an means to transfer the risk.

(iv) Interest rate risk refers to the uncertainty market volumes in the future and the quantum of future income caused by the variations in the interest rates.

(v) The EIRR is the measure most often used to indicate the economic viability of bank financial projects.

Answer 5. (a)

(i) (C) Both (A) and (B)

(ii) (D) Uncertainties

(iii) (A) Customers satisfaction

(iv) (A) Reverse engineering

(v) (A) Strategic Benchmarking

Answer 5. (b)

(i) **True.**

In social arena, lead indicators can be pestilence, expediencies, social upheavals etc., Measurement of these social risks are done on the basis of the impact on the society, i.e. , increase in crimes, violence and accidents etc.

Political risk is often identified with the change in Government Policy approach like say-Capitalistic, Democratic or Totalitarian and can be measured by the impact of such Government policy on the economic activity e. g., Government's Industrial Policy or Labour Policy.

Economic Risk may arise out of commercial transactions, foreign exchange currency variation, capital market fluctuations, trade cycles etc. The lead indicators risks are like variations in GDF, IIP, Balance of Payments, Stock Market Indices, etc.

Legal Risk arises out of the implications of various statutes affecting business like say-Anti Trust Bills, Factory Act, Industrial Disputes Act, Foreign Exchange Management Act (FEMA) etc.

(ii) **True.**

For example, let us consider the peril of collision, which may cause loss to an automobile. A physical condition that makes the occurrence of collision more likely is an icy street. The icy street is the hazard, and the collision is the peril. The chance of loss due to collision may be higher in winter than at other times of the year because of the greater incidence of the physical hazard of icy streets.

(iii) **True.**

Insurance is defined as the equitable transfer of the risk of a loss, from one entity to another, in exchange for payment. An insurer is a company selling the insurance; the insured, or policyholder, is the person or entity buying the insurance policy. The amount to be charged for a certain amount of insurance coverage is called the premium.

(iv) **True.**

Interest rate risk is the risk (variability in value) borne by an interest-bearing asset, such as a loan or a bond, due to variability of interest rates. In general, as rates rise, the price of a fixed rate bond will fall, and vice versa. Interest rate risk is commonly measured by the bond's duration.

(v) **True.**

EIRR is Economic Internal Rate of Return. Calculation of the EIRR requires a set of assumptions regarding the conditions faced by the project which in the judgment of the appraisal mission are most likely to prevail during its life. However, since Bank financed projects normally have a very long life, the conditions faced by the project may change for a variety of reasons. Sensitivity analysis is, therefore, carried out to determine the effects of possible changes in the values of key variables (costs, yields, and price of inputs and outputs) on the project's EIRR.

Q. 6. (a) Enumerate the principles of 'Risk Management' as identified by the International Organisation for Standardisation (ISO).

(b) When should the insured have an insurable interest in the subject matter of insurance in case of (i) Life Insurance, (ii) Fire Insurance, and (iii) Marine Insurance?

(c) Can you do 'risk mapping' for Pharmaceuticals industries involved with developing a new product?

[6+(1+1+2)+5]

Answer 6. (a)

The International Organisation for Standardisation (ISO) has identified the following principles of Risk management :

(i) Risk management should create value.

(ii) Risk management should be integral part of the organisational process.

(iii) Risk management should be part of decision making.

(iv) Risk management should explicitly address uncertainty.

(v) Risk management should be systematic and structures.

(vi) Risk management should be based on the best available information.

(vii) Risk management should be tailored.

(viii) Risk nianagement should take into account human factors.

(ix) Risk management should be transparent and inclusive.

(x) Risk management should be dynamic, iterative and responsive to change.

(xi) Risk management should be capable of continual improvement and enhancement.

Answer 6. (b)

The insured should have insurable interest in the subject matter of insurance at the following items :

(i) In life insurance at the time of taking policy.

(ii) In the fire insurance at the time taking policy as well as at the time of loss, and

(iii) In marine insurance an assured need to have an insurable interest at the time of affecting the marine insurance.

Answer 6. (c)

In Pharmaceutical industry, it takes a number of years to develop and test a new drug before it can be introduced into the market, and for much of this time, there will be a real possibility that the new drugs may never become a commercial success. This poses a great amount of risk for this industry in new product development process. With the evaluation of enterprise list management, risk mapping or profiling method of risk identification and assessment have great use in such kind of new product development risk. In this method, identifying all the risk facing pharmaceutical company using cataloging and making sense of structure than in a manner firm may face them. This involves arraying these risks in a matrix with one dimension being a frequency of event and other being the severity. Each risk then marked to indicate whether it is covered by insurance or not by configuring the likelihood and severity of each of the risk in this matrix as well as the extent, to which the insurance protection is already available, it becomes possible for the firm to identify the risk that are most likely to seriously affect the firm's ability to achieve its goals.

Q. 7. (a) What is meant by 'Hedging Risk'?

(b) Can you suggest an exchange rate risk management through asset-liability management for Indian IT firms becoming global?

(c) Discuss 'pricing' in relation to insurance products and the role of Management Accountant in this regard. [4+5+(3+3)]

Answer 7. (a)

Exposures of funds to fluctuations in foreign exchange rate, interest rates, prices, etc. bring about financial risks resulting in losses or gains. The downside risk is often taken care of by hedging. Hedging is done by an agency taking over the risk for a consideration for a period and select band of fluctuation.

Answer 7. (b)

Indian IT firms are becoming global by expanding their businesses to USA and Europe, their financial performance are subject to exchange rate risk. To overcome this problem, they need to have exchange rate risk management through asset-liability management. As the exchange rate fluctuates the IT firm's assets and liability not match exactly and create stress. A simple solution to correct this risk is risk management and shareholders to match assets and liability in the same currency. The risk of foreign exchange borrowing of Indian IT firms can be passed on to the lender through dollar denominators loans. The uncovered loans are hedged at the time of contracting them through forward covers to the entire amount.

Answer 7. (c)

The process of determining or fixing premium for a particular insurance product is known as pricing. Traditionally, premiums have been calculated based on tariffs set by the Insurance Regulatory Authority. The rates are derived based on various factors like past loss ratio, location of the assets, types of assets as well as exposure to the risks. Rate is the pricing factor upon which the premium is based, for example, car insurance policies are priced based on factors such as make and model of the car, purpose for which the car is used, etc.

Traditionally, the motor car insurance, the parameters that are used to price a policy have been model of the car, age of the driver, location of the car and purpose for which the car is driven, etc. The industry will eventually move from price rating to risk rating. The price of the each individual would be based on their track record. For example, for 'own damage' in a car insurance policy, the pricing parameters will be the model of the car, driver's age and engine capacity.

This is of particular importance to a management accountant as it is in the nature of pricing a product. The insurance premium can be divided into four parts :

(i) Cost of payments of losses;

(ii) Cost of operation and maintenance of insurance pool;

(iii) Reserve for contingencies;

(iv) ROI

In the life insurance, calculation of insurance premium is very complicated exercise as the variables involve are many, e.g., factors aggravating mortality rates like smoking, drinking, drugs and other habits, age of the insured, occupational hazard, etc. This computation is normally through actual computations involving mortality rates. Premium rate is often referred as rate per unit of exposure.

Q. 8. Write answer *any three* from the following : [5×3]

(a) What do you understand by the term 'Subrogation'? Enumerate two examples.

(b) What is meant by 'self-insurance'? Mention two elements.

(c) What is 'Cross Currency Options'?

(d) Write a brief note on 'Corporate Risk Management Strategy'.

Answer 8. (a)

The term 'Subrogation' means the transfer of all the rights and remedies available to the insured in respect of the subject matter to the insurer after indemnity has been effected. It is also referred to as getting into shoes of the others. It implies substitution of the insurer in place of the insured in respect of the latter's rights and remedies. For example,

(i) when loss is caused by the 'wrongful act of a third party, the insurer can proceed against the third party after paying the insured his loss. This principle holds good only in the case of fire and marine insurance.

(ii) Subrogation also arises in motor insurance as, for example, where an inward motor vehicle is damaged owing to the negligence of a third party against whom the insurers will, therefore, claim in an endeavour to recover the cost of repairs paid by them under their policy.

Answer 8. (b)

Self Insurance : If a firm has a group of exposure units large enough to reduce the risk and thereby predict losses, the establishment of a fund to pay for those losses is a special form of planned, funded retention known as self-insurance. Some people object to this particular term, because the word insurance usually implies that a risk is transferred to another party. Obviously, self insurance continues to be used to describe some special situations in which risk retention has been consciously selected as an. appropriate risk management technique. True self-insurance falls in the category 'tolerate risk' of risk mitigation strategies.

There are two necessary elements of self insurance : (i) existence of group of exposure units that is sufficiently large to enable accurate loss prediction and (ii) prefunding of expected losses through a fund specifically designed for that purpose.

Answer 8. (c)

Cross Currency Option (CCO) :

(i) A person resident in India may enter into a cross currency option contract (not involving the rupee) with a bank in India to hedge foreign exchange exposure arising out of his trade, provided that in respect of cost-effective risk reduction strategies like range forwards, ratio- range forwards or any other variable by whatever name called, there shall not be any net inflow of premium. These transactions may be freely booked and/or cancelled.

(ii) CCO should be written on a fully covered back-to-back basis. The cover transaction may be undertaken with a bank outside India, an off-shore banking unit situated in a Special Economic Zone or an internationally recognised option exchange or another bank in India.

(iv) All guidelines applicable for cross currency forward contracts are applicable to cross currency option contracts also.

(v) Banks desirous of writing options should obtain a one-time approval, before undertaking the business, from RBI.

Answer 8. (d)

Risk management is a process that identifies loss exposures faced by an organisation and selects the most appropriate techniques for treating such exposures. As the term 'risk' is ambiguous and has different meanings, many risk managers use the term "loss exposure" to identify the potential losses.

In the risk management, the following strategies are generally adopted :

(i) *Risk Avoidance* - it is strategy by which the organisation does not engage in the activity of which involves any risk.

(ii) *Risk Reduction* - it is another strategy where the organisation takes two steps. One is preventing the occurrence of risk and the second one is controlling the number of occurrences. One of the possible ways of reducing the risk is going for large number.

(iii) *Risk Retention* - it is the most popular method of dealing with risk. Risk retention may be conscious or unconscious. Conscious risk retention takes place when the risk is perceived and not transferred or reduced. When a risk is not recognised, it is unconsciously retained.

(iv) *Risk Transfer* - it is another method of managing risk. Risk can be transferred to a person willing to take it. Hedging and insurance are the best example risk transfer.

(v) *Risk Sharing* - it is a process by which the potential risk is shared among many, so that the loss is not borne by a single person.