Paper-13: MANAGEMENT ACCOUNTING -STRATEGIC MANAGEMENT

Objective questions :

A. State whether the following statements are 'True' or 'False' with justification for your answer.

(i) 'Loss leader' is the leader, who is unable to conceptualize and analyse strategic problems.

(ii) 'Niche' means concentrating around a product and market.

(iii) 'Merger' is the purchase of controlling interest of another company.

(iv) 'Repositioning' involves moving the product or brand into a different market segment.

(v) 'Strategic planning' focuses on forecasting the future by using economic and technical tools.

(vi) 'CVP model' is a simple break-even model.

(vii) 'Time value' refers to the difference between the market value of an option and its intrinsic value.

(viii) Performance measures for monitoring strategies cannot be mainly financial.

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

(x) A cost-plus policy can lead to inflexibility in a firm's pricing decisions.

B. Define the following terms (in not more than one/two sentences):

(i) Cash Cow

(ii) Transfer Price

(iii) Overtrading

(iv) Acquisition

(v) Barriers to entry

(vi) Tax haven

(vii) Conglomerate diversification

(viii) Man power strategy

(ix) Values

(xi) Stake-holder

C. Choose the most appropriate one from the stated options and write it down :

(i) What are the enduring statements of purpose that distinguish one business from other similar firms?

a. Policies

b. Mission statements

c. Objectives

d. Rules

(ii) Brand names such as Coca-Cola, Sony, McDonald's and Nike are a source of competitive advantage as :

a. They are owned by global firms
b. They are more than 50 years old
c. They are well managed brands
d. They are highly innovative firms

(iii) The acquisition of Hutch by 'Vodafone' is an example of

a. Horizontal integration
b. Forward integration
c. Vertical integration
d. Concentric diversification

(iv) The BCG growth matrix is based on the two dimensions:

a. Market size and market share
b. Market size and profit margins
c. Market size and competitive intensity
d. None of the above

(v) For an actor in Bollywood, his outstanding performance would be a/an

a. Asset
b. Strategic asset
c. Core competency
d. Capability

(vi) A product that offers either a radical performance advantage over competition or drastic lower price or both is a

a. Competitive product
b. Improved product
c. Breakthrough product
d. Credence product

(vii) Which one of the following is not the form of restructuring?

a. Expansion
b. Reengineering
c. Sell offs
d. Corporate control

(viii) Major reason for the lower success in cross border merger is –

a. Different cultures involved
b. Shortage of finance
c. Distance
d. Government policies

(ix) In product life cycle "DODOS" indicates

a. Negative cash flows
b. High shares, low growth, large cash flows
c. Low share and low growth
d. Low share, negative growth and negative cash flow

(x) Intensity of competition is ……………. in low return industries

a. Low

b. Highest

c. Non-existent

d. Not important

Answer A.

(i) **False**

In marketing, a loss leader is a type of pricing strategy where an item is sold below cost in an effort to stimulate other profitable sales. It is a kind of sales promotion.

(ii) **True**

'Niche' means concentrating around a product and market.

(iii) **False**

Merger is the combination of two or more corporations in which one of the corporations survives and the other corporation cease to exist. A merger occurs when two companies combine to form a single company.

(iv) **True**

'Repositioning' is a strategic marketing approach and involves moving the product into different market segment.

(v) **False**

The appropriate term is 'long range planning' instead of the words 'Strategic Planning'. In long range planning, we make more use of economic and technical tools. Thus the corrected statement is – 'Long range planning' focuses on forecasting the future by using economic and technical tools.

(vi) **True**

Break even analysis is based on cost-volume-profit (CVP) of a firm.

(vii) **True**

Difference in value, positive/ negative arises over a period of time.

(viii) **True**

Performance measures for monitoring strategies cannot be mainly financial, there are other aspects also.

(ix) **False**

As per BCX Matrix, "dogs" are units with low market share in a mature, slow-growing industry.

(x) **True**

A cost-plus policy can lead to inflexibility in a firm's pricing decisions.

Answer B.

(i) Cash Cow – Cash cows are units with high market share in a slow-growing industry. These units typically generate cash in excess of the amount of cash needed to maintain the business.

(ii) Transfer Price – Transfer price refers to the pricing of assets, tangible and intangible, services, and funds etc. within an organization. The choice of the transfer price will affect the allocation of the total profit of the company.

(iii) Overtrading – is excessive trading by a business with insufficient long-term capital at its disposal raising the risk of liquidity problems.

(iv) Acquisition – is the purchase of the controlling interest of another company.

(v) Barriers to entry – The expression indicates the factors like economies of scale, product differentiation and capital requirements, which make it difficult for a new entrant to enter and gain a foothold in an industry.

(vi) Tax haven – a country with lenient tax rules or relatively low tax rates, which are often designed to attract foreign investment.

(vii) 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.

(viii) Man power strategy – involves reviewing current manpower resources, forecasting future requirements and availability and taking steps to ensure that the supply of people and skill meet demand.

(ix) Values – Beliefs, business principles and practices that are incorporated into the way the company operates and the behaviour of the company personnel.

(x) Stake-holder – an individual or organization whose behaviour can directly affect the firm's future but is not directly under the control of the firm.

Answer C.

(i)	b.
(ii)	c.
(iii)	a.
(iv)	d.
(v)	c.
(vi)	c.
(vii)	a.
(viii)	a.
(ix)	d.
(x)	b.

Q.1. The strategic management process encompasses three phases – strategy formulation, implementation and evaluation and control – discuss .

Answer 1.

Strategic Management

The term 'strategic management' has been defined differently by different scholars of management. Some of them are :

1. Strategic management is "a set of decisions and actions resulting in formulation and implementation of strategies designed to achieve the objectives of an organization" (**Pearce and Richard Robinson).**
2. Strategic management is "the means by which management establishes purpose and pursues the purpose through co-alignment of organizational resources with environment, opportunities and constraints." (**Bourgeois)**
3. Strategic management is "the art and science of formulating, implementing and evaluating cross- functional decisions that enables an organization to achieve its objectives." (**Glueck)**

Thus

a. Strategic management is an on-going process of analysis, planning and action. It attempts to keep an organization aligned with its environment while capitalizing on organizational strengths and environmental opportunities and minimizing or avoiding organizational weaknesses and external threats, and

b. Strategic management is also a future –oriented proactive management system.

In short, an effective strategic management translates a sound strategy into action. As otherwise, even a sound strategy would be rendered ineffective if it cannot be converted into action.

Hence, it is the duty of the strategic managers to do environmental scanning, assess internal strengths and weaknesses, set goals, mobilize resources, design action plans, implement actions. Monitor progress and control resources and deviations from goals for the achievement of goals and key results areas.

Strategic management process

The strategic management process is most often described as a rational and analytical one. The process consists of the following activities in different phases :

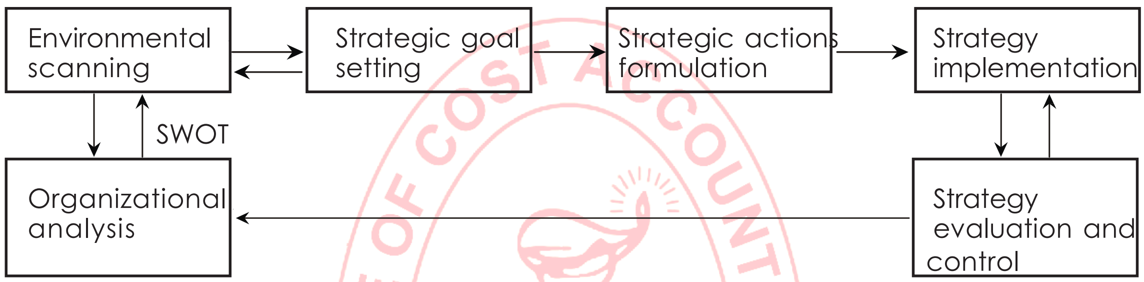


Chart showing strategic management process

1. Environmental Scanning : Threats and opportunities analysis.

This involves analyzing each threat and opportunity according to its time frame (i.e., short term or long term). Significance and likelihood of occurrence can help focus on the most important threats and opportunities. In identifying them in the organizational environment, three questions need to be kept in mind :

(i) Which threats are critical and must be exploited ?

(ii) Which threats are critical and how can they be avoided in order to derive opportunities ? (iii) Which threats and opportunities are short-terms and which are long-term?

An Indian example on : Baby food manufacturer

Opportunities	Threats
An increasing number of births per year Good trade relations with SAARC countries Surplus production of wheat/ maize in the country Ready market with growth prospects	Liberalization policy of the government State Govt. policies on excise and other taxes, varying across states Price regulation Too many competitors Profitability may be affected by increase in input prices

2. Organisational analysis : Mission, strengths and weakness analysis.

An organization analysis begins with an analysis of how the organization is performing and why.

An Indian example on : Baby food manufacturer

Strengths	Weaknesse
Well established reputation Leading name in baby food Identifiable brand name – BABY GROW 45% market share – market leadership in baby food Good R & D unit	No plan for plant modernization or capacity expansion schemes in near future Over confident about market share Little care in management development

3. Strategic goals setting : Understandable, measurable, achievable and challenging long-term goals. It is necessary to set annual objectives in line with long –term objectives as well as specifying functional strategies consistent with the company's grand strategy. Such goal should be measured in terms of quality, cost and time frame.

Given the mission and objectives and having done the SWOT analysis, the strategic manager should proceed to generate possible 'strategy alternatives'. The purpose of considering different 'strategic options' is to adopt the most appropriate strategy as 'goal'. This necessitates the evaluation of the 'strategy alternatives' with reference to the criteria like suitability, feasibility and acceptability.

4. Strategic actions formulations : An action plan to achieve the goals.

Strategic actions flow from the goals of the organisation. A strategy sets forth a general programme of action and an implied development of employees and resources to obtain goals. This strategic action can be taken from three approaches – (i) Functional approach, (ii) Product approach and (iii) Business units grouping approach. For all major actions, the aspects of timing and sequencing should be considered.

5. Strategy implementation : Spelling out effective policies or operating procedures to initiate actions for implementing strategy.

This involves translating the strategies into organizational actions. This requires 'strategic leadership' i.e. identifying policies, rules and key results areas; allocating responsibilities; and making operational plans and day-to-day decisions. Strategy implementation is, thus, the action phase of the strategic management process. This step, therefore, encompasses the operational details to translate the strategy into effective practice.

6. Strategy evaluation and control : Monitoring progress of strategic and controlling the resources.

This includes both monitoring progress and control resources – human/physical/ financial – by analyzing the deviations from standards and goals and providing the feedback for modifications.

Q. 2. (a)What do you understand by the term Merger? What are the different types of Merger? Why are mergers not always successful ?

Answer 2. (a)

Combination of two or more firms is known as merger. A combination of two or more business units in which one acquires the assets and liabilities of the other in exchange for cash or shares and/or debentures, is generally known as 'merger 'through acquisition of absorption. When all the combining units are dissolved and a new company is formed to take over the assets and liabilities of those units against issue of new shares or debentures, it is described as 'amalgamation' or 'consolidation'.

Types of merger :

A combination of two or more firms in the same business or of firms engaged in certain aspects of production process is known as horizontal merger. Akin to the horizontal merger is concentric merger which involves combination of two or more business entities related by technology, production processes or markets. A combination of two or more business units which are not closely related to each other in respect of technology, production processes or markets is known as conglomerate merger. This is akin to vertical merger of firms.

Going by the research evidence, mergers have not been generally successful from the shareholders' point of view. There are also evidences to show that they have not been successful in many cases from the point of view of management. The question therefore is : what prevents the successful consummation of mergers ? The possible reasons for failure of mergers may be one or more of the following lapses on the part of management.

a. Failure of management to establish merger objective which fit into the overall corporate strategy. Kitching, in his study of the outcome of mergers in the U.S.A., found that acquisitions were largely accidental and did not fit into a pattern of planned strategic growth, and that, even if acquisition did form part of a thought –through management programme, thinking was often dangerously shallow. Indeed, the objectives of merger should stem from corporate strategy since merger or acquisition is one of the means of achieving corporate goals.

b. Management's failure to consider the relative merits of internal and external means of achieving corporate goals. Considering the low rate of success, mergers should be recognized as more risky than internal growth strategy.

c. Lack of serious consideration of the financial stake. Not infrequently pricing of acquisitions is characterized by an attitude of recklessness, and on occasions there is considerable over-pricing and high premiums paid by acquiring firms. Sometimes over-pricing is due to unrealistic assumptions made about the future earnings. This again reflects inadequate scrutiny of the merger plan.

d. Insufficient familiarity of the management of acquiring firms with the business of the acquired firms. Failure of mergers is often due to the facile assumption that management expertise can be carried over from one type of activities to another. Actually, human problems and complex structuring of organizational relations are sometimes beyond the capability of the management of acquiring firms. This again may be due to the lack of any serious analysis of the merger proposal.

e. Lack of preparedness with post-merger planning, organization and control. Undoubtedly, the post- merger phase of management action is as important for success as the pre-merger consideration. In many cases there was more eagerness for acquisition than for rationalization.

Q. 2. (b) How a firm can use foreign collaboration as a strategy of growth?

Answer 2. (b)

Collaboration with foreign companies has been found to have special appeal as a growth strategy particularly in developing countries. Depending on the purpose in view, such collaborations may be classified as : technical, financial and/or managerial. There are many advantages which a firm in the host country can derive from the collaboration deal :

a. Upgradation of existing technology or introduction of advanced technology, acquiring technical know-how, and facilitating transfer of technology;

b. Developing indigenous production of components and spare parts;

c. Fostering cultural changes with respect to work ethos, attitude towards discipline, etc.;

d. Improving competitive abilities for domestic and export marketing;

e. Enlarging the scale of operations and reducing costs;

f. Deriving the benefits of import substitution and increased foreign exchange earning;

g. Developing the brand image of products more quickly;

h. Securing foreign equity investment as a part or risk capital and enhancing the potential ability to raise necessary funds from the domestic capital market.

Benefits which may accrue to the foreign collaborators are :

a. Earning by way of royalty and fees for technological collaboration, supply of drawings and documents, technical and managerial know-how;

b. Return on financial outlay;

c. Market expansion in countries restricting hard currency imports;

d. Tax benefits derived in low-tax host countries, royalties, technical fees, and service charges are taxed at a lower rate than profits.

Q3. Corporate growth requires strategic direction and conscientious management. Throughout the growth process, management is faced with complex problems and has to take various strategic decisions relative to products, markets, operations and resources – In this context,

(a) Explain the term 'growth strategy', and

(b) Identify and discuss some of the strategies adopted in the pursuit of corporate growth.

Answer 3.

(a) According to Ansoff and Stewart, 'a growth strategy is one that an enterprise pursues when it increases its level of objectives upward in a significant increment. Much higher than an extrapolation of its past achievement level. The most frequent increase indicating a growth strategy is to raise the market share and/or sales objective upward significantly'. They are of the view that at least three reasons are dominant in the pursuit of a growth strategy :

i. In volatile industries, growth is a necessity for survival;

ii. To many executives, growth is equated with effective performance; and

iii. As an objective, growth is the important one.

A company pursuing a growth strategy will always strive for better results every year than the previous year in the areas of production, sales and profits.

(b) Strategies in pursuit of corporate growth :

The growth strategies listed below are relevant in the early stage of potential development :

1. Hold relative position in high-growth product/ markets.

The growth associated with the strategy is directly attributable to the growth in demand for the product/ service being produced by the firm. Ability to remain competitive in terms of product development, promotion and advertising and distribution as well as in terms of productive capacity is the key to this strategic choice. A principal risk inherent in this strategy is that a competitor may embark on a preemptive strategy designed to capture market share. This risk is relatively high when the product is in about the mid-range of the growth stage of product life cycle. Those firms which have the greatest capacity to assume the financial risks associated with preemptive capacity expansion are most likely to adopt this strategy.

2. **Increase market share in high-growth market.**

   This strategy is highly suitable for commodity –type products. Essential to the success of this strategy is 'getting there first'. This strategy demands management's ability to significantly differentiate the products from those of competitors, associated with aggressive investment in advertising and distribution etc.

3. **Increase market share in mature markets.**

   Two major approaches are seen to be employed to capture market share in slow-growth markets. These are as follows –

   a. Rationalizing production in a way that will achieve cost leadership, and thereby yielding higher margins than those enjoyed by competitors. Reducing the number of models in the product line and taking market-related competitive moves such as 'price-cut' are envisaged in this approach.

   b. Segmenting the market in search for high growth potential segments and reallocating resources to those segments that will result in a product-mix — which in the aggregate is superior to that of competitors in terms of growth potential.

4. **Hold strong relative position in mature market, use 'excess' cash flow, funds capacity and other resources to support penetration of multinational markets with existing product line.**

   Any management deciding on this strategy typically expose its firm to a wide variety of patterns of opportunity and risk. For most Indian managements, moving their firm's resources into the multinational market arena opens a bewildering array of new uncertainties including complexities of international money markets and global politics.

5. **Hold strong relative position in maturing market; use 'excess' cash flow, external funds capability, and other resources to support penetration of new product/ market areas domestically.**

   The management of a firm deciding to follow this strategy can do so either by developing new products internally or by acquiring firms with already developed products and perhaps, market positions. The latter approach is typically the faster and less risky. It, however, requires larger initial investment.

6. **Hold strong relative position in multinational markets with present product line; use 'excess' cash flow, funds capability, and other resources to diversify products.**

   This strategy leads to the formulation of the multi-market/multi – product strategies. The approach of it is that : having already achieved geographic market diversification, managers striving for further growth for their firms must begin to think about product diversification.

7. **Hold strong relative position in diversified product – line domestically; use 'excess' cash flow, funds capability, and other resources to diversify markets.**

   With this strategy, corporate managers view each of the product lines as in growth strategy 4 above. Several product lines instead of one product line pose additional complexity here. Thus, plans for geographic expansion in relation to one product line must be carefully integrated from all functional and geographic perspective with such plans for the other product lines.

Q4. (a) It is said that there is no one way to do strategic planning. Identify different acceptable steps and approaches in doing it.

Answer 4. (a)

Different acceptable steps to do strategic planning :

Step 1 – Defining the mission

Step 2 – Assessing organizational resources

Step 3 – Evaluating environmental risks and opportunities

Step 4 – Establishing long-term objectives

Step 5 – Formulating strategies

Step 6 – Establishing annual objectives Step

7 – Establishing operational plans

Step 8 – Implementing the plans

Step 9 – Implementing, monitoring and adapting.

These stages seldom occur in a fixed sequence, and some may take place simultaneously, but given the flexibility needed for a bit of cycling – revising, seeking authorizations and coordinating – some rationale exists for considering the stages in the order presented.

Different acceptable approaches :

Fundamentally, there are four different approaches to do formal strategic planning. These are :

a. **Top-down approach :** In a centralized company, such planning is done at the top of the corporation and the departments and outlaying activities are advised straightway what to do.
   In a decentralized company, the CEO or the President may give the divisions guidelines and ask for
   plans. The plans after review at the head office are sent back to the divisions for modifications or with a note of acceptance.

b. **Bottom-up approach :** The top management gives the divisions no guidelines but asks them to submit plans. Such plans may contain information on
   (i) major opportunities and
   threats; (ii) major objectives;
   (iii) strategies to achieve the objectives;
   (iv) specific data on sales/ profits/ market share
   sought; (v) capital requirements, etc.

   These plans are then reviewed at top management levels and the same process, as in the top-down approach, is then followed.

c. **Mixture of the top-down and bottom-up approaches :** This is practiced in most large decentralized companies. In this approach, the guidelines given by the top management to the divisions are broad enough to permit the divisions a good amount of flexibility in developing their own plans. Sometimes, the top management may decide basic objectives by dialogue with divisional managers in respect of sales and return on investments especially when divisional performance is measured upon those criteria.

d. **Team approach :** The chief executive, in a small centralized company, often use his line managers to develop formal plans. The same approach is used even by the president of a large company. In many other companies, the president meets and interacts with his group of executives on a regular basis to deal with all the problems facing by the company so that the group can develop written strategic plans.

Q4. (b) Identify the most important pitfalls that ought to be avoided in starting and doing strategic planning.

Answer 4. (b)

The issues in a corporate strategic planning involve judgments, values, passions and perceived consequences. So, irrationality cannot be avoided. Major pitfalls that should be avoided in starting and doing the strategic planning may be listed as follows :

(i) Failure to develop throughout the company an understanding of what strategic planning really is, how it is to be done, and the degree of commitment of top management in doing it well.

(ii) Failure to accept and balance interrelationships among intuition, judgment, managerial values and the formality of the planning system.

(iii) Failure to tailor and design the strategic planning system to the unique characteristics of the company and its management.

(iv) Failure to encourage managers to do effective strategic planning by basing performance appraisal and rewards solely on short-range performance measures.

(v) Failure to modify the planning system as conditions within the company change.

(vi) Failure to understand the analytical tools used in different parts of the planning process.

(vii) Failure to balance and link appropriately the major elements of the strategic planning and implementation process.

(viii) Failure to secure in the company a climate for strategic planning that is necessary for its success.

(ix) Failure to understand the importance of strategy implementation and how to make that process efficient and effective.

(x) Failure to mesh properly the process of management and strategic planning.

Q5. What are the different policies taken by the Government of India to improve the productivity and competitiveness of the Indian economy ?

Answer 5.

Proactive policy measures taken by the Government of India to improve the productivity and competitiveness of the Indian economy enunciated in the various sectors of the economy – real, fiscal, external, monetary and financial.

(i) Real sector policies

a. **Agriculture and allied activities**

Agricultural sector has remained a problem area and there has been a declaration in its growth. To arrest this trend and reverse the deceleration, number of policy inputs has been made. A National Rain Fed Area Authority (NRAA) has been created in November 2006 to support up-gradation and management of dry land and rain fed agriculture. The authority would coordinate all schemes relating to watershed development and other aspects of land use. The accelerated irrigation benefit programme is also being revamped to repair, renovate and restore water bodies in various states. The National Agriculture Insurance Scheme (NAIS) and the National Rural Employment Guarantee Scheme (NREGS) are two important schemes which have been implemented. These have been extended to more number of villages, so that the under employment in agriculture sector is mitigated and business risk in agricultural farming due to natural calamities are also taken care of.

b. Manufacturing and infrastructure policies

If the increased activity in the manufacturing sector since 2003-2004 has to be sustained focus on upgrading the infrastructure facilities in the country is the need of the hour. Up gradation of human skills, work on golden quadrilateral, introduction of public private partnership model, increase in the power production capacity, etc, have already been identified as the areas which need robust growth in the immediate future. Spiraling of crude oil prices has had a deleterious impact on production and logistics costs through higher fuel costs. Alternatives to fossil fuel are being looked into. W ind energy is being harnessed increasingly apart from utilizing the large coal reserves available in our country. The credible alternative of producing nuclear power is one of the salient government policy. In regard to the industrial policy, the micro, small and medium enterprises development act 2006 has modified the previous act to increase the threshold investment.

A new national pharmaceutical policy has also been announced during the year 2006 to strengthen drug regulatory system and patent office. The public-private partnership model has enabled greater private sector participation in the creation and maintenance of infrastructure. Concepts of special economic zone are under introduction and there have been a lot of hiccups in this area. New modifications are on the anvil to take care of the displaced landowners as also protection of the fertile lands. The information technology amendment bill 2006 will put in place technology applications, security practices and procedures relating to such applications.

(ii) Fiscal policy

While preparing a policy to take care of the robust growth of the economy it has also been necessary to introduce fiscal corrections to reduce the fiscal deficit. Government of India subjected itself to a fiscal discipline for reducing deficits in the key areas viz, revenue, fiscal and primary. The tax base is being broadened to include more and more new services in the tax net. Personal taxation is being reduced so that the disposable incomes are bigger and savings grow. Introduction of value added tax (VAT) in various states has been a significant success and is expected to usher price stability as well as improved earnings to the various states through higher volumes.

(iii) External sector policies

Foreign trade policy of 2004-2009 was modified through an annual supplement in 2007 for deepening the incentives provided for focused products and markets. For simplifying and liberalizing the external payments regime and deepen the foreign exchange market the recommendations of the committee of Fuller Capital Account Convertibility have been considered by the Government of India and certain policy initiatives have been undertaken. They relate to increase in overseas investment limits for joint ventures/wholly owned subsidiaries abroad by Indian companies, higher portfolio investment limits for Indian companies/domestic mutual funds, higher ceilings for investments by foreign institutional investors in Government securities and enhanced repayment limits for external commercial borrowings.

(iv) Monetary policies

The necessity to balance the growth of economy with containing inflationary pressures has guided the monetary policy. The Reserve Bank of India (RBI) have taken its stance on the monetary policy to continue to reinforce the emphasis on price stability and well anchored inflation expectations and there by sustain the growth momentum contextually, financial stability may assume greater importance in the near future. RBI has been managing this area with the cash reserve ratio (CRR) on one-hand and Repo rates on the other. The interest rates are being modified whenever necessary on the basis of the monitoring exercise on rates of inflation.

(v) Financial sector policies

In view of the critical role played by the financial sector in supporting the robust growth of economy, RBI have tightened provisioning norms and risk weights to ensure asset quality, strengthened the accounting and disclosure norms for greater transparency and discipline. Final guidelines for the implementation of the new capital adequacy framework have been issued. Alongside its initiatives to strengthen the financial sector the RBI continue to take measures for protecting customers' rights and enhancing the quality of customer service.

Q6. (a) What is 'Situation Audit' in strategic planning?
(b) Discuss its fundamental purposes with a brief description of the contents.

Answer 6. (a)

Strategic planning is the process of making current risk-taking decision with the best possible knowledge of the future consequences and situations. It thus requires sensing of expectations and needs, creating awareness throughout the organization, crystallizing the development focus and making people committed to achievement of specific goals. 'Situation audit' refers to the analysis and appraisal of these basic planning premises and covers the entire process of determining the following pertinent issues –

(i) Expectations of major outside interests in relation to : society, community, stakeholders, customers, suppliers and creditors;

(ii) Expectations of major inside interests in relation to : top managers, senior and middle-level managers, supervisors, staff and workmen;

(iii) Data base with respect to past performance, current situation and forecasts; and

(iv) Evaluation of environment (i.e. opportunities and threats) and of company (i.e. strengths and weaknesses).

Answer 6. (b)

Fundamental purposes of Situation Audit.

(i) A major objective of the situation audit is to identify and analyse the key trends, forces and phenomena that may have a potential impact on the formulation of strategies. This helps a company to identify specific elements in the environment that will be addressed.

(ii) The situation audit serves to emphasise the importance of systematic assessment of environmental impacts.

(iii) The situation audit is a forum for sharing and debating divergent views about relevant environmental changes. The more open the debate about them, the more likely the planning system will be effective.

(iv) Systematic attempts to appraise the environment, through situation audit, help individuals to sharpen vague amorphous attitudes about forces operating in the environment.

(v) Finally, all of the information collected in the situation audit provide a base for completing the strategic planning process in all of its phases, from revaluating missions to formulating strategies and implementing them.

Contents of Situation Audit

(i) **Expectations of outside constituents :** The constituents viz. outside people and groups are interested to understand what a large corporation wants to do. Systematic examination of the attitudes, demands, and expectations of these groups and their considerations in appropriate forms help a corporation in the strategy formulation.

(ii) **Expectations of inside constituents :** The values, attitudes and interests of individuals and groups within a corporation constitute significant premises for planning. The value systems of top management particularly are basic and fundamental premises in any comprehensive corporate planning system. These value systems not only influence objectives but also influence all sorts of decisions made in the planning process.

(iii) **Data base :**

a. *Past performance :* The data about it are useful as a base for assessing the present situation and possible developments in the future. Data about the past covers the basic information as sales, profits, return on investment, productivity, marketing systems, and so on. Current situation – the data about it could include the company's financial position, market share, competition, customers and markets, evaluation of managerial and employee skills, various measures of efficiency (e.g. sales per employee, plant utilization, investment per employee), constituent demands, government regulations, general environmental setting, and so on.

b. *Forecasts :* The data about this would certainly include forecasts of markets, sales, competition and selected economic trends of prime concern to the company. These are traditional projections. But the estimates of future technological developments, changing social expectations, anticipated political and regulatory forces likely to affect the company and other trends of particular concern to the firm (e.g. population, international political turbulence, etc.) are vitally necessary in the situation audit.

(iv) **SWOT analysis :** Environment — This is a critical phase of the situation audit. In this phase, a company seeks to identify the principal opportunities that appear to exist in the environment of the future as well as the threats that may adversely affect the company. The assessment of company strengths and weaknesses in relation to the perceived opportunities and threats affects the strategy formulation and its implementation.

Q7. (a) What is a 'Model' in business decisions and strategies?

(b) Give various classifications of 'models'

(c) Why should a manager consider using 'models' in business decisions and strategies?

Answer 7. (a)

Model :

The word 'model' is often used in conjunction with quantitative techniques for business decision making and for strategic choices. Almost all quantitative techniques can be classified as models.

Generally all business decision situations, although decision-contents greatly vary, have certain common factors like – (i) alternative choices, (ii) possibility of various outcomes against a particular choice, (iii) occurrence of probabilities against an alternative, and (iv) inequality of the probabilities for each outcome. In such a situation, decision maker or the strategist has to determine the value or the utility with each unique action-outcome combination – before he makes the final decision or strategy – mostly in terms of pay-offs and costs.

A quantitative technique incorporates all these elements of business decision situations into a 'model' that is intended to maximize pay-offs and minimize costs.

Answer 7(b)

Classification of 'Models'

There are several basic kinds of models.

(i) **Analog model :** An 'analog' model is a physical representation of the real world. A mockup of an airplane is an analog model. An architect may place a mockup of a building to examine the characteristics of alternative designs. Such models are always reduced in size.

(ii) **Iconic model :** An 'iconic' model is one which does not act like the real thing but only looks like it.
For example, a road map or an organization chart. A road map abstract the facts like distance, direction, kinds of highways, bridges and tunnels, etc. needed by a driver. Similarly, in an organization chart, the boxes represent specific offices or formal roles and the lines represent channels of communications and reporting relationships.

(iii) **Verbal model :** It involves a verbal description of a real situation. Language, written or spoken is employed to abstract the relevant factors or characteristics. A newspaper description of a football game is a verbal model.

(iv) **Mathematical model :** This model employs mathematical manipulation of symbols to abstract and represent the behaviour of a real-world system. The use of electronic computers has led to the rapid and wide adoption of mathematical models in managerial decisions. A complex series of mathematical formulae representing the growth of Indian economy can be classified as a model.

Answer 7. (c)

The specific reasons are –

(i) A model in a decision situation provides a frame of reference to consider the decision-cum- strategy problem. A number of diverse considerations can be brought together in an organized fashion.
(ii) A model can suggest gaps in the manager's information about the decision, even though the gaps are not immediately apparent. It can, consequently, suggest useful lines of inquiry.
(iii) A model brings out into the open the process of abstraction and decision-cum-strategy making. The process of abstraction is deliberate.
(iv) A model, be it iconic, verbal or mathematical, can be easily manipulated. For example, a mathematical model of an entire economy is capable of testing the effects of a variety of monetary and fiscal policies on economic outcomes without waiting for the actual economy to behave.
(v) A model is always cost-effective and considered as the safest means to test alternative designs.
(vi) Building a model allows the decision maker to simplify reality to the extent that he can grasp its salient characteristics, make his understanding of the situation rather more concrete, and focus his attention on the most important elements of the situation.
(vii) A model serves as a kind of filter, eliminating extraneous of confusing data, while highlighting meaningful pattern.
(viii) The primary value of a model lies in its simplicity relative to the real world.

Q8. "In maturity stage of product life cycle the market becomes saturated, price competition intensifies, and the rate of sales growth slows down."
Suggest strategic choices in such situations.

Answer 8.

Marketing and distribution strategic choices for maturity stage of product life cycle :

The following is the list of alternative marketing and distribution strategies available before the marketing management to face the situations characterized by the maturing stage of the Product Life Cycle :

(i) Intensification of brand promotion by means of –

a) More intensive and brand-stressing advertising;

b) Heavier point-of-sale effort;
c) More attractive design and functional packaging;
d) Advertising messages and media for different market segments;
e) More after-sales service for the product; and
f) Increase in sales promotion expenditure rather than advertising to hold customer loyalty rather than seek out new buyers.

(ii) Trading down through –
a) Entering a 'fighting brand' on the market at a lower price to avoid jeopardizing an established premium brand;
b) Introduction of low-priced models of an established brand;
c) Lowering of prices of the entire product line and keeping prices close to private levels; and
d) Production for private levels.

(iii) Proliferation, exclusive or radical, by –
a) Offering more variety in features and designs, etc.;
b) Seeking more exclusive and innovative features;
c) Creating more radical and distinct package designs; and
d) Making more options available in accessories, and design, etc.

(iv) Trading up (strategy opposite to item ii) through -
a) Improvement of quality, appearances, etc. to offer better product;
b) Use of prestige packages, brand name, etc.; and
c) Increase of prices to cream market labels (in order to increase penetration of markets willing to pay higher prices, earn more margin on possibly lower sales, and keep greater differentiation over competitive products).

(v) Increase of product availability and point-of-sale service through –
a) More distribution centers closer to the point of use or sale;
b) Longer channels to make the product more available at wholesale level;
c) More outlets and different channels; and
d) Improvement of services offered by dealers (where applicable) or establishment of own service centers.

Q.9. The life cycle hypothesis is a powerful integrative tool for any industry. Discuss the various stages defined in three popular PLC models, namely:

a. Porters Generic Strategies

b. Ansoff's Matrix

c. BCG Matrix

Answer 9.

Stages	**Introduction**	**Growth**	**Maturity**	**Decline**
Porter	Differentiation	Differentiation	Cost	Cost focus
Ansoff	Market	Product	Penetration	Diversificatio
BCG	Question mark	Star	Cash cow	Dog

Porter :

- Cost leadership – become the lowest cost producer for the market as a whole.
- Differentiation – is the exploitation of a product or service, which is unique in the market as a whole.
- Focus (either cost or differentiation) – depends on segmentation and involves pursuing. Thus, instead of trying to serve the entire market with a single product, it is based on segmenting the market and targeting particular segments. With the segment only focus on either cost or differentiation, depending on the requirement.

Ansoff :

- Market development – uses existing products in new markets.
- Product development – involves offering new products to existing market.
- Market penetration – involves trying to milk more from existing products and existing markets.
- Diversification – involves moving into new market with new products.

BCG :

- Question mark – is a product in a high growth market, but has a low market share. Because considerable expenditure would be needed to build up market share, question mark will usually be poor cash generator and show a negative cash flow.
- Stars – are products with a high share of a high growth market. In the short term, these require capital expenditure, possibly in excess of the cash they generate.
- Cash cows – are products with a high share of a low growth market. They need very little capital expenditure and generate high levels of cash incomes.
- Dogs – are products with a low growth market. They generate either modest positive or negative cash income.

Q10. Define 'marketing mix' and explain its main features.

Answer 10.

Marketing mix is a term used by Prof. Macarthy in mid 1960's. Some definitions on this term are given below :

a. "Marketing mix refers to the amounts and kinds of marketing variables the firm is using at a particular time." (Philip Kotler)
b. "The marketing mix refers to the apportionment of the effort, the combination, the designing and integration of the elements of marketing into a programme or mix which on the basis of an appraisal of the market force will best achieve the objectives of an enterprise at a given time." (Prof. N.H. Bordon)
c. "Marketing mix is the combination of the four inputs which constitutes the core of a company's marketing system – the product, the price structure, the promotional activities, and the distribution system (place)." (Stanton)

Thus, the term marketing mix refers to a combination of marketing decisions which are aimed at stimulating sales and constitutes a firm's marketing system in a global sense. It denotes and consists of a well- designed plan that analyses the important forces having direct linkage with the firm's marketing operations and that outlines and implements policies relating to the firm's marketing programme through co-ordination of available resources such as sales promotion, advertising, personal sales, service, distribution, etc. The concept includes "Four P's" i.e. right product, right place, right promotion and right price.

Features of marketing mix - A product must be such as to satisfy the needs and wants of the consumer. The price of the product must be reasonable so as to enable the consumer to pay for the product. If it is exorbitant, most of the consumers reject it. Also the promotion such as advertising and personal selling must be right without exaggerating the advantages of the product. And place means transportation and channels of distribution.

These four P's are now widely discussed by the marketing executives because any one variable of them is of no use. Every element of the marketing mix must be planned with demographic profile in mind. The product design, price, advertising media, sales promotion tools and distribution channels will often be different depending upon whether the target market is young, and so on. Marketing plan must be based on the characteristics of the best planners, thus, look first at demographic characteristics since these are usually more available, reliable, and actionable than other types of characteristics. Changes in one or more demographic characteristics of the population often prompt a business firm or an entrepreneur to offer some new product or service aimed at the changing segment.

The marketing manager in the interest of his business firm has to arrange and co-ordinate the marketing in such a way that would advance harmonise development of each of the above P's.

Q11. What is market share analysis? How is it determined?

Answer 11.

Market share analysis – Before a discussion is made about market share analysis, it is important to understand the meaning of the term 'market share'. Market share is the percentage of a business's sales relative to the combined sales of all competition in a given market. By achieving a large share of the market in which it competes, a business firm can gain important advantages over its smaller rivals. Market share analysis refers to a technique by which the relative merits of a company's product in comparison with the competitor's products are determined. It assists in knowing the present and long- term demand for the particular product of a company in relation to the total demand for the same product in the market. Such analysis requires an explicit evaluation of competition and of the company's market plans in terms of their effect of a firm's position in the industry. This analysis is a part of corporate planning vis-a-vis market planning exercise. The market share analysis is effective when trends are reasonably predictable and competition is centered on market share. In industries like fashion garments or toys for children, market shares are very unstable. Thus, any attempt to project market shares from historical data is likely to be misleading both in the short-run and in the long-run. It is only an approximate indicator of market position due to changing market conditions.

Determination of market share: In order to determine the market share, the total demand forecast is subjected to competitive analysis and a sales forecast for the company is prepared. The measurement of market share becomes meaningful if the ' industry ' can be precisely defined in terms of directly substitutable, non-differentiated products. In practice, market share measures can be only approximations of the market positions. In other words, we find that there are three determinants to ascertain market share – (i) total demand forecast, (ii) competitive analysis, and (iii) sales forecast.

(i) Demand forecast – There are various methods and techniques of quantitative forecasting of demands such as extrapolation, regression analysis, input-output analysis, and economic models.

Extrapolation implies projection of past trends. For example, a graph of past demand and sales for a product may be projected in the future and adjusted for any changes that are expected to occur. Time series analysis and exponential smoothing are used for the purpose of extrapolation.

Regression analysis is an independent forward projection technique that uses casual relationships between the elements of a situation. It predicts the dependent variable (say, demand in quantities of a product) on the basis of value of one or more independent variables (such as population changes, purchasing power, employment level, etc.).

Input-output analysis, which is appropriate for a short-term, demand forecast, can be used to study a company and a market. It shows the inter industry flow of products ands services within the national economy on the assumption that output of one industry is the input of another industry and that there is no technology change over the forecasting horizon.

Econometric models, which are predictive and descriptive in nature, take the help of economics, mathematics, and statistics in order to express economic relationships. It is a system, whereby hypotheses are developed concerning the relationships among a set of variables and a certain economic phenomenon.

(ii) Competitive analysis – It involves (a) identification of competitors and their present market share; (b) comparison of the marketing strategies (product quality/ pricing/ discount/ packaging/ distribution/ promotion, etc.) of different competitors; and (c) forecast of changes in marketing strategies and their impact on the market share of each competitor.

(iii) Sales forecast – There may be long-term and short-term sales forecasting. The function of long-term forecast necessitates information about market conditions for a good length of period (5 or 10 years) upon which a rational plan of expansion, modernization, or diversification is based. In short-term forecasts, emphasis is on seasonal fluctuations in demand or on temporary changes in national income levels.

Q12. Discuss and explain the concepts, scope, and dimensions of :

a. Customer analysis

b. Competitor analysis

c. Industry analysis, and

d. Economy analysis as parts of external analysis necessary in understanding the marketing strategy.

Answer 12.

External analysis is concerned with identifying opportunities and threats and strategic questions that affect key factors of successful performance. Such analysis is necessary for strategy formulation and management in all fields of activity including marketing activity of an organization. This analysis is mainly concerned with the study of external environment in which a business firm operates.

The components of external environmental analysis can be summed up in the table below:

Components of external analysis	Scope and dimensions
Customer analysis	Segmentation, motivation and needs
Competitor analysis	Identification of present and potential competitors, and understanding competition.
Industry analysis	Actual and potential industry size, industry structure, cost structure, distribution channels, industry trends, growth and product life cycle.
Economy analysis	Technology, government, demographics, culture and economics.

Each of the components are discussed below as to their scope and dimensions:

A. Customer analysis : It is intended to identify the customer groups, their characteristics and buying motives and so on with a view to ascertaining the customer-oriented product-market scope. This analysis is done along the following dimensions -

(i) **Segmentation –** The differences in the responses among the various customer groups in a competitive environment are identified and a programme is made to deliver competitive offers to those identified segments.

(ii) **Customer motivation –** It involves the identification of factors that direct or motivate the customers to make buying decisions.

(iii) **Needs identification –** The identification of customer needs provides a basis for product development or for a policy to have an edge over competitors.

B. Competitor analysis : It is intended to identify the competitors and understand the degree of competition. (i) Competitors – existing and potential

a. Intensity of competition, direct or indirect.
b. Customer choice between own/ competitive products.
c. Existing and/or substitute products.
d. Mobility barriers
e. Policies of potential competitors as to market expansion, product expansion, exports etc.

(ii) Competition

a. Size, growth, profitability.
b. Current and past strategies with respect to products and markets.
c. Strengths and weaknesses of competitors.

C. Industry analysis – It is conducted for the industry as a whole and for the important product-market structure within the industry along the following dimensions.

(i) Actual and potential industry size

a. Size of current and potential market.
b. Gap analysis with respect to usage, distribution, product line, product features, market penetration etc.

(ii) Industry structure

a. Number of existing competitors.
b. Product differentiation.
c. Economies of scale.
d. Substitute products.
e. Capital investment.

(iii) Cost structure

a. Plant capacity.
b. Fixed assets investment.
c. Working capital employed.
d. R.O.I.

(iv) Distribution channels

a. Branches and depots.
b. Showrooms.
c. Wholesales' and retailers' relative importance.

(v) Industry trends
   a. Average and norms typical of the industry
   b. History of innovation.
   c. Technological trends.
   d. Role of technology in success.
   e. New products.
   f. Profitability.

(vi) Growth and product life cycle
   a. Profits and profitability.
   b. New growth directions.
   c. Additions to the existing product line.
   d. Basic determinants of demand.
   e. Market share, concentration, segmentation, dominance.
   f. Relation to life cycle of the product and present stage.
   g. Technology status.

D. Economy analysis

(i) Technology
   a. Maturity of old technologies
   b. New technologies.

(ii) Government
   a. Regulations
   b. Tax policies.
   c. Stability
   d. Industrial policies.

(iii) Culture
   a. Life cycle.
   b. Fashions
   c. Opinions
   d. Education
   e. Social up- liftment.

(iv) Demographics
   a. Age
   b. Income
   c. Family
   d. Geographic location

(v) Economics
   a. National and international economic trends
   b. Economic health of industries.
   c. Interest rates.
   d. Currency valuation.

Q13. If the first commandment in marketing is 'know the customer', second is 'know the product'. Explain.

Answer 13.

Product definition : A 'product' is a thing which is bought and sold in the market. Prof. Stanton defines the term 'product' as "a complex of tangible attributes, including packing, colour, price, manufacturer's and retailers' prestige, and manufacturers' and retailers' services which the buyer may expect as offering satisfaction of wants or needs." So, a company's product can be described in two ways : (i) by its physical characteristics and (ii) by its functions or uses.

From the aspect of physical characteristics, a product offered to the market includes physical objects, services, amenities and satisfaction. From the user's point of view, a product is the right to own or use a bundle of need satisfactions.

Of the four elements of marketing mix (i.e. product, price, promotion and place), the product is the main element without which other elements have no role to play. The method of describing a product has an important implication for the whole marketing philosophy of the manufacturing company.

Product – why important in marketing : The knowledge of product is important in marketing in the sense that there can be no marketing functions without the existence of a product.

A product assumes its importance in consideration of following facts :

(i) The key element in a successful marketing policy and strategy is finding and meeting the needs of the consumers. A product through its tangible attributes like quality, services and amenities can meet the consumers' needs and wants.

(ii) For the performance of marketing functions like selling, purchasing, distribution, etc., the existence of a product is a must.

(iii) The success of a company of its marketing efforts, in most cases, depends on the product policy.

(iv) The policies relating to pricing, distribution, sales promotion, and customer satisfaction are all dependent on the product policy.

(v) The study of market size, sales volume, profits and profitability, and their growth or decline which serve as effective guide to the marketing management – are all done always in consideration of the product.

(vi) It is the knowledge of the product, whether consumer category or industrial category, that has led to the concept of product and marketing guided organization structure.

The product is probably the bread and butter of a company's profit. It should receive close attention throughout its life cycle. The product or brand manager should pay day-to-day attention to the product's market behaviour during its introduction to maturity to growth life and bring forth new uses or applications to lengthen its life.

The producers must know the market and customers' needs, no doubt; but at the same time, they must know and understand the qualities of a product that can satisfy the customers.

Q14. Discuss various pricing methods based on competition.

Answer 14.

(i) **Skimming pricing method :** This refers to a pricing policy which sets relatively high prices at the outset and successively offers lower prices as the market expands at later stages.

The idea behind this pricing policy is that the introduction of a new product with a high price is an efficient way to segment the markets with different price elasticities of demand. The initial high price can serve to skim the cream off those segments which are less sensitive to price. Subsequent price reductions reach customers with higher elasticities and enlarge the size of the market.

A higher price at the initial stage of market penetration can achieve a larger sales volume and a higher sales revenue. This higher sales revenue ensures profit maximization and provides a good base for sound financing necessary for the production expansion and promotional activities during the later stages of the market development.

(ii) **Penetration pricing method :** This method refers to a pricing policy of setting a relatively low initial price with an intention to help the product penetrate into the markets to hold a position. This method is just opposite to the skimming pricing method. This pricing strategy is adopted when there seems to be no distinctive classes of customers with different price elasticities, and when advantages of mass production drastically reduce costs, and when the product's distinctiveness i.e. protection from the competitors is likely to be short-lived. This strategy aims at capturing the market at the very outset and in case of a competitive product, aims at capturing the major share of the market, and discourages the competitors to enter.

(iii) **Seasonal discount pricing method :** This is a type of pricing strategy to promote sales by offering special discounts during certain seasons. This policy is found to be followed by the manufacturers of air conditioners, refrigerators, electric fans, etc.

(iv) **Going-rate pricing method :** This method refers to a pricing policy whereby the prices are fixed in consideration of the prices of competitors and the firm's costs. This is like 'follow the leader' i.e. price leadership. It is quite popular because it is easy to avoid competition and make reasonable profits. Under this method, prices are fixed near about the prices of the leaders. This pricing policy does not have any scientific basis like considerations of cost and marketing factors. Small firms usually determined this pricing strategy on the considerations that the big firms have determined the prices carefully and scientifically, and that the general consumers are price conscious.

(v) **Discriminatory pricing method :** This method of pricing refers to a policy of following different prices for different customers based on their ability to pay or place of customers. It involves 'selling a product or service at two or more prices and the difference in price is not based on difference in costs', according to Philip Kotler.

(vi) **Oligopolistic pricing :** An oligopolistic competition, by definition, refers to 'a market in which there are a few sellers who are highly sensitive to each other's pricing and marketing strategies'. In other words, each seller in the market has a significant effect on the market price and each seller considers the likely effect of price changes on the competitors. The life cycle of a product and corresponding market stage play a great role in this pricing policy. During the later stage of market growth or early stage of market maturity of a product of perishable distinctiveness, an oligopolistic pricing situation develops.

(vii) **Monopolistic pricing :** A monopolistic competition, by definition, refers to "a market in which many buyers and sellers trade over a range of prices rather than a single market price" (Philip Kotler). This state of competition offers a greater degree of flexibility in the pricing strategy as such market is characterized by : (a) large number of competitors, and (b) price change by any one competitor tends to have little effect on other competitors. While pursuing a price reduction strategy under monopolistic competition, the marketing management of a company must consider the possibility that too drastic a reduction may set off a price war throughout the whole industry.

Q15. Write short notes on :

a. Brand image or equity
b. Types of buying behaviour
c. Brand positioning
d. Emerging challenges in Indian market.

Answer 15.

(a) **Brand image or equity**

Brands vary in the amount of power and value they have in the market place. At one extreme are brands that are not known by most buyers in the marketplace. Then there are brands for which buyers have a fairly high degree of brands awareness. Beyond this are brands that have a degree of brand acceptability in that most customers would not resist buying them. Then there are brands which enjoy a high degree of brand preferences. They would be selected over the others. Finally there are brands that command a high degree of brand loyalty. A powerful brand is said to have high brand image or equity. Brand equity is higher, the higher the brand loyalty, name awareness, perceived quality, strong brand association, and other assets such as patents, trademarks and channel relationships. The point is that a brand is an asset insofar as it can be sold or bought for a price. Measuring the actual equity of a brand name is somewhat arbitrary, including basing it on the price premium, the stock value, the brand replacement value and so on. High brand equity provides a number of competitive advantages to a company. As an asset, a brand name needs to be carefully managed so that its brand equity doesn't depreciate.

(b) **Types of buying behaviour**

Consumer decision making varies with type of buying decision. Complex and expensive purchases are likely to involve more buyer deliberation and more participants. 4 types of consumer buying behaviour based on the degree of buyer involvement and the degree of difference among brands can be distinguished. They are :

Complex buying behaviour – Consumer go through complex buying behaviour when they are

highly involved in a purchase and highly aware of significant differences among brands. Consumers are highly involved when the product is expensive, bought infrequently, risky and highly self-expressive. Typically the consumer does not know much about the product category and has much to learn.

Dissonance – Reducing buying behaviour : Sometimes the consumer is highly involved in purchase but sees little difference in the brands. The high involvement is again based on the fact that the purchase is expensive, infrequent, and risky. In this case, the buyer will shop around to learn what is available but will buy fairly quickly because brand differences are not pronounced.

Habitual buying behaviour – Many products are bought under conditions of low consumer involvement and the absence of significance brand differences. They go to the store and reach for the brand. If they keep reaching for the same brand, it is out of habit, not strong brand loyalty. Consumer behaviour does not pass through the normal belief/ attitude/ behaviour sequence.

Variety – Seeking buying behaviour : Some buying situations are characterised by low consumer involvement but significant brand differences. Here consumers are often observed to do a lot of brand switching.

(c) **Brand positioning**

It is an activity which seeks to determine and achieve a position in the perception of the buyers relative to that of the competitors. In order to effectively place a brand has to communicate carefully-choose the message which has best chance to get into prospect's mind – which prospect can understand, which behold his attention, gives him a reason to read. It should also provoke a thought process in his mind and should create a distinct image, a position for the brand in his mind, the message can create an unfavourable position or a favourable position. A favourable position is one which changes his attitude towards the brand leading him to accept it.

(d) **Emerging challenges in Indian market.**

Due to economic reforms, foreign participation in Indian industries covering manufacturing, infrastructural, consumer and service sectors, flow of foreign capital and expertise etc. has increased. The Indian environment has suddenly become open before the international advancement. As a result lot of market adjustments are taking place with the consequent impact on our life and society. The recent liberalization policies have eased the flow of new products, processes, technologies from developed countries. The new technologies can shock a business organization – because they require a quantum jump in an organisation's precision and integration. Traditional managerial attitudes cannot change without profound knowledge and reform in the modern mindset. It may well require a new generation of executives. Moreover, as organizations struggle to gain advantage over competitors, most neglect their most potent weapon : time. Quality and price are still important because today's discriminating customer demands world class quality at a competitive price. When all the leading firms in an industry achieve high levels of quality, a focus on quality alone will not attract new customers. A faster response to time must complement quality. Speed and quality are not a trade-off. Speed is a component of quality – one of the things we must deliver to satisfy customers.

Q16. Is service marketing different from product marketing? How do marketers try to overcome the limitations of delivering uniform service quality? Discuss the problems of maintaining quality for any service business.

Answer 16.

A service is any act or performance that one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product. Services are intangible. Unlike physical products, they cannot be seen, tasted, felt, heard or smelled before they are bought. The person getting a 'face lift' cannot see the results before the purchase, and the patient in the psychiatrist's office cannot predict the outcome. To reduce uncertainty, buyers will look for signs or evidence of the service quality. They will draw inferences about service quality from the place, people, equipment, communication material, symbols, and price that they see. The service provider's task is to 'manage the evidence'. Whereas product marketers are challenged to add abstract ideas, service marketers are challenged to put physical evidence and imagery on their abstract offers. Services are typically produced and consumed simultaneously. This is not true of physical goods that are manufactured, put into inventory, distributed through multiple resellers, and consumed still later. If a person renders the service, then the provider is part of the service. Since the client is also present as the service is produced, provider – client interaction is a special feature of services marketing. Both the provider and the client affect the service outcome. Services are highly variable, since they depend on who provides them and when and where they are provided. Moreover, services cannot be stored. The perish ability of services is not a problem when demand is steady because it is easy to staff the services in advance. When demand fluctuates, service firms have difficult problems. Each characteristic poses problems and requires strategies. Thus, marketers have to find ways to 'tangibles' the intangible; to increase the productivity of providers who are inseparable from the product; to standardize the quality in the face of variability; and to influence demand movements and supply capabilities in the face of service perish ability.

One of the major ways of becoming successful, service firm is to deliver consistently higher quality service than competitors. The key is to meet or exceed the target customer's service quality expectations. Their expectations are formed by their past experiences, word of mouth, and service-firm advertising. The customers choose providers on this basis and, after receiving the service, they compare the perceived service with the expected service. If the perceived service falls below the expected service, customers lose interest in the provider. If the perceived service meets or exceeds their expectations, they are apt to use the provider again. To overcome the limitations of delivering uniform service quality, the marketers may try to share the following common practices of excellently managed service companies :

- A strategic concept : top service companies are 'customer obsessed'. They have developed a distinctive strategy for satisfying the needs that wins enduring customer loyalty.

- A history of top-management commitment to quality : the management should look not only at financial performance on monthly basis but also at service performance.

- The setting of high standards : the standards must be set appropriately high.

- Systems for monitoring service performance : the top service firms audit service performance, both their own and competitors, on a regular basis.

- Systems for satisfying complaining customers : well-run service businesses respond quickly and generously to customer complaints.

- Satisfying the employees as well as the customers : excellently managed service companies believe that employee relations will reflect on customer relations. Management carries out internal marketing and creates an environment of employee support and rewards for good service performance. Management regularly audits employees' satisfaction with their jobs.

There are, however, five gaps that cause unsuccessful service delivery as follows :

- Gap between consumer expectation and management perception;

- Gap between management perception and service –quality delivery;

- Gap between service quality specifications and service delivery;

- Gap between service delivery and external communications;
- Gap between perceived service and expected service.

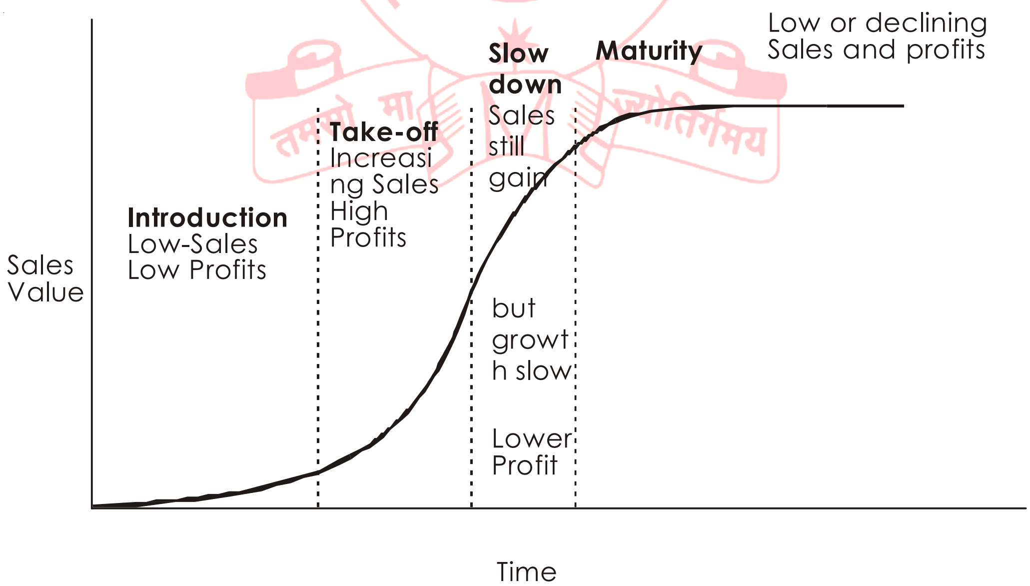
There are five determinants of service quality that may create problems of maintaining quality as follows:

- **Reliability :** The ability to perform promised service dependably and accurately.
- **Responsiveness :** The willingness to help customers and to provide prompt service.
- **Assurance :** The knowledge and courtesy of employees and their ability to convey trust and confidence.
- **Empathy :** The provision of caring individualized attention to customers.
- **Tangibles :** The appearance of physical facilities, equipment, personnel and communication materials.

Q17. Elucidate the concept of Product-life Cycle. Show how it is related to marketing planning.

Answer 17.

Product Life Cycle - One concept which is of value in many forecasting situations is that of the product life cycle (PLC). The concept and idea of PLC has been formed to be useful in marketing also. This suggests that all products pass through a series of growth curves (the first part of which is S-shaped), until they reach a point when they either level out or begin to decline.



The curve begins with a period of low sales and low profit as the new product is introduced to the market. This is followed by a period of take-off associated with rapidly increasing sales and relatively high profits, the period during which the product is gaining acceptance and has little competition. At this stage, any competitive product tends to increase the total market. At the same time, unit costs are lower because the benefits of increasing sale of product are achieved.

By the third stage the rate of growth slows down considerably as more competitors enter the market and as, in any case, it becomes more difficult to increase sales penetration. The additional expenditure to increase sales and to meet competitive activity reduces the profit per unit (although it may increase in total).

The product moves to maturity, where it reaches a situation of low or declining sales growth, and a fall- off in profitability. Yet another and final stage may result, where the product declines rapidly to obscurity.

Relation between PLC and marketing planning :

a. Introductory stage begins with new products. In this stage, there is delay in consumer acceptance because the product is new and the expansion of facilities takes time. In the case of expensive products, the number of buyers is small. In other words, the sales are low and the profits are low. Thus, money is needed to develop the market through promotion as the customers are unknown.

b. Growth stage opens more opportunities for the new products because by now the consumers will have heard about the product and became interested in it. They will buy it. The market share increases and the profits also grow up. The economies of scales are introduces, costs go down, and the market segmentation is possible to be adopted.

c. At maturity stage, sales continue to increase but at a lesser rate than before and the price competition increases. This stage is characterized by over-capacity, product improvement, new uses of products, and more market segmentation.

d. At declining stage, the market demand slackens because of market saturation. The weak products are dropped if they do not meet profit target.

The interesting thing about PLC is that it occupies an important place in long-term planning for marketing. When the product reaches growth stage, economies of scale are realized and the costs go down.

At maturity stage the products need constant improvement of functions style, design, packaging, etc. If the competitors adopt intensification of advertising, the management concerned must also follow the same policy.

Philip Kotler observes that PLC must be considered in relation to marketing strategy and so all the four stages of PLC must have strategy. Especially pricing strategy must be different from one stage to another. Depending upon the stages of PLC, strategies of promotion/ product modification/ product improvement/ advertising, etc. must have to be carefully formulated and adopted.

PLC, marketing strategy and marketing planning are interrelated and go hand in hand. The external environment variables such as competition, technology changes, consumer perception and behaviour, population changes, international environment, etc. are needed to be considered for marketing planning and for understanding of their impacts on PLC. These can be done by proper marketing research and market surveys. Thus, we find a correlation between PLC and planning for marketing operations and actions.

Q18. Porter, in his value chain model proposed some activities of an organization. What are those activities and their relationships between them?

Answer 18.

The value of an organization depends upon the activities of the organization. The activities of an organization can broadly classified under two heads, namely – Primary Activities and Secondary Activities.

Primary Activities : Primary activities comprises of the primary or the basic activities of a firm. These activities adds value to the firm i.e. It represents all those activities which are involved in converting an input into a finished product and subsequent sales and after sales service. All such primary activities affect the value of an organization. Some of these Primary activities are as listed below :

a. **In bound logistics :** This activity involves the reaching of the raw materials to the place of production from the stores. It includes activities like receiving, handling and storing inputs to the production system.

b. **Operations :** Involves all those activities connected with converting the resource inputs into final outputs like Product Planning and Development. Product process development, Product line and Product mix decisions, Lay out planning etc.

c. **Outbound logistics :** This activity represents the distribution of finished products, storage, warehousing, transportation, channel of distribution, branding, packaging, containerization, inventory management etc. There are varied scopes in this activity to reduce cost, attaining delivery schedule, meeting demand at the right time and at the right place.

d. **Marketing and sales :** Informing customers about the product, persuading them to buy it, and enabling them to do so. Marketing activities encompasses different kinds of routes like advertising, sales promotion, personal selling etc. The best method should be adopted to create value to the potential customers.

e. Various after sales services activities like, installing, repairing products, providing spares etc.

Support activities : The above mentioned primary activities are supported by the following activities called the support activities, which are as enumerated below :

a. **Procurement :** The 'Supply chain management' is becoming more and more popular these days.
Sourcing or procurement should be from the best available sources, keeping in mind that the value is passed to the consumers right from there.

b. **Technology :** Keeping in pace with the up to date technology is another main activity. This will result in offering better products at low cost to the customers. Further adoption of latest technology will go a long way in product design and improving process and / or resources utilization.

c. **Human resources development and management :** Includes activities like-recruiting, training and rewarding people. Machine, Money and Material cannot function without the active support and involvement of 'Men'. Human resources is an integral support function. Identifying the strengths and weaknesses of the individuals and motivating them will result in a very efficient functioning of the firm.

d. **Firm infrastructure :** Concerns the systems of planning, finance etc. which are crucially important in all primary activities. Further the infrastructure of the firm should ensure that the production activities are carried out smoothly and the workers are at their best performance while working.

Both the primary and support activities are interlinked to each other.

Linkages between the activities connect the interdependent elements of the value chain together. One element affects the cost or effectiveness of another. The element of 'Margin' (the excess of amount that a customer pays over costs of resource inputs and value activities) provides the final linkage. technology, procurement, HR, infrastructure effects the quality of the product. On the other hand, the product quality, price etc., affect the infrastructure / image of the firm.

These are so interlinked that one's doing will have a great impact on the other. All these in combination comprise the value chain model.

Q19. Explain the concept of risk pooling and diversification.

Answer 19

Whether it is the individual, an insurance company or insurer or a corporate, which necessarily has to insure all its risks, the proper way to look at the exigencies is to pool the risk. 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, insurance (Marine insurance) is taken for shipping the various plant and machinery from the manufacturers to the port near the project site. The logistics from the port to the project site is taken care of by the carrier and he insures (transit insurance) the risk for that segment. The material is received at site and stored until erection (storage insurance). During erection of different plant and machinery, mechanical, electrical, etc, risk is covered (erection insurance). The erected plant and machinery is then tested and trial runs are taken for guarantee purposes on continuous run as per the contract. The risk during this period is covered as risks for commercial run. All these risks put together is pooling and each separate policy has a risk value and premium and conditions attached there to by the insurer and insured has to carry out those obligations. This is the process of monitoring. To reduce risk after pooling it can be combining through a comprehensive policy from the plant and machinery Freight on Board (FOB) to the completion of final commercial guarantee run. Integrating risks will be to take care of all the foreign shipments together, inland transit risks together so that these risks which are similar are taken together.

Diversification of risk :

This involves identifying that fraction, which is systematic and the remaining unsystematic. Systematic risk is that inherent and peculiar to the type of business or the organization and can be reduced or diversified by acting with in the organization, which is through functional level strategy. The unsystematic risk, which is the market risk is external to an organization and is also 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.

Q20. What is risk ? Discuss different types of risk. How do you measure physical risk?

Answer 20.

Uncertainty and risk are two terms which are anathema to every manager. Certainty and uncertainty are the two extremities on a continuous platform and risk is identified somewhere between the two extremes. Uncertainty is a totally indefinable happening and is also unexpected. An uncertain situation is faced when the variables are many and their interaction can be innumerable. For example different people behave and react differently to the same situation and uncertainty arises.

Risk expressed mathematically is the dispersion of a probability distribution: how much do individual outcomes deviate from the expected outcome. A simple measure of dispersion is a range of possible outcomes, which is simply the difference between upper most and the lowest outcomes. This is mathematically measured as standard deviation. Physically, risk can be identified as an event which has different probabilities of happening, but the time of the event is not known as also the impact of such risk can vary. While uncertainty cannot be quantified a risk can be quantified though mathematical models, probability models, correlation, etc. and also measured through quantitative models and technological tools.

Types of Risk :

Mark Dorfman has defined "risk management as the logical development and execution of a plan to deal with potential losses". The risk can include both upside and downside. Potential risk management often refers to reducing downside potential and enhances the returns on topside.
Risks are of many types as follows:

1. **Physical Risk** like natural calamities: fire, tsunami, floods, earthquake, etc.
2. **Business Risk** which is inherent to a business due to its nature and susceptibility to environment, e.g., change of fashion, business cycles, conflicts like war, insurgency, cross border terrorism, technological obsolescence, etc.
3. **Financial Risk** arising out of the nature of financial transactions and conduct of business and investment.

Measurement of risk: Physical Risk :

Physical risks are measured by the application of technological tools. Earthquakes are measured in the Richter scale. Floods are measured through level monitoring and marking danger levels. Risk of fire is often monitored through measurement of flash point, fire point, ignition temperatures and propulsion temperatures. Spontaneous ignition temperatures are yet another measurement to identify fire risk, e.g., coal dumps, oil installations, explosive godowns, etc.

Physical risk arising out of Social, Political, Economic and Legal Environments are often identified through the performance of lead indicators. In the Social arena lead indicators can be pestilence, expediencies, social upheavals, etc., measurement of these social risk 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 capitalistic, democratic or totalitarian and can be measured by the impact of such government policy on the economic activity, e.g., Government Industrial Policy and Labor 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 variation in GDF, IIP, Balance of Payments, Stock Market Indices, etc.

Legal Risk arises out of the implication of various statutes affecting business, Anti Trust Bills, Factory Acts, Industrial Disputes Act, and Foreign Exchange Management Act (FEMA).

Q21. What is Risk Management ? Discuss the strategies involved in risk management.

Answer 21.

Risk management is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events. Risks can come from uncertainty in financial markets, project failures, legal liabilities, credit risk, accidents, natural causes and disasters as well as deliberate attacks from an adversary.

In ideal risk management, a prioritization process is followed whereby the risks with the greatest loss and the greatest probability of occurring are handled first, and risks with lower probability of occurrence and lower loss are handled in descending order. In practice the process can be very difficult, and balancing between risks with a high probability of occurrence but lower loss versus a risk with high loss but lower probability of occurrence can often be mishandled.

The International Organistaion for Standardisation identifies the following principles of risk management :

- Risk management should create value.
- Risk management should be an integral part of organizational processes.
- Risk management should be part of decision making.
- Risk management should explicitly address uncertainty.
- Risk management should be systematic and structured.
- Risk management should be based on the best available information.
- Risk management should be tailored.
- Risk management should take into account human factors.
- Risk management should be transparent and inclusive.
- Risk management should be dynamic, iterative and responsive to change.
- Risk management should be capable of continual improvement and enhancement.

Strategy for risk management

Risk management strategies are seven fold and they are: Avoid Risk, Reduce Risk, Retain Risk, Combine Risks, Transfer Risk, Share Risk and Hedge Risk.

Avoid Risk :

Avoid risk is the prevention method and proven method. This method results in complete elimination of exposure to loss due to a specific risk. It may involve avoidance of an activity which is risky. This can be approached in two ways

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

(ii) Discontinuance of an activity to avoid risk: While a proactive avoidance follows a sound decision knowing fully the perils of the risk, abandoning a project to avoid risk midway is a decision taken while handling the project. E.g., A PVC plant was being put up on the basis of alcohol as a raw material to be converted to an intermediate product known as ethylene-di-chloride. Unpredictability of alcohol supplies suddenly became risk due to a distillery which was supposed to come up in this area did not materialize. So the root of using alcohol was abandoned half way through the PVC product and ethylene-di-chloride was imported to be processed to PVC.

Reducing Risk :

Reduction of risk 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 and Loss Control.

Loss Prevention: Prevention of loss is the most insignificant of dealing with the risk, prevention systems like fire sprinkler systems, burglar alarms, etc., are typical prevention measures to reduce the risk of fire burglary. Other measures are the understanding of the risk or the comprehension of the risk arising out of an activity is environment and relationship between the activity and the environment. This will help in the following way:

Modify the risk involved in the activity itself through improved design or technology;

Tailor the surroundings where the risky activity is to take place by isolation or notification or proper layout;

Identify the linkage between the activity and the environment and institute suitable safe guards through training of people, safety devices and providing knowledge and institute mock exercises, etc.

Loss Control: Is accomplished through measures which will douse the fire in the case of fire accident, e.g. using fire hydrants, fire extinguishers. Loss control is also accomplished by on line process control which operates in the event of a risky happening, e.g., Gas leaks fires.

Retain Risk :

Risk retention is adopted when it 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 ensures when the organization is unaware of the risk and faces it when it come up.

Combine Risks :

When the business faces two or three risks the over all risk is reduced by a combination. This strategy is prevalent mainly in the area of financial risk. Different financial instruments being negative risk return of co relation like Bonds and Shares are taken in a single port folio to reduce the risk. A physical risk of non- availability of a particular material is often solved by having more than one supplier.

Transfer Risk :

Normally in projects assignments or multifaceted exercises, execution is fought with risks. Different agencies work together and these agencies take care to transfer risk in their areas to another agency which is better equipped to take care of a risk for a consideration. Here the concept of core competence curves in and whenever a particular agency, individual or a firm finds that it is dealing in a area where it does not have the core competence to deal with it seeks the help of another agency which has the specific core competence to transfer its own risk. The risk may be in the form of loss of reputation or sub quality performance and this risk is taken care of through transfer.

Sharing Risk :

Insurance is a method of sharing risk for a consideration, viz., premium insurance loss, undertakes to share the risk with the companies and share their own risk through re-insurance with other companies. Some times big conglomerates share risk among their own group of companies in proportion to their risk bearing strengths by creating a corpus instead of paying premium to insurance companies.

Hedging Risk :

Exposures of funds to fluctuations in foreign exchange rates, 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.

Risk optimization :

Risk optimization means utilizing information on risk to compute precisely what types and combinations of risk to take. It also develops the precise trade off between risk and reward and the corresponding appropriate product pricing to reflect the risk taken.

Q22. Write short notes on :

- **a. Probability of ruin**
- **b. DCF analysis**
- **c. Monte Carlo simulation analysis**
- **d. Risk adjusted performance measurement**

Answer 22.

(a) Probability of ruin

Probability of ruin is essentially a study of risk of insolvency for a company with multiple business activity facing heavy claims from creditors. For this purpose, the company is permitted to transfer resources between business lines. But such transfers are restricted by transaction costs. Insolvency or ruin occurs when the negative positions in one or more business lines cannot be compensated by capital transfers. Such problems are normally solved on the basis of intermittent or continuous process. Mathematically, actuarial calculations are involved in such exercise. A clear expression of Laplace transformation of the finite type, for computing ruin probability is one such method. Another model developed by Clayton Levy Copulas takes into consideration the interdependence of components of risk.

(b) DCF analysis

This financial tool computes the present value of future cash flows over multiple periods using a discount factor. The formula for net present value of alternative decisions can be computed as below:

$$NPV = \sum_{t=0}^{n} \frac{E(NCF_t)}{(1+r)^t}$$

Where

$E(NCF_t)$ = Expected net cash flow in year *t*

r = opportunity cost of capital (reflects the risk of the cash flows)

For example, consider a compound wall's Upfront cost = ₹1,50,000

Compound will reduce theft loss by ₹ 55,000 each year for 3 years Security expenses will be reduced by ₹15,000 each year for 3 years Discount rate = 10%

NPV = (1, 50, 00 – [1x 70,000 + 0.909 x 70,000 + 0.826 x 70,000]) = +12936

Thus NPV is positive.

(c) Monte Carlo simulation analysis

Monte Carlo simulation is a process of deriving a simulated distribution of an output variable (like cash flow or firm value) by randomly combining values of input variables in repeated drawings. It involves the following steps :

- Model the firm's value or cash flow as a function of macro-economic variables (exchange rate, interest rate, inflation rate and so on).
- Specify the probability distribution of each of the macroeconomic variables.
- Select a value, at random, from the probability distributions of each of the macro economic variables.
- Determine the firm's value or cash flow corresponding to the randomly generated values of exogenous variables.
- Repeat steps (3) and (4) a number of times to get a large number of values of the firm or cash flow so that the simulated distribution of firm's value or cash flow can be defined.

(d) Risk adjusted performance measurement

The best practice recommendation on risk management was enunciated in the G30 report on derivatives. The recommendations have been considered very sound and are very much in use currently. They include: Involve senior management

a. Establish independent risk managers for market and credit risk

b. Market to Market on a daily basis with consistent valuation measures

c. Measure and limit market and credit risk rating using value at risk (VaR) techniques to estimate probable loss over a period of time

d. Strengthen operational controls, systems and training e. Make investment and funding forecasts

f. Identify revenue sources and next conduct stress testing

The above recommendations ensure that adequate information could be available for the management to manage risk and avoid nasty surprises. RAPM framework brings together and measures the trade off between risks and rewards.

Q23. What are the characteristics of insurance exposures? Discuss the relationship relative importance of identified risk and probability of occurrence of loss.

Answer 23.

The characteristics for an exposure to be covered by Insurance are as follows:

(i) Pure Risk: These are classified into personal risk, property risk, liability risk and loss of income risk.

a. *Personal Risk* – Can happen due to premature death, old age, sickness or disability and unemployment.

b. *Property Risk* – Can be classified as loss of property, loss of use of property, additional expenses arising out of loss of property.

c. *Liability Risk* – Can arise as injury to people or damage to property or negligence or carelessness.

d. *Loss of Income Risk* – Consequential loss of income arising out of personal or property losses.

(ii) Similar Exposures: Prediction of losses through application of statistical computations with the help of theory of probability require a sizeable population of similar exposures. This is particularly important in that estimation of probabilities for the happening of an event needs an adequate large sample, as accuracy increases with bigger sample.

(iii) Accidental Losses: Insurance contracts allow payments only for a accidental losses which beyond the insured's control. Losses taking place unintentionally alone are covered by Insurance. Suppression of information of a known risk will not entitle for compensation.

(iv) Definite Loss: A definite loss has three facets. It should be recognizable and should be susceptible to verification. The loss should be measurable. This is particularly important in that premium are computed mainly on the estimated quantification of losses.

(v) Large Loss: As there is always a consideration in the form of a premium for receiving a compensation for a loss, care should be taken that the premium to loss ratio is sufficiently favorable. Insurance tariffs normally form a very small percentage sometime even less than a per cent.

(vi) Catastrophic Losses: Catastrophic losses from natural disasters have two main characteristics :

a. They are limited to geographic area where the impact has taken place.

b. Prediction of the event is very difficult. For example storms and floods or earthquakes etc. can create catastrophic losses as such an Insurer will have to take special precautions of calculating the premiums. Even then the loss may be so huge that the consumers normally resort to sharing the risks through reinsurance as also ensures dispersion of risks over a larger geographical area. To estimate the frequency and severity of the catastrophic losses probability analysis is resorted to.

Q24. Write short notes on :

a. Re-insurance

b. Pricing

c. I R D A

d. Utility Theory

Answer 24.

(a) Re-insurance :

All insurance companies have a risk appetite i.e. a limit on the amounts that they can settle for any given claim that is made by the Insured. Any claims made beyond this specified limit by the insured is settled by another company referred to as a Reinsurance company.

Thus, Reinsurance is insurance for insurance companies. Reinsurance is the transfer of part of the risk that a direct insurer assumes by way of an insurance contract on behalf of the insured, to a second insurance carrier, the Re-insurer who has no direct contractual relationship with the insured. Direct insurers need reinsurance to limit annual fluctuations in the losses they must bear on their accounts and to protect the assets of the company in the event of a catastrophe. Direct insurers take on hazards and risks from the policy holders. Re-insurers take on hazards and risks from the direct insurer.

Insurance companies typically enter into an agreement with the Re-insurer and sign a Reinsurance Treaty which states all the terms and conditions of the agreement. The Re-insurer agrees to accept a certain fixed share of risk upon terms as set in the agreement. The well known Reinsurance companies in the world are Swiss Re, Munich Re, and Zurich Re. For example, an Insurance company has a risk appetite of ₹1 million. but has issued a general insurance policy for an engineering project where the sum insured is ₹4 million. If a claim is made on this particular policy, the claim will be settled for ₹4 million. ₹ 1 million will be paid by the Insurance Company that issued the policy and the remaining 3 million will be paid by the Re- insurer.

(b) Pricing :

The process of determining or fixing the rates of premium for a particular 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 asset, type of asset, 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. Where SI is Sum insured.

Traditionally, for motor 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 pricing for each individual will 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 broken up into four parts:

Cost of payment for losses

Cost of operation and maintenance of insurance pool

Reserve for contingencies

Return on Investment.

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 actuarial computations involving mortality rates. Premium rate is often referred as rate per unit of exposure.

(c) IRDA :

This institution came into existence on the basis of Insurance Regulatory and Development Authority Act (IRDA), 1999. Providing Licenses for transacting insurance business and reviewing premium rates are the twin activities of IRDA. IRDA is consumer friendly and protects the interests of the consumer through adequate checks, premium rates, products, procedures and investments made by the insurance companies.

The Insurance Regulatory Authority of India (IRDA) regulated the general insurance covers for over a decade. Owing to the increase in the number of players in the Indian insurance market in the last few years and the fierce competition in the General Insurance segment, IRDA wanted to de tariff the market in January 2007 and Insurers were given greater freedom to price the three insurance covers that were still regulated by IRDA: fire, engineering and motor. Policies can now be priced on a standalone basis, and therefore match the risk.

The second phase of de tariffing will allow the Insurers to structure their products as well where they may be allowed to offer some optional covers in addition to the compulsory covers. In other countries like U.S.A. where product structuring is allowed, factors like the colour of the car also can influence premiums.

De tariffing would allow Insurers to lower premiums. For policyholders, de tariffing is always beneficial. For the same amount of premium, customers can get a higher sum insured. The industry can also benefit from this, since lower premiums will lead to increased sales and thus product penetration.

(d) Utility Theory :

The destruction caused by any unforeseen event is referred to as "Risk". In the insurance business, people exposed to the same risk form a group and share the loss together. Insurance companies collect the shares (Premiums) in advance from the group and create a fund. This fund is utilized to pay for the loss (Claims) that is incurred by any member of the group.

Risks can be classified into various types:

a) Financial and non-financial risks
b) Dynamic risks
c) Speculative risks

Risk cannot be avoided through insurance but may be considered as a means to transfer the risk. It is also a mechanism to compensate the financial and economic loss due to risk. Safety measures and damage control management can be adopted to mitigate or eliminate the magnitude of risk. The fundamental principle of insurance is to share the losses and to substitute uncertainty with certainty. Expected utility theory emphasizes that the demand for insurance is a demand for certainty. The conventional specification of the theory perceives that the buyers of insurance prefer certain losses to actuarially equivalent uncertain losses. But certain other surveys indicate that individuals actually prefer uncertain losses to actuarially equivalent certain losses. This can be explained by saying that "the purpose of any insurance policy is to convert an uncertain, but potentially large loss into a certain small loss. Such a conversion benefits the consumer, if greater losses cause progressively larger declines in utility (i.e., if there is diminishing marginal utility of wealth)" – Newhouse, 1978, page.19. For example, insurance against fire peril where the bigger part of the loss will be insured that is uncertain for a specific premium today.

Another approach evaluates a conventional expected utility theory explaining the demand for insurance by an individuals demand for an uncertain *payoff* of income in a pre specified state. This can be explained through the demand for health insurance. According to this theory, becoming ill fundamentally changes preferences. Thus an insured customer is able to transfer income into the ill state where the marginal utility of income is greater.

Q25. What is Insurance ? What are the requirements & characteristics of an insurance contract?

Answer 25.

Insurance can be defined as transferring or lifting of risk from one individual to a group and sharing of losses on an equitable basis by all members of the group. In legal terms insurance is a contract (policy) in which one party (insurer) agrees to compensate another party (insured) of its losses for a consideration (premium). Exposure to loss is the insured's possibility of loss.

Insurance is a means whereby a large number of people agree to share the loss which a few of them are likely to incur in the future. Insurance is also a means for handling risk. There is an uncertainty related to the risk. The business of Insurance is related to the protection of the economic value of any asset. So, every asset that has a value needs to be insured. Both tangible goods and intangibles can be insured.

Requirements of an insurance contract

Four requirements are laid down for a valid insurance contract as below:

Agreement must be for a legal purpose, i.e., the contract of Insurance should not violate the principle of Insurable Interest and it is a contract of Uberrimae Faide (Utmost Good Faith)

Parties must have legal capacity to contract; Minors, Lunatics, Insolvents, Intoxicated persons, etc. do not have the legal capacity and cannot enter into an insurance contract.

There should be a **valid offer** and **acceptance** and

There must be **exchange of consideration** in response to an agreement which defines the quantum of possible loss to the insured. The premium amount is paid by the Insured by way of consideration on the basis of the policy risk insured. The Insurer's consideration will be a promise to indemnify the loss of the insured on the occurrence of the insured's risk.

Characteristics of insurance contract

Following are the unique characteristics which are distinct from other forms of contract.

Aleatory contract (Dependent on chance): The values exchanged by the contracting parties in an insurance contract are unequal as they are dependent on chance or in other words in an insurance contract result depends entirely as risk. If the loss arises, compensation is paid by the Insurer on the occurrence of peril. If it doesn't occur insurer does not pay any compensation while the premium gets paid to the insurer. The question of paying compensation does not arise.

Conditional Contract: Insurance contracts lay down conditions like providing proof of insurable interest, immediate communication of loss, proof of loss, and payment of premium by the insured.

Contract of Adhesion: Legally obligatory on the part of the insurer to explain the terms of contract fully to all the parties. This is particularly important as under contract of adhesion, any ambiguity in the wording of the agreement will be interpreted against the insurer as he had laid down the terms.

Unilateral Contract: Insurer is the only party to the contract who makes promises that can be legally enforced.

Generally, Non life insurance contracts are usually annual contracts and have to be renewed each year. Each time the policy is renewed a new contract is issued by the Insurer.

Q26. Write short notes on :

a. **CAPM**
b. **APT**

Answer 26.

(a) CAPM :

Harry Markowitz developed an approach that helps an investor to achieve his optimal portfolio position. Hence, portfolio theory, in essence, has a normative character as it prescribes what a rational investor should do.

William Sharpe and others asked the follow up question : If rational investors follow the Markowitizian prescription, what kind of relationship exists between risk and return? essentially, the Capital Asset Pricing Model (CAPM) developed by them is an exercise in positive economics. It is concerned with two key questions :

- What is the relationship between risk and return for an efficient portfolio ?
- What is the relationship between risk and return for an individual security?

The CAPM, in essence, predicts the relationship between the risk of an asset and its expected return. This relationship is very useful in two important ways. First, it produces a benchmark for evaluating various investments. For example, when we are analyzing a security we are interested in knowing whether the expected return from it is in line with its fair return as per the CAPM. Second, it helps us to make an informed guess about the return that can be expected from an asset that has not yet been traded in the market. For example, how should a firm price its initial public offering of stock?

Although the empirical evidence on the CAPM is mixed, it is widely used because of the valuable insight it offers and its accuracy is deemed satisfactory for most practical applications.

CAPM is based on the following assumptions :

- Investors are risk averse.
- Security returns are normally distributed,
- The utility function of investors is quadratic,
- Investors have homogeneous expectations – they have identical subjective estimates of the means, variances and co-variances among returns,
- The market is perfect: there are no taxes; there are no transactions costs; securities are completely divisible; the market is competitive,
- The quantity of risky securities in the market is given.

Looking at these assumptions, one may feel that the CAPM is unrealistic. However, the value of a model depends not on the realism of its assumptions, but on the validity of its conclusions. Extensive empirical analysis suggests that there is a lot of merit in the CAPM.

(b) APT

While the CAPM represents a seminal contribution to the field of finance, many empirical studies have pointed towards its deficiencies in explaining the relationship between risk and return.

A key challenge to the CAPM came from a set of studies that have suggested that it is possible to rely on certain firm or security characteristics and earn superior returns even after adjustments for risk as measured by beta. Examples : Banz found that small cap stocks outperformed large cap stocks on a risk- adjusted basis; Basu found that low P/E stocks outperformed high P/E stocks, after adjustment for risk; more recently, Fama and French documented that ' value stocks' (stocks with high book-to-market price ratios) generated larger returns than 'growth stocks' (stocks with low book-to-market ratios), on a risk- adjusted basis.

In an efficient market such return differentials should not exist. Does it mean that the markets are not particularly efficient for long periods of time ? Or, does it mean that the markets are efficient but a single
– factor model such as the CAPM does not capture risk adequately?

Since it is unlikely that markets are inefficient for extended periods of time, financial economists began looking for alternative risk-return models, beyond the CAPM. In the mid-1970s, Stephen Ross developed an alternative model called the Arbitrage Pricing Theory (APT) which is reasonably intuitive, requires only limited assumptions, and allows for multiple risk factors.

The APT does not require the following assumptions (which under gird the CAPM):the utility function of investors are quadratic; security returns are normally distributed; the market portfolio that contains all risky assets is mean-variance efficient.

The APT only assumes that the capital markets are perfectly competitive and that investors always prefer more wealth to less wealth with certainty.

Q27. What are the tools for managing enterprise risk. Discuss in brief.

Answer 27.

Instrument	Purpose	Remarks
Guarantee	Guarantees can be financial guarantees or performance guarantees. Financial guarantees protects against the financial loss on failure to meet financial obligations Performance guarantees are protection against non-performance of contractual obligations.	Financial institutions provide guarantees as a riskcover against a collateral bythe buyer for a consideration.
Letter of credit or documentary credit	Guarantee against non payment of purchase consideration by the buyer	Financial institutions issue this instrument for a consideration. It can be revocable or irrevocable. Can also be revolving
Underwriting	Underwriting is a protection mechanism available in the capital market to cover the risk of non subscription to a public issue	Financial institutions offer this risk cover for a consideration after due evaluation of risk
Collateralized debt obligations	Taken against short term and long term loans for working capital as well as fixed assets	Financial institutions offer this risk cover for a consideration after due evaluation of risk and cover themselves completely either through hypothecation or pledge orequitable markets
Asset Securitization	Companies offering financial services of hire purchasing, leasing, etc try to raise finance through this method	This is a special purpose vehicle (SPV) to manage default risk. Financial institutions as well as public subscribe to this method for a consideration in the form of interest and securitization is available from the assets that arebeing traded
Factoring	Companies resort to this instrument both as a risk cover and insure cash flow	Specific financial institutions called factoring companies offer this service for a commission with recourse or without the recourse

Q28. How is project management done in practice?

Answer 28.

In reality, the risk assessment is done through considering the various components of the financial estimates and developing certain judgmental approaches:

Estimation of revenues : Revenues projected for a project need to be justified on the basis of real data available and then the projections are made conservatively. This avoids optimistic projections of income.

Cost estimates : Always include a margin of safety to take care of impact of inflation over the time horizon for which the projections are being made. Here again the margin of safety is computed on the basis of trend analysis of inflation over the recent past and the lead indicators that are available from fundamental analysis.

Acceptable return on investment : This is the prime measure and as such it should be arrived at on the basis of certain consensus. It will depend on the payback period to be assumed, the industry experience and the company's norm for return on any new project on the basis of the current experience.

Overall certainty index : The critical risks of the project are identified and the certainty index of each of these risks is quantified. Then the overall certainty index is developed as an average of the critical indices already computed. For instance, raw material availability, power availability, intensity of competition is a few of the risks, which are quantified in terms of certainty indices. The cumulative average is the overall certainty index.

Judgmental perceptions : Three different estimates of return on the investment are developed – pessimistic, most likely and optimistic on the basis of the stage at which the particular industry is in its life cycle. On the basis of the three estimates and comparing them with the earlier methods available on certainty equivalent coefficient, a judgmental decision can be taken.

Q29. What is systematic risk and what is unsystematic risk? Discuss the further classification of systematic and unsystematic risk.

Answer 29.

The risk is understood as the sacrifice made by an individual by deferring the use of money to a future day by investing that money in a venture promising a higher return which has uncertainty. The forces that contribute to the variations in return can both be external or internal to a company in which an individual has invested. These forces can partly be controllable and the remaining uncontrollable. The uncontrollable portion, which is essentially external, is known as systematic risk and the controllable internal risk is known as unsystematic risk.
The external or systematic risk can be classified as three types of risk:

Market Risk: Variability in return on investments in the market is referred to as market risk. This is caused by investor reaction to the tangible as well as intangible events. Tangible events like economic, political, social events and intangible events arising out of a market psychology or the other factors like interest rates and inflation also form part of the forces behind market risk.

Interest Rate Risk: This risk refers to the uncertainty of market volumes in the future and the quantum of future income caused by the variations in the interest rates. These interest rates are normally controlled by the Reserve Bank of India in our country and the exigencies for changing the interest rates arise out of many economic factors which are monitored by the central bank i.e, R.B.I. Normally, when the interest rates increase the companies with higher quantum of borrowed money will have to pay out higher quantum of interest reducing their earnings and vice versa.

Purchasing Power Risk : Purchasing power risk is the uncertainty of the purchasing power of the monies to be received, in the future. In short purchasing power risks refers to the impact of inflation or deflation on an investment. Prudent investors normally include a premium for purchasing power risk in their estimate of expected return.

Exchange Risk: With the globalization of market cross border transactions are on the increase. Balance of payments comprising the net effect of exports and imports are subject to fluctuation in the various currencies. As recently, the strengthening of Rupee against the Dollar imports has made imports cheaper and exports costlier. The need to recognize this exchange risk is obvious as the international trade operations may be profitable or loss-making unless this risk is taken care of.

Unsystematic Risk: Unsystematic Risk is that fraction of total risk which is unique to a company or an Industry due to inherent internal factors like managerial capabilities, consumer responsiveness, labour unrest, etc. The operating environment of the business and the financing modalities involve this unsystematic risk. The first one is known as the *Business Risk* and the second is the *Financial Risk*

Business risks can be again divided into internal and external business risks. Internal business risk is mainly due to the variations in the operational efficiency of the company. The external business risks arise out of circumstances imposed on the company by external forces like business cycle, certain statutory restrictions or sops.

Financial risk is associated with the modalities adopted by a company to finance its activities. For instance the financial leverage like the Debt Equity Ratio or the type of borrowings and the variations thereof introduce financial risk. Lower the debt less is the financial risk

30. (a) What are solvency related measures for risk management?
(b) What are performance related measure for risk management?

Answer 30. (a)

Solvency-related measures (these measures concentrate on the adverse "trail" of the probability distribution
– and are relevant for determining economic capital requirements)

Probability of ruin – the percentile of the probability distribution corresponding to the point at which the capital is exhausted.

Shortfall risk – the probability that a random variable falls below some specified threshold level. (Probability of ruin is a special case of shortfall risk in which the threshold level is the point at which capital is exhausted.)

Value at risk (VAR) – the maximum loss an organization can suffer, under normal market conditions, over a given period of time at a given probability level. VaR is a common measure of risk in the banking sector, where it typically calculated daily and used to monitor trading activity.

Expected policy holder deficit (EPD) or economic cost of ruin (ECOR) – an enhancement to the probability of ruin concept (and thus shortfall risk and VaR) in which the severity of ruin is also reflected. Technically, it is the expected value of the shortfall.

Tail Value at Risk (Tail VaR) or Tail Conditional Expectation (TCE) – an ECOR-like measure in the sense that both the probability and the cost of "tail events" are considered.

Tail events – unlikely but extreme events, usually from a skewed distribution. Rare outcomes, usually representing large monetary losses.

Answer 30.(b)

Performance-related measures (these measures concentrate on the mid-region of the probability distribution –see "risk profile" above – i.e., the region near the mean, and are relevant for determination of the volatility around expected results):

- Return on equity (ROE) – net income divided by net worth
- Operating earnings – net income from continuing operations, excluding realized investment gains
- Earnings before interest, 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 investments (CFROI) – EBITDA divided by tangible assets.
- Weighted average cost of capital (WACC) – the sum of the required market returns of each component of corporate capitalization, weighted by that component's share of the total capitalization.
- Economic value added (EVA) – a corporate performance measure that stresses the ability to achieve returns above the firm's cost of capital. It is often stated as net operated profits after tax less the product of required capital times the firm's weighted average cost of capital.