## Paper - 13: Management Accounting -Strategic Management

Time Allowed: 3 Hours

Full Marks: 100

Answer question No.1 and Question No.6, which are Compulsory and any three Questions from Section I and another two question from Section-II.

#### Working Notes should form part of the answer

"Wherever necessary, suitable assumptions should be made and indicated in answer by the candidates."

#### Question.1

(a) Choose the most appropriate one from the stated options and write it down: [1x5=5]

#### (i) Business process re-engineering is

- (a) Eliminating loss-making process;
- (b) Redesigning operational processes;
- (c) Redesigning the product and services;
- (d) Recurring the process engineers
- (e) Increasing operational process
- (ii) Strategic analysis is concerned with stating, the position of the organisation in terms of:
  - (a) Mission, choice of market segments, product selection, financial targets, external appraisal
  - (b) Mission, goals, corporate appraisal, position audit and gap analysis
  - (c) Mission goals, identification of key competitors, SWOT and environmental appraisal
  - (d) Mission, targeted ROI, manpower planning, position audit
  - (e) Mission, SWOT, competitive strategies, stakeholder's position and institutional goal
- (iii) Air India decreasing the airfare on the Kolkata-Mumbai sector following the introduction of No-Frills Airlines is an example of
  - (a) Cost Leadership
  - (b) Product differentiation
  - (c) Market Retention
  - (d) Price Leadership
  - (e) Value chain analysis

#### (iv) Which of the following could be a core competence?

- (a) A brand
- (b) Fixed asset
- (c) Ability to manage the integrity of the asset
- (d) Enlightened leadership
- (e) Land
- (v) The BGG growth matrix is based on two dimensions
  - (a) Market size and Competitive intensity
  - (b) Profit margins and Market size
  - (c) Relative market share and Market/Industry growth rate
  - (d) Market size and Profit margins
  - (e) Market growth and Loss margins.

#### Answer:

- (i) (b) Redesigning operational processes
- (ii) (b) Mission, goals, corporate appraisal, position audit and gap analysis
- (iii) (c) Market Retention
- (iv) (c) Ability to manage the integrity of the asset.
- (v) (c) Relative market share and market/industry growth rate.
- (b) State whether the following statements, based on the quoted terms, are 'True' or 'False' with justifications for your Answer. If any given statement is 'False', you are required to give the correct terms duly quoted. No credit will be given for Answers without justifications.

[1x5=5]

- (i) 'Repositioning' involves moving the product or brand into a different market segment.
- (ii) "Different Cultures' in an organization is the major reason for lower success in crossborder-merger.
- (iii) 'Stars' are the products in a high-growth market but where they have a low-market share.
- (iv) 'Diversification' means selling off a part of a firm's operations or pulling out of certain product-market areas.
- (v) Penetration Pricing is the use of price to drive a competitor out of business.

#### Answer:

- (i) TRUE. 'Repositioning' is a strategic marketing approach and involves moving the product into different market segment.
- (ii) True; The given statement is true.
- (iii) False; The correct statement is: 'Question Marks' are the products in a high-growth market but where they have a low-market share. 'Question Mark', being a problem child has a low market share whereas 'Star' has a high-market share.
- (iv) False: The appropriate term is 'Divestment' instead of 'diversification'. Diversification seeks new products and /or new market, where a firm has no previous market share.
- (v) False; The correct statement is: Predatory Pricing is the use of price to drive a competitor out of business.
- (c) Define the following terms (in not more than two sentences):

[1x5=5]

- (i) Franchising
- (ii) Exit barrier
- (iii) Conglomerate diversification

## (iv) Problem child

## (v) Core business

#### Answer:

- (i) **Franchising:** Franchising is a method of doing business wherein a "franchisor" authorizes a "franchisee" it's proven method of doing business for a given set of return.
- (ii) Exit barrier: is that which makes it difficult for an existing supplier to leave the industry,
- (iii) Conglomerate diversification: consists of making entirely new products for new classes of customers. These new products have no relationship to the company's current technology, products or markets.
- (iv) **Problem child:** is also termed as Question Mark. It relates to a product in a high growth market but with low market share in the BCG Matrix.
- (v) Core business: A business identified with certain products or markets to which most of its activities are devoted having a common thread, running through all of its activities, in order to earn a high return on investments.

## Section-I

## Question.2

#### (a) What does Corporate Mission mean? State the benefits of Mission Statement. [2+5] Answer

**Corporate Mission:** The term 'mission' implies the fundamental and enduring objectives of an organization that set it apart from other organizations of similar nature. The mission is general enduring statement of instruction of an organization. It indicates the nature and scope of business operations in terms of product, market and technology.

Corporate mission establishes the principal concentration of company effort in terms of customers.

It provides a systematic yet somewhat visionary overview of a company's position in the competitive world. A mission provides the basis of awareness of a sense of purpose, the competitive environment, the degree to which the firm's mission fits its capabilities and the opportunities which the environment offers.

**BHEL describes its mission as follows:** To achieve and maintain a leading position as suppliers of quality equipment, systems and services to serve the national and international markets in the field of energy. The areas of interest would be the conversion, transmission, utilisation and conservation of energy for applications in the power, industrial and transportation fields. To strive for technological excellence and market leadership in these areas'.

Through its mission, a company indicates what it is trying to achieve and in what field.

Mission represents company's objectives in qualitative terms. Ackoff refers to such objectives as stylistic objectives.

It may be noteworthy that corporate missions are more ethical and philosophical in character-and reflect the top management's values. They do not have a fixed time period. While stating its mission the company's management should go further and spell out in precise terms what the company has to accomplish and the extent of managerial action required to fill the gap. This is why an enterprise develops a set of long-range objectives.

## **Benefits of Mission Statement:**

The benefits of Mission Statements are: Mission Statements

- describe what the company is about;
- > provide a guideline philosophy : give direction in case of doubts;
- > display the area in which the company is operating;
- > define the broad social purpose and scope of the organisation;
- clearly chart out the future direction for the organisation and establishes a basis for organisational decision making;
- enable employees to clearly understand the values and principles that will guide them in the present and future activities;
- provides a realistic assessment of what is attainable in the future by the organisation, considering its culture, history and shared values;
- > encourage commitment and energies all employees towards fulfilling the mission;
- > guide and inspire the organisation for many years to come;
- stimulate debate as to how the mission can be implemented;

## (b) Name any major organization and list down the strengths, weaknesses opportunities and threats for that organization. State the methodology adopted to identify such a SWOT.

[5+3]

#### Answer

Take, for instance, the case of TISCO.

#### Its strengths have been:

- Locational advantages coming from proximity to the inputs and its marketing channels;
- High quality, cheap and market friendly steel products;
- > Technology of steel manufacture and its product-mix;
- Excellent financial performance over the years and the main issues in such excellence;
- > Management practices and congenial industrial relations; and
- Innovative policies marked by highly respectable and transparent actions of the Tatas leading to the situation that they have been able to remain in the saddle even with a small fraction of the total shareholding

#### Its weaknesses have been mainly that

- Steel making technology requires continuous updating which was not allowed as easily as was necessary during the pre liberalization regime;
- Growing competition from SAIL with individual plants more than equal to the size of TISCO, allowing greater scale economies;
- With the lifting of controls, SAIL has been showing enterprise and better competitive edge in terms of greater market share and profitability which in turn would require increasing readiness for dealing with issues such as production, product-mix, cost and price; and
- Shrinking total market share for individual companies in view of several new steel manufacturers coming into the scene.

#### Opportunities that could be spelt in these circumstances are:

- Greater leeway for strengthening the operational strategies in the new regime;
- Building up reputation in the areas of marketing and distribution, areas which have overtly gathered most during the regime of controls of various kinds;
- Introducing foreign technology, know-how and perhaps investment to take
- > full advantage of the atmosphere of freedom in recent years; and
- Better chances of expanding capacity, divestment of some lines, integration and diversification - both vertical and horizontal; and

> Improving financial performance by way of different structural changes.

#### The lurking threats for the organisation are several:

- > The growing feasibility of substitutes in the areas of traditional uses of steel;
- Growing competition from SAIL and other units coming up in different areas in the country with state-of-the-art technology;
- Difficult capital market conditions with a large number of financial instruments tossing around with varying costs and benefits; and
- Likelihood of growing foreign competition, along with Indian, underlining that there would be little scope for resting on oars.

## The methodology generally adopted in the context of SWOT analysis relates to:

- Environmental scanning covering both first-hand surveys of demand and supply, stressing forecasts and second-hand information emerging from various sources such as Country Studies by the Economist Intelligence Unit, NCAER and others.
- Scenario planning taking into consideration the emerging problems and prospects with attention given to response management.

Both of these are essential aspects of sensitive management, involved as it is in making the future today. The prospects of growth and the hurdles to cross are to be identified to enable management to take appropriate action, considering that the decisions of today could bind the organisation to particular lines in terms of resource commitment and the outcome of such a decision may not be certain and may remain bound by risks. Supervening impossibilities for different reasons may not, however, be fully anticipated in view of their very nature

## Question.3

#### (a) Explain the Nine Price-Quality Strategies. Answer:

[7]

	Quality High	Quality Medium	Quality Low
High Price	Premium(a)	Mega Value (b)	Ultra Value(c)
Medium Price	Overcharging(d)	Average Value(e)	Fair Value(f)
Low Price	Rip off (g)	Deceptive(h)	Economy(i)

Product Quality has a big bearing on the price. A Pricing Strategy, based on Quality is the Nine Price-Quality Strategies, which is as below:

Essentially, the strategies (a)High Price-High Quality, (e)Medium Price-Medium Quality, and (i)Low Price-Low Quality can exist in a market at the same time as there is logic in pricing.

The strategies (b)High Price -Medium Quality, (c)High Price -Low Quality and (f)Medium Price -Low Quality are a consumer high surplus.

The Strategies (d)Medium Price -High Quality, (g)Low Price -High Quality and (h) Low Price -Medium Quality lead to over pricing to take advantage of a temporary shortage market.

All these strategies must follow a structured approach in the following manner:

- Selecting the pricing
- Determining the demand
- Estimating costs
- > Analysing competitors
- > Selecting the price for the second time
- Selecting the final price.

The pricing policy will also have to set out the objectives clearly as the strategies to be adopted will be determined by the following objectives:

- > Survival
- > Skimming the market
- Maximum current revenue
- Maximum sales growth
- Product-Quality leadership

Sensitivity Analysis in respect of price elasticity is yet another aspect, which should be taken care of for pricing.

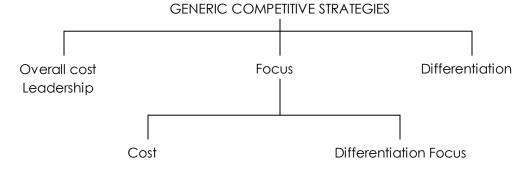
The Management Accountant will always be involved in the pricing exercise and the relevance of the exercise is determined by the sensitivity analysis based on adequate reliable data.

## (b) State concept of 'value-chain' and write down the advantages of value-chain analysis to-any organization. [2+6]

#### Answer:

Porter points out that a firm's value chain is an important determinant of competitive advantage. Buyers are willing to pay for what a firm provides them. The total revenue reflects the value. Creating value for buyers that exceeds the cost of doing so is the goal of any generic strategy.

Porter has identified, at the broadest level, three internally consistent generic strategies (which can be used singly or in combination) for creating a defendable position in the long run and outperforming competitors in an industry.



**Overall cost leadership:** The strategy of cost leadership is to become the lowest cost producer in the industry through a set of functional policies aimed at this basic objective. **Differentiation:** In this strategy a firm seeks to be unique in its industry along some dimensions that are widely valued by key buyers. It selects one or more at tributes that many buyers in an industry perceive as important and uniquely positions itself.

**Focus:** This strategy based on the choice of narrow competitive scope within an industry which the focuser can serve better than the competitors. This strategy has two variants -

Cost focus: where a firm seeks cost advantage in its target segment, and

Differentiation focus: where a firm seeks differentiation in its target segment.

The value chain displays total value and consists of value activities and margin. Value activities are the physically and technologically distinct activities of a firm performs.

There are, broadly, two types of value activities, viz., Primary activities and support activities.

#### Primary activities include:

- (i) Inbound logistics (activities associated with receiving, storing and disseminating inputs to products);
- (ii) Operations (processing activities);
- (iii) Marketing and sales,

(iv) Services.

## Support activities include:

- (i) Procurement (purchasing of inputs);
- (ii) Technology development;
- (iii) Human resource management;
- (iv) Firm infrastructure (includes general management, planning, finance, accounting, legal and government affairs and quality management).

	FIRM INFRASTRUCTURE (e.g., finance, planning)							
ities .	HUMAN RESOURCE MANAGEMENT							
Activities	TECHNOLOGY DEVELOPMENT							
Support	PROCUREMENT							
▲ Su	Inbound Logistics	Operations (Manufacturing)	Outbounding logistics	Marketing and Sales	After Sales Service			

Firms create value for their customers through performing activities mentioned in the value chain above. To gain competitive advantage over its rivals, a firm must either provide comparable buyer value by performing the activities more efficiently than its competitors (cost leadership) or perform activities in a unique way that creates greater buyer value and command a premium price (differentiation). Firms gain competitive advantage from conceiving of new ways to conduct activities, employing new procedures, new technologies or different inputs. However, a firm is more than the sum of its activities. A firm's value chain is an interdependent system of network of activities, connected by linkages. Linkages occur when the way in which one activity is performed affects the cost or effectiveness of other activities. Linkages often create trade-off in performing different activities which must be optimised, e.g. a more costly product design can reduce after-sales service costs.

Careful management of linkage can be a decisive source of competitive advantage. Gaining competitive advantage requires that a firm's value chain is managed as system rather than a collection of separate parts. Reconfiguring the value chain, by relocating, reordering, regrouping or even eliminating the activities is often at the root of a major improvement in competitive position.

A company's value chain for competing in a particular industry is embedded in a larger stream of activities that is called the value system. This includes the value chains of suppliers, distribution channels and the buyers. A firm should strive to understand not only its own value chain activities but also of the competitors', distributors' and suppliers. Ultimately, firm gains competitive advantage by performing strategically important activities more cheaply or better than its rivals.

#### Question.4

(a) Benchmarking exercise is based on "best exercise" and not on "best performances". Discuss. Also state briefly the important benchmarking processes used in strategy implementation. [2+3]

#### Answer:

The term "Benchmarking" is defined as the continuous process of measuring the products, services and business practices of a company against the toughest competitors or those companies search for industry's best practices that lead to superior performance.

In other words, it is a tool for improving performance by continuously identifying, understanding, adopting and adapting best practices and processes followed by an entity- both internally as well as externally.

From this definition, it is evident that a benchmarking exercise has to be based on "best practices" and not on "best performances". Practices signify continuity in use while performances may be flash in the pan and not continuous.

Best practice is a continuous process of learning, feedback, reflection and analysis of what works or does not work and the reasons therefore.

#### Important benchmarking processes used in strategy implementation.

The following are some of the important benchmarking processes used in strategy implementation:

- Strategic Benchmarking: This aims at enhancing company's holistic performance by analysing the long-term approaches and strategies adopted by the 'best practice companies' for their success in any sector across the globe.
- Functional Benchmarking: Optimization of functional processes or activities through Benchmarking can be done by comparing with different business sectors but engaged in similar functions or processes.
- Process Benchmarking: The initiating firm focuses its observation and investigation of business processes with a goal of identifying and observing the best practices from one or more benchmark firms. Activity analysis will be required where the objective is to benchmark cost and efficiency. This type of Benchmarking processes are applied to back-office processes, where outsourcing may be a consideration.
- Product Benchmarking (or Competitive Benchmarking): This is confined to the area relating to the performance characteristics of the company's key products and services of the companies in the same sector.
- Internal Benchmarking: This involves Benchmarking against the companies own divisions or branches or strategic business units situated at different locations. The purpose is to develop a database which gives access to information and a cross fertilisation of the managerial acumen within the company.
- Financial Benchmarking: This involves performing a financial analysis and comparing the results in an effort to assess the company's overall competitiveness.

## (b) What are the five way of Brand Valuation?

[5]

#### Answer:

## Five ways of Brand Valuation:

The five ways of valuation of brands are:

- Add up all costs of research and development and marketing expenditure of the brand over a specific time horizon. This method suffers from the limitation that it is difficult to identify all expenses relating to the brand and it only quantifies the cost and not the value.
- Consider the present value of the price premium that a brand commands over the unbranded product. However,
- (a) It is difficult to identify a proper unbranded product for comparison.
- (b) It does not recognize the stability attribute brought into the earnings by the brand.
- (c) The possibility of a brand being a barrier to the entry and this aspect in terms of value is not included.
- > If the brand were to be auctioned, the value may be fetched by such auction.

However, it may not be practicable since brand market is very narrow and accurate valuation is not possible.

- Computation of value based on intangible measures such as esteem, recognition and awareness. However, translating these intangibles into commercial value is extremely difficult and the methods of quantification through use of statistics can be erroneous.
- Discounting future potential earnings for brand valuation. This method virtually includes all the information from the earlier four methods and in addition has to develop a reliable forecast of future earnings and growth. Here it is difficult to gauge the life of the brand and the time horizon to be set apart from quantifying earnings.

## (c) "The condition wherein the whole is greater than the sum of its parts; in a synergistic merger, the post merger value exceeds the sum of the separate companies' pre merger values". Illustrate. [5]

#### Answer:

Under 'synergy', the combined value of a firm is much greater than the value of individual firms. The phenomenon of synergy arises due to economies of scale of operation. Besides, the combined mega features such as enhanced managerial capabilities, creativity, innovativeness, R & D and market coverage capacity. Due to the complementary nature of resources and skills a widened horizon of opportunities are also responsible for synergy on a merger situation. For example, Madura bank had very big network compared to ICICI. Bank of Madura had one of the lowest costs of deposit and capital adequacy ratio was very high.

ICICI had latest technology to be implemented and subsidiaries overseas but had no significant network in India. So, ICICI and Madura bank came together and there has been a dramatic improvement post merger due to synergy.

## Question.5

(a) Write short note on DMAIC (define, measure, analyse, improve, control) Six Sigma Approach. [5]

## Answer:

#### The DMAIC- Six Sigma Approach: Define

- Project definition
- Project charcter
- Gathering voice of the customer
- Translating customer needs into specific requirements

## Measure

- Process mapping (as-is process)
- Data attributes (continuous vs. discrete)
- Measurement system analysis
- Gauge repeatability and reproductibility
- Measuring process capability
- Calculating process sigma level
- Visually displaying baseline performance

## Analyse

- Visually displaying data (histogram, run chart, pareto chart, scatter diagram)
- Value-added analysis
- Cause and effect analysis
- Verification of root causes
- Determining opportunity (defects and financial) for improvement
- Project chart review and revision

• Translating customer needs into specific requirements

## Improve

- Brainstorming
- Quality function deployment (house of quality)
- Failure modes and effects analysis (FMEA)
- Piloting your solution
- Implementation planning
- Culture modification planning for your organisation

#### Control

- Statistical process control (SPC) overview
- Developing a process control plan
- Documenting the process

## (b) Explain the Arthur D. Little's Life Cycle/Portfolio Matrix.

#### Answer:

Arther D. Little (ADL) presents a twenty-cell matrix identified by the competitive position of a business and its industry maturity. Competitive position is approximated by market share, share movement, technology, breadth of the product line, and special market advantage, and industry maturity is measured by considering industry growth, rate of technological change, stability of shares, and customer switching. Again, weights must be defined to calculate the matrix position of a particular business. The matrix location of each unit can then be used to formulate a natural strategy to accomplish the business goals of the firm. The model is as shown below.

[6]

In it market situation is described in four stages-from embryonic to ageing. The competitive situation is shown in five categories ranging from weak to dominant.

	Embryonic	Growth	Mature	Ageing
Dominant	Fast growth, Start up	cost Leadership,	Defend position attain cost leadership,	focus, renew, and
Strong Competitive Position		Position Fast growth,	Renew, fast growth Attain cost leadership, renew, focus, Differentiate, growth with industry.	niche, hang on,
Favourable	Differentiate,		Harvest find niche, hang on, hold niche, renew, turnaround, differentiate, focus, and grow with industry.	
Tenable				divest, retrench
Weak		Turnaround, retrench.	Withdraw Divest	Withdraw

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The purpose of the matrix is to establish the appropriateness of a particular strategy in relation to these two dimensions. The position within the life cycle and the company is determined in relation to eight external factors' or disciplines of the evolutionary stage of the industry. These are: market growth rate, growth potential, breadth of product line, number of competitors, spread of market share among the competitors, customer loyalty, entry barriers, and technology. It is the balance of these factors, which determine the Lifecycle.

The competitive position of the organisation within its industry can be established by looking at all characteristics of each category. Thus a dominant position usually results from quasi-monopoly. Strong organisations are those that can follow strategies of their own choice without too much concern for the competitors etc.

## (c) "Technology forecasting is a crucial input in strategy formulation", which is the best method to forecast the technological changes State. [4]

#### Answer:

In the case of forecasting the technological changes, reliable data needed for one of the quantitative technique is not available. As such, the estimation is generic and is a subjective judgment, to be drawn through a process of statistical group response. Thus, for any long term technological forecasting at macro level, the Delphi technique is the best suitable method of obtaining expert opinion from a large group of people in a systematic way.

This technique has three attributes: anonymity, feedback and group response. The final result is a statistical group response. This technique being a modification of the panel or committee approach eliminates some of the disadvantages of classical committee.

[1x5=5]

## Section-II

#### Question.6

(a) Choose the most appropriate one from the stated options and write down:

- (i) ECOR in risk management means
  - (a) Expected cost of ruin
  - (b) Expected cost of opportunity loss
  - (c) Economic cost of ruin
  - (d) Economic cost of opportunity loss
  - (e) None of the above
- (ii) Physical Risk includes
  - (a) Natural calamities: fire, tsunami, floods, earthquake, etc.
  - (b) Factory accidents due to fire, mishandling of equipment, breakdown and explosions
  - (c) Occupational hazards
  - (d) Both b and c
  - (e) All of the above
- (iii) While applying statistical analysis, two concepts are applied for assessment of risk:
  - (a) Measures of Central Tendency
  - (b) Measures of Variation
  - (c) Measures of end result
  - (d) Both (a) and (b)
  - (e) All of the above

- (iv) The concept of the process of identification of separate risks and put them all together in a single basket, so that the monitoring, combining, integrating or diversifying risk can be implemented.
  - (a) Physical risk
  - (b) Financial risk
  - (c) Pooling risk
  - (d) Business risk
  - (e) Sharing risk
- (v) "Building block" approach related to asset liability model refers to successive levels in an organisation. The levels are:
  - (a) Standalone risks within a single risk factor are accumulated (Ex, credit risk)
  - (b) Accumulation of risks arising out of different risk factors within a single business area (Ex, combining the assets, liability and operating risks in companies operations)
  - (c) At this level risks across all the business lines in a corporate are aggregated together
  - (d) All of the above
  - (e) None of the above

#### Answer:

- (i) (c) Economic cost of ruin
- (ii) (e) All of the above
- (iii) (c) Measures of end result
- (iv) (c) Pooling risk
- (v) (d) All of the above
- (b) State whether the following statements, based on the quoted terms, are 'True' or 'False' with justifications for your Answer. If any given statement is 'false', you are required to give the correct terms, duly quoted. No credit will be given for any Answers without justifications. [1×5=5]
- (i) ECOR in risk management means 'Economic Cost of Ruin.
- (ii) Purchasing power risk is the uncertainty of the purchasing power of the moneys to be received, in the futures.
- (iii) "Benchmarking" is the simulation of cost reduction schemes that help to build commitment and improvement of actions.
- (iv) Risk cannot be avoided through insurance but may be considered as a means to transfer the risk.
- (v) RAROC in Risk Analysis means Risk and return on capital.

#### Answer:

- (i) True; ECOR in risk management means 'Economic Cost of Ruin'.
- (ii) True; Purchasing power risk is the uncertainty of the purchasing power of the moneys to be received, in the future;
- (iii) False; Benchmarking is the search for industries best practices that leads to superior performance,

- (iv) True; The statement is true.
- (v) False; RAROC in Risk analysis means Risk-Adjusted Return on Capital.

## Question.7

## (a) "Risk Management Strategies are seven fold". Write them and state any three of them.

[4+6]

#### Answer:

Risk Management strategies are seven-fold and they are:

- Avoid Risk
- Reduce Risk
- > Retain Risk
- > Combine Risk
- Transfer Risk
- Share Risk and.
- > Hedge Risk.

A brief on the first three Risk Management Strategies is as below:

(i) Avoid Risk: This is prevention and a proven strategy. This strategy results in complete elimination of exposure to loss due to a specific risk. It may involve avoidance of an activity, which is risky. This strategy can be approached in two ways:

Do not assume risk: This means that no risky projects are undertaken, e.g., Government has clearly mandated that no hazardous chemical industry can be put up near a populated area. This is a proactive avoidance.

Discontinuance of an activity to avoid risk: Abandoning a project to avoid risk midway is a decision sometimes taken while handling the project.

- (ii) **Reducing Risk:** This strategy is attempted to decrease the quantum of losses arising out of a risky happening e.g., earthquake, storm, floods ,etc, Risk reduction can be achieved through:
- Loss Prevention (e.g. Burglar Alarm) and
- Loss Control (e.g. Using Fire Extinguisher)
- (iii) Retain Risk: Risk Retention is adopted when Risk cannot be avoided, reduced or transferred. It can be a voluntary or involuntary action. When it is voluntary, it is retained through implied agreements. Involuntary Retention occurs when the organization is unaware of the risk and faces it when it comes up.

## (b) Write short note on Performance related measure.

[5]

## Answer:

Performance related measures in the context of risk management:

These measures concentrate on the mid-region of the probability distribution, i.e., the region near the mean and are relevant for determination of the volatility around expected results:

- > Return on equity (ROE)-i.e., net income dividend by net equity.
- Operating earnings-i.e., net income from continuing operations, excluding realized investment gains.
- Earnings before interests, dividends, taxes, depreciation and amortization (EBITDA)- a form of cash flow measure, useful for evaluating the operating performance of companies with high levels of debt (when the debt service costs may overwhelm other measures such as net income).
- > Cash flow return on investment (CFROI) =EBITDA dividend by tangible assets.

## Question.8

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# (a) State 'Asset-Liability Model' and its utility for managing liquidity risk and exchange rate risk. [9]

#### Answer:

Asset-liability Management Model: Asset-liability Management Model involves matching of the assets and the liabilities, by which a prudent management of an investment portfolio can be properly taken care of. Asset-liability management is defined as "maximising the risk adjusted returns to shareholders over the long run". It is also defined as management of total balance sheet in terms of size and quality (composition of assets and liabilities).

**Liquidity risk management through Asset-Liability Management:** It is difficult to measure liquidity risk as it entails expected likely inflow of deposits, loan dispersals, changes in competitive environment, etc., The most commonly used techniques for measurement of liquidity risks is the gap analysis.

The Assets and Liabilities are arranged according to their maturity pattern in time brackets. The gap is the difference between the maturing assets to the maturing liabilities. A positive gap indicates that maturities of assets are higher than those of liabilities. A negative gap indicates that some rearrangement of funds will have to be done during that time bracket. It can be from sale of assets or issue of new liabilities or rolling over existing liabilities.

**Exchange Rate Risk Management through Asset-Liability Management:** At a particular exchange rate, assets and liabilities of a financial institution match exactly. As the exchange rate fluctuates, this balance-get disturbed. A simple solution to correct this risk is to match assets and liabilities of the same currency. Many financial institutions do not have foreign exchange exposure, as all their assets and liabilities are in rupee currency. The risk of foreign exchange borrowings of these institutions is passed on to the lenders through dollar denominator loans. The uncovered loans are hedged at the time of contacting them through forward covers for the entire amount.

#### (b) State the concept of 'Risk Pooling' and Diversification of Risk? Answer:

[3+3]

**Concept of Risk Pooling:** The concept of pooling risk is the process of identification of separate risks and put them all together in a single basket, so that the monitoring, combining, integrating or diversifying risk can be implemented.

Monitoring becomes easier when the specific agency put in charge knows that all the risks have been identified and they are being monitored according to the system drawn up to quantify the total risk through pooling and with a control figure i.e., plan the way to monitor, actually monitor and then check whether there are variations from the monitoring exercise and then act to correct the deviation. This correction act can be combining risks or integrating risks or diversifying risks.

For example, whenever a project is put up, Transit Insurance is taken for transporting the various plant and machinery from the manufacturers to the project site. The materials are then received at the site and stored until erection. Storage Insurance will cover the risk during the storage. During erection of different plant & machinery, risks due to mechanical, electrical etc., are covered through Erection Insurance. The erected plant & machinery is then tested and trial runs are taken for guarantee purposes on continuous run, as per the contract. The risk covered during this period is covered as risks for commercial run. All these risks put together is called pooling. This single pooled policy has a risk value and premium payable and the conditions attached thereto by both the insurer and the insured to carry out those obligations are clearly spelled out in the policy documents.

**Diversification of risk:** This involves identifying both the systematic and the unsystematic risks. Systematic risk is inherent and is peculiar to the type of the business/firm and can be

reduced or diversified through functional level strategy. The unsystematic risk is external to the organization and is termed as 'market risk'. The identification of characteristics of market risk through statistical correlation' Beta', which is a measure of market risk, lends itself for manipulation through portfolio management.

## Question.9 Write Short notes on:

- (a) Agro and Bio liabilities,
- (b) Corporate Risk Governance:
- (c) Enterprise Risk Management

## Answer:

- (a) The basic liability issues arise as follows:
  - a. Farmers credit liability
  - **b.** Consequential losses liability
  - c. Genetically modified crop seed liabilities
  - d. Consulting expenses and royalty liabilities
  - e. Casualty liabilities on farmer's assets
  - f. Latent deficiencies liabilities (public and professional liabilities)
  - g. Inflation liabilities (dynamic risks in risk management) affecting the farming community

Dr. M.S. Swaminathan committee has identified insurance as a panacea for the above liabilities and the possible steps can be:

- Recognising agriculture as an "open roof" industry and bringing in concepts of industrial liability insurances
- Pre-harvest hedging
- > Cross dimensional liability coverage for inability
- > Linking of life assurances of farming community with their property and casualty
- insurances

## (b) Corporate Risk Governance:

Responsibility of a corporate body encompasses

- Identifying the organisation's appetite for risk in the areas of capital leverage, credit rating, etc
- > The capability of the organisation to manage risk and support it's business strategy
- Establishing the structural relationship between the roles and responsibilities for risk management
- Pooling of risk and develop such integrated risk measures encompassing the various spheres of activity like finance, marketing, human resources and operations
- > Establishing proper tools for risk assessment, measurement and analysis
- > Developing a proper culture and awareness in the organisation through leadership
- Educating the various layers of organisation about risks absorption and management through case studies. Corporate governance has become a buzzword in Indian corporate world and SEBI has laid down guidelines in this regard. Every annual report contains a section on corporate governance along with management's discussion on performance and future outlook.

## (c) Enterprise Risk Management:

"Enterprise Risk Management is the discipline by which an organisation in any industry assesses controls exploits finances and monitors risks from all sources for the purpose of increasing the organisation's short and long-term value to its stakeholders".

There are seven components to the Enterprise Risk Management and they are:

- Corporate risk governance
- Line management

[3x5=15]

- Portfolio management
- Risk transfer
- Risk analysis
- > Data and technology resources
- Stakeholders' management.

Some important points are:

- > Every Annual Report contains a section on Corporate Governance along with management's discussion on performance and future outlook.
- Line management develops the strategy on a cross functional basis, using various models identifying strengths, weaknesses, opportunities and threats.
- Risk transfer objectives aims at lowering the cost of hedging of risks, which are already balanced in a portfolio.
- > The tools and techniques are used to evaluate Risk transfer products such as Derivatives, Issuances and Hybrid Products, etc.

Enterprise Risk Management is emerging as the best practice model, which is often benchmarked among the competitors. The Enterprise Risk Management becomes all the more important, for, the absence of it lead to Crisis Management.