FINAL EXAMINATION

(REVISED SYLLABUS - 2008)

GROUP - III

Paper-13 : MANAGEMENT ACCOUNTING – STRATEGIC MANAGEMENT

Q. 1. For each of the questions given below, one out of four answers is correct. Indicate the correct answer.

(i) The difference between strategic alliances and joint ventures can best be explained by

(a) all strategic alliances are joint ventures

(b) all joint ventures are strategic alliances

(c) all strategic alliances are temporary phenomena

(d) all joint ventures involve equity participation

(ii) Most Indian firms did not have a mission statement till recently because

(a) It was not a statutory requirement

(b) Companies were not professionally managed

(c) Growth options were controlled by Government policy

(d) There was lack of specialists

(iii) BSNLs plan behind introduction of "Internet Plan 99", ISDN Virtual Private Network etc would be an example of :

(a) Utilisation of newer technologies

(b) Portfolio generation

(c) Diversification of business

(d) Product development

(iv) Offensive strategy is a strategy :

(a) For small companies that consider offensive attacks in the market.

(b) For those companies that search for new inventory opportunities to create competitive advantage.

(c) For the market leader who should attack the competitor by introducing new products that make existing ones obsolete.

(d) For those companies who are strong in the market but not leaders and might capture market share from the leader.

(v) Technology adaptation is :

(a) the complete assimilation of technical know-how acquired from a collaborator

(b) the acquisition of technical know-how from the source external to the firm

(c) the acquisition of design from a collaborator and carrying onto necessary modifications thereto

(d) the improvement of the level or quality

Answer 1.

(i) **(b)** – all joint ventures are strategic alliances.

(ii) **(c)** – Growth options were controlled by Government policy

(iii) **(d)** – Product development

(iv) **(d)** – For those companies who are strong in the market but not leaders and might capture a market share from the leader.

(v) **(c)** – the acquisition of design from a collaborator and carrying onto necessary modifications thereto

Q. 2. Write short notes on the following :

(i) Benefits of Strategic management

(ii) Crisis Turnarounds

(iii) Types of Buying Behaviour

(iv) Premium and Penetration Pricing

(v) Strategic Total Cost Management

Answer 2.

(i) Strategic management is defined as a set of decisions and actions resulting in formulation and implementation of strategies designed to achieve the objectives of an organisation.

The following are some of the benefits that would accrue to any company if it practices sound strategic management.

(i) Financial benefits: Improved financial performance in terms of both profit and growth

(ii) Enhanced capability of problem prevention,

(iii) Improved quality of strategic decisions through group interaction,

(iv) Greater Employee Motivation,

(v) Reduction of gaps and overlaps in activities,

(vi) Minimum resistance to change,

(vii) Positive impact on the long-term prosperity of the firm,

(viii) Leads to better analysis and diagnosis of the current and likely future environment, identifying opportunities and threats.

(ii) Crisis turnaround refers to the management measures which reverse the negative trends in the performance indicators of the company. In other words, turnaround management refers to the management measures which turn a sick company back to a healthy one or those measures which reverse the deteriorating trends of the performance indicators such as falling market share, sales (in constant rupees), profitability and worsening debt-equity ratio.

The exact nature of crisis turnaround and the relative importance of different factors may vary from company to company. The important factors commonly employed in turnaround management are :

(i) management factor,
(ii) human resources factor,
(iii) production facilities,
(iv) financial management,
(v) product-mix modifications and
(vi) marketing strategy.

According to one leading organisation scientist, the elements of a successful turnaround strategy are :

(i) change in top management,
(ii) initial credibility-building actions,
(iii) neutralising external pressures,
(iv) initial control,
(v) identifying quick pay-off activities,
(vi) quick cost reductions,
(vii) revenue generation,
(viii) asset liquidation for generating cash,
(ix) mobilisation of the organisation and
(x) better internal co-ordination.

(iii) 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 behavior 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 behavior: 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 behavior - 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 behavior does not pass through the normal belief/ attitude / behavior sequence.

Variety - Seeking buying behavior: 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.

(iv) **Premium Pricing :** New products when entering the market may resort to pricing at a premium. This Idea is to sell the product, which is a novelty item at a higher price, at the beginning, capture the niche market and later on lower the price and thereby make huge initial cash flows.

Following are the situations, when Premium Pricing is effected :

(i) When the new product is a drastic improvement or is far superior to the existing options. In such situations and assuming consumers are less sensitive to price in the early stages, marketer can charge high price for its offering.

(ii) When the product seems to have a high esteem value;

(iii) When the potential customers are willing to pay high prices;

(iv) When there is demand-elasticity for the demand of the product;

(v) When the BRAND of the product is identifiable and distinguishable.

(vi) The Initial high price also serves to skim the cream of the market, as long as a section of the market, (i.e. early adopters) are keen to buy a superior quality product.

(vii) This sort of premium pricing strategy is okay as long as the demand is likely to be far greater than firm's ability to meet the level of demand.

However, premium, pricing strategy is not always appropriate. It does have some drawbacks. It does not encourage rapid adoption or diffusion of the product. Moreover, as premium pricing usually results in high profit margins, it is likely to invite more new competition.

Penetration Pricing : It is a strategy where marketer deliberately keeps the offering at a somewhat lower price as a wedge to get into mass market early.

It is appropriate when :

(i) The main target is to capture major portion of the market share.

(ii) Market is highly price sensitive and the demand is highly elastic.

(iii) It is possible to manage with low prices and low margin as long as the sales volume is large, (e. g. Lifebuoy soap, Nirma detergent)

(iv) Market is unwilling to pay a higher price to obtain the same product. This was the case in case of handsets of mobile phones in India. With drop in price, the market expanded at a rapid pace.

Example : Reliance has penetrated into the Telecom market with its low price and has obtained a big chunk of the market share.

(v) Strategic Total Cost Management is a new world-class approach to Cost Management. So long we had been classifying cost under 3 heads - as variable, semi-variable and fixed. When cost as a strategy is to be implemented, it presupposes that there is a time horizon, which is longer than a few accounting periods. In such a time-span, even the so-called fixed costs tend to vary e. g., rent, taxes, salaries, etc. So, the total cost management strategy has evolved a new classification namely,

Bed rock Fixed Costs e.g., depreciation, patent, amortisation, etc. , Managed Costs-like rent, taxes, salaries, maintenance, advertising, etc., Truly Variable Costs- like materials, royalties, freight, overtime cost, etc.

The above classification helps in arriving at Break-even points, which are more credible and take into consideration the changes in the costs over a period. A single break even is not possible and not acceptable in the Total Cost Management.

Another very important feature of Total Cost Management is that almost all costs are manageable through cost strategy as even period costs tend to vary over time. For instance, rents, which are considered as fixed cost under normal parlance are treated as, managed costs in Total Cost Management Strategy. This is particularly so, because the quantum of rent variation can be managed through leasing, tax-planning etc.

Introduction of Strategic Total Cost Management can embrace many different areas in business and as such there are specific tools to be employed for the implementation as follows :

Enterprise wide cost system,

Production Cost System,

Marketing Cost Management,

Support Cost Management,

Transformation Cost Management.

Strategic Total Cost Management emphasizes that enduring cost benefits will accrue to a company only when the organisation aligns its information systems to its strategic goals. ERP (Enterprise Resource Planning) concept stems from this tenet and introduces automation in areas where the human intervention may not be so efficient but more costly.

Q. 3. (a) Dabur, The pharmaceutical company wants to grow its business. Draw Ansoff's Product Market Growth Matrix to advise them of the available options.

(b) "An organisation can choose from a wide variety of grand strategies such as Stability Strategies, Growth Strategies, Retrenchment Strategies and Combination Strategies". Explain these strategies and highlight the conditions under which each one is the most appropriate.

Answer 3. (a)

The Ansoff's product market growth matrix (proposed by Igor Ansoff) is a useful tool that helps businesses decide their product and market growth strategy. With the use of this matrix a business can get a fair idea about how its growth depends upon its new or existing products in both new and existing markets.

The Ansoff's product market growth matrix is as follows :

	Existing Products	New Products
Existing Markets	Market Penetration	Product Development
New Markets	Market Development	Diversification

Based on the Matrix, Dabur may segregate its different products. Being in pharmaceuticals development of new products is result of extensive research and involves huge costs. There are also social dimensions that may influence the decision of the company. It can adopt penetration, product development, market development, market development or diversification simultaneously for its different products.

Market penetration refers to a growth strategy where the business focuses on selling existing products into existing markets. It is achieved by making more sales to present customers without changing products in any major way. Market development refers to a growth strategy where the business seeks to sell its existing products into new markets. It is a strategy for company growth by identifying and developing new markets for current company products. Product development is refers to a growth strategy where business aims to introduce new products into existing markets. It is a strategy for company growth by offering modified or new products to current markets. Diversification refers to a growth strategy where a business markets new products in new markets. It is a strategy by starting up or acquiring businesses outside the company's current products and markets.

As market conditions change overtime, a company may shift product-market growth strategies. For example, when its present market is fully saturated a company may have no choice other than to pursue new market.

Answer 3. (b)

Four grand strategies : stability, growth, retrenchment and combination are options for the pace or level of efforts in the current business definition or for changing the business definition.

Stability : A stability strategy is a strategy that a firm pursues when -

It continues to serve the public in the same product or services, market and function sector as defined in its business definition or in very similar sectors.

Its main strategic decisions focus on incremental improvement of functional performance.

Stability strategies are implemented by 'steady as it goes' approaches to decisions. Few major functional changes are made in the product or service line, markets or functions. In an effective stability strategy, a company will concentrate its resources where it presently has or can rapidly develop a meaningful competitive advantage in the narrowest possible product - market- function scope consistent with its resources and market requirement.

Growth : A growth strategy is a strategy that a firm pursues when -

It serves the public in additional product or service sector or adds markets or functions to its definition.

It focuses its strategic decisions on major increases in the pace of activity within its present business definition.

A firm implements this strategy by redefining the business- either adding to the scope of activity or substantially increasing the efforts of the current business. Growth is usually thought of as 'the way' to improve performance. An increase in assets or sizes is thought by many to yield growth in profit or ROI. Several studies support this proposition.

Retrenchment : A retrenchment strategy is pursued by a firm when -

It sees the desirability of or necessity for reducing its product or service lines, markets on functions.

It focuses its strategic decisions on functional improvement through the reduction of activities in units with negative cash flows.

A firm can redefine its business by divesting itself of a major product line or an SBU. It could abandon some market territories. A firm could also reduce its functions. Of course, the ultimate redefinition is total liquidation.

Combination : A combination strategy is a strategy that a firm pursues when -

Its main strategic decision focus on the conscious use of several grand strategies at the same time (simultaneously) in several SBUs of the company.

It plans to use several grand strategies at different future times (sequentially).

With combination strategy, the decision makers consciously apply several grand strategies to different parts of the firm or to different future periods. The logical possibilities for a simultaneous approach are stability in some areas, growth in others; stability in some areas, retrenchment in others; retrenchment in some areas, expansion in others; and all three grand strategies in different areas of the company.

Q. 4. (a) Given below is an extract from the literary supplement of a leading newspaper.

<u>An imprint of one's own</u>

"Earlier, Publishing houses, focusing on writing by women and books on women-oriented subject, might have been inconceivable. But now such Publishing houses, mostly with a distinct feminist slant to what they publish, have become a reality worldwide.

Virago, Women's Press, Kali for Women, Stree, Labyrinth, Attic Press, Minnesota Women's Press, Street Women Press etc., have not only given women a voice long due to them, but have also earned themselves a respectable position in the Publishing Industry.

In fact, Seagull Bookstore is possibly the only bookstore in the city of Kolkata that has a separate shelf for books on "gender". Seagull Bookstore has translated a lot of Mahasweta Devi's works into English, which have reached many people all over the world."
Does this convey any strategy-related message?
If so, write in brief a note on the same.

(b) Discuss how 'Gap Analysis' might be applied to a product/market situation.

Answer 4. (a)

The strategy adopted by publishing houses of having books written by women and having books on women oriented subjects clearly indicates a Niche strategy.

By having books from women writers, publishers have successfully created a distinct position vis-à-vis the other general publishers, thus overcoming competition. Such a strategy would not only help in creating a new market space by attracting a new segment of customers – women. It would earn them a respect of being a firm that thinks beyond profit and takes care of women by 'giving them a voice long due to them'.

Answer 4. (b)

If 'gap analysis' is applied to a product/market situation, the organisation will consider its targets for different types of products it wants to manufacture and different types of markets/ market segments where it wants sell its products.

The product/market targets may be quantified —

(i) The organisation should have targets (quantitative) for its products it wants to sell, classified into —

- Those in the introductory stage of their life, those in the growth stage, those in the maturity stage and those in the decline stage (PLC classification);
- Cash cows, stars, dogs and question marks (BCG classification);
- What sort of products the organisation wants to sell, e.g. does it want a more diversified range of products?

(ii) There should also be targets for markets/market segments that the organisation would like to be in and targets for —

- Market share or market segment share (both in the existing markets and the markets it would likely to enter into);
- Market positioning - positioning is concerned with such matters as product quality, image and reliability, price, outlets, types of customers.

A projection of the organisation's products and the market shares and market positioning for each of its products would be made on the assumption that —

- No new products are developed.
- The market mix for the existing products remains the same.

The gap could be analysed in terms of -

- What products the organisation will be missing from the product range?
- What markets/market segments it is failing to enter into?
- How far out of position in the market will the product be?

Strategies to close the gap would include —

- new product development strategies or new market development strategies;
- a strategy of product and market diversification through a takeover policy;
- a marketing mix strategy to gain the required position in target markets.

Q. 5. M/s. Milton Ltd. has business organized as three divisions and Head Office. The divisions are based on market grouping, which are Retail, Wholesale and Government. The divisions do not trade with each other. The main method of control of the divisions has been the requirement to earn a return on investment (ROI) of 15% p.a. The definition of return and capital employed is provided by Head Office, as is the criterion rate of 15%.

The recent experience of M/s. Milton Ltd., is that the group, as a whole, has been able to earn 15% ROI but there have been wide variations between the results obtained by different divisions. This infringes upon another group policy that forbids cross-subsidization, i.e., each and every division must earn the criterion ROI.

M/s. Milton Ltd., is now considering divestment strategies and this could include the closure of one or more of its divisions.

The Head Office is aware that the Boston Product Market Portfolio Matrix (BPMPM) is widely used within the divisions in the formulation and review of marketing strategies. As it is so widely known within the group and is generally regarded by the divisions as being useful, the Head Office is considering employing this approach to assist in the divestment decision.

***You are required to* :**

(i) Evaluate the use by M/s. Milton Ltd. of the ROI and its policy that forbids cross-subsidization.

(ii) Describe the extent to which the BPMPM could be applied by M/s. Milton Ltd., in its divestment decision. Evaluate the appropriateness of the use of BPMPM for this purpose.

Answer 5.

Return on investment and Cross Subsidization :

ROI is widely used as a means & measure to evaluate performance. So M/s. Milton Ltd has rightly adopted it as a toll to monitor the performance of the company as a whole as well as its divisions.

However, ROI can also be misinterpreted to one's own interest. The misinterpretation can be in either of the following forms :

(i) The returns can be presented with distortions. As profit is usually calculated after depreciation of fixed assets, depreciation rates can be easily influenced.

(ii) The figure w.r.t. capital employed for investment can also be engineered.

(iii) It is important to note that ROI excludes risk.

(iv) ROI ignores business cycle. In the case of the divisions of M/s. Milton Ltd., it is possible that the business cycle of the three divisions could be of different lengths.

Issue with Cross Subsidization :

The issue of Cross Subsidization is a rather complex concept. No data are available regarding allocation of investment funds. If the Head Office allocates them and the division cannot take their own investment decisions, there is cross-subsidization as it were one-division's hard-earned cash is used to buy another division's assets.

Appropriateness of the use of BCG Market Portfolio Matrix for Divestment Decision :

BCG as a strategy aims at linking the overall growth of the market for a product and the growth in the market share of a product with the product's cash-generation activities. BCG Matrix classifies company's products in terms of potential cash generation and cash expenditure requirements into cash cows, dogs, stars and question marks.

Stars are products with a high share of a growth market. In the short term, these require capital expenditure, in excess of the cash they generate, in order to maintain their positions but promise high return in future.

In due course, however, stars become cash cows, which are characterized by a high market share but low sales growth. Cash cows need very little capital expenditure and generate high level of cash income.

Question marks are products with a high growth market but with a low market share.

Dogs are products with a low share of market. They may be ex-cash cows that have now fallen on hard times. Dogs should be allowed to die.

BCG Matrix may not be suitable for application to businesses with divisions as in the case of M/s. Milton Ltd. The problem is that we do not know enough about the firm's product range to suggest how the matrix could be applied. It will not be appropriate if the divisions are allotted in any of the four quadrants of the BCG Matrix. Moreover, BCG Matrix should not be used is isolation as at time dogs may have a low growth market but can earn sufficient profits.

Q. 6. (a) Name any major organisation and list down the strengths, weaknesses opportunities and threats for that organisation.

(b) Explain the methodology adopted to identify such a SWOT.

Answer 6. (a)

Take, for instance, the case of TISCO.

Its strengths have been :

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

Its weaknesses have been mainly that

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

Opportunities that could be spelt in these circumstances are :

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

The lurking threats for the organisation are several :

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

Answer 6. (b)

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

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

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

Q. 7. (a) While Pioneers generally enjoy certain advantages, sometimes, the crafty imitators or the later entrants too, enjoy their share after a pioneers' successful entry.

In view of the above –

(i) List the advantages enjoyed by the pioneers;

(ii) Identify the benefits the imitators or the later entrants may enjoy; and

(iii) Discuss some successful strategies taken by such non-pioneers in India.

(b) Distinguish between 'Strategy' and 'Policy'.

Answer 7. (a)

A 'Pioneer' is defined as a firm, which introduces a product or service in the market and sells it successfully.

An 'imitator' is one who copies at least some features of the pioneers' product.

A 'Late entrant' is one who enters the market after a pioneer's successful entry.

(i) Pioneer's advantages may be :

- Image and reputation
- Brand loyalty leading to long-term market share
- Opportunity to pick the best market position
- Technological leadership
- Setting product standards
- Access to preferential distribution

(ii) Imitators' or later entrants' benefits are :

- Can avoid products having no potential

- Can decide for market entry as and when favourable – thus reducing costs and risks.
- Need not spend much on R&D as it is borne by the pioneer.
- Initially, pioneer's product in the market is poorly formed and later entrants stand to gain thereby.

(iii) Strategies by non-pioneers :

- **Low price penetration strategy –** Such a strategy may cause the pioneer's downfall. For example, Melmoware's downfall to others likes Sunware, Superware, etc. in durable crockery.
- **Imitate and improve strategy –** Some imitators succeed being second but often better. Later entrants do not imitate but improve upon the pioneer's design and gain consumer acceptance. For example, Eagle Industries (Thermo Flask) was pioneer but Milton and Cello surpassed the pioneer.
- **Market power strategy –** Pioneers, it is believed, erect impenetrable entry barriers that keep imitators at bay. But when industry giants, as imitators, decide to move into the market with unparallel strengths that overwhelm the pioneer, entry barriers break. TELCO (the market giant in heavy commercial vehicle) used this strategy to enter in the light commercial vehicle market.
- **Conscious Parallelism Strategy –** This is common in capital-intensive homogeneous product industries, eg. Steel, Chemicals, Fertilizers etc.

Answer 7. (b)

Strategy : Strategy refers to the determination of the purpose or mission and the basic long-term objectives of an enterprise, and the adoption of courses of action and allocation of resources necessary to achieve these aims. Therefore, objectives are a part of strategy formulation.

Policy : Policies are general statements or understandings that guide managers thinking in decision making. They ensure that decisions fall within certain boundaries. They usually do not require action but are intended to guide managers in their commitment to the decision they ultimately make. The essence of policy is discretion. Strategy, on the other hand, concerns the direction in which human and material resources will be applied in order to increase the chance of achieving selected objectives.

Certain major policies and strategies may be essentially the same. A policy of developing only through retailers may be an essential element of a company's strategy for new product development or marketing. One company may have a policy of growth through the acquisition of other companies, while another may have a policy of growing only by expanding present markets and products. While these are policies, they are also essential elements of major strategies. Perhaps one way to draw a meaningful distinction is to say that policies will guide a manager's thinking in decision - making if a decision is to be made while a strategy implies the commitment of resources in a give direction.

Q. 8. (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 8. (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 –

- Alternative choices,
- Possibility of various outcomes against a particular choice,
- Occurrence of probabilities against an alternative, and
- 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 maximise pay-offs and minimise costs.

Answer 8. (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 organisation charts. A road map abstract the facts like distance, direction, kinds of highways, bridges and tunnels, etc. needed by a driver. Similarly, in an organisation 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 8. (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 organised 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.

Q. 9. (a) What is strategic management? How does it differ from operational management?

(b) What are the strategies adopted for Corporate Risk Management?

Answer 9. (a)

Strategic management covers the entire cycle of planning and control at a strategic level. It is a process by which an organization tries to :

(i) Assess its position within its environment (Strategic analysis);

(ii) Generate as well as choose a set of options (Strategic choice);

(iii) Implementation of strategies;

(iv) Review and control.

Apart from being focused on making optimal strategic decision, strategic management is also focused on producing strategic results. It is not only analytical process, but also an organizational action process. It is not only about choosing things to do, but also about the people, who will do them. Thus it commands; widespread strategic thinking; coherent reinforcing management process; supportive value system and climate.

Difference between strategic and operational management

Operational management	Strategic management
Concerned with goals, derived from established objectives.	Concerned with the identification and evaluation of new objectives and strategies.
Goals usually have been validated through extensive past experience	New objectives and strategies can be highly debatable; experience within the organization or in other companies may be minimal
Goals are reduced to specific sub-goals for functional units.	Objectives usually are evaluated primarily for corporate significance.
Managers tend to identify with functions or professions and to be preoccupied with means.	Managers need a corporate point of view, oriented to the environment.
Managers obtain evidence of their performance against goals, relatively promptly.	Evidence of the merit of new objectives on strategies is often available only after several years.
Incentives, formal and social, are tied to operating goals.	Incentives are at best only loosely associated with planning
The rules of game become well understood. Experienced individuals feel competent and secure.	New fields of endeavour may be considered. Past experience may not provide competence in a new game.
The issues are immediate, concrete and familiar	Issues are abstract deferrable (to some extent) and may be unfamiliar.

Answer 9. (b)

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

- **Risk Avoidance** is a strategy by which the organisation does not engage in the activity which involves any risk.
- **Risk Reduction** is another strategy where the organisation takes two steps. One is preventing the occurrence of risk and the second one is controlling the number of occurrences. One of the possible ways of reducing the risk is going for large number.

- **Risk Retention** is the most popular method of dealing with risk. Risk retention may be conscious or unconscious. Conscious risk retention takes place when the risk is perceived and not transferred or reduced. When a risk is not recognised, it is unconsciously retained.
- **Risk Transfer** is another method of managing risk. Risk can be transferred to a person willing to take it. Hedging or insurance are best examples for risk transfer.
- **Risk Sharing** is process by which the potential risk is shared among many, so that the loss is not borne by a single person.

Q. 10. It has been argued that products have life cycles whereas brands do not.

Required :

(a) Discuss the validity of the above argument.

(b) Explain the role of brands in the construction of barriers to entry,

(c) Recommend some suitable financial criteria which could be used, at the different stages of the product life cycle, for the purposes of financial control.

Answer 10. (a)

A product can be defined as something which is offered to a market in order to satisfy customer needs in some way; it is a package of benefits. A brand on the other hand, is rather different: it is a name, term or symbol or design or combination of them which is intended to signify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. For example, denim jeans, the product, underpin a number of brands, such as Levis, Wrangler, Lee.

Product life cycles : The life cycle model suggests that a product goes through distinct phases, with different financial and marketing characteristics. The phases are development, launch, growth, maturity and decline. This model applies to some products but not for all. The same customer need for black and white TVs have by and large given way to colour. On the other hand, some products do not have a life cycle. Denim jeans show no signs of fading away, nor does toothpaste, although some stages of the life-cycle model still apply.

Brand life cycle : With brands, the situation is equally ambivalent. Some brands appear immortal, despite the changes in the products they support. This is because they are adequately supported. On the other hand, some brands do or die, if they are not properly supported by advertising and promotion. The statement is thus a false dichotomy. The life cycle model is a tool for marketing managers, not a scientific prediction. What drives both products and brands is customer needs.

Answer 10. (b)

A barrier to entry makes it difficult for a new entrant to gain a foothold in a market. Barriers to entry include economies of scale, product differentiation, capital requirements, switching costs, access to distribution, and other cost advantages. Brands function as entry barrier in the following ways :

(i) **Product differentiation:** Porter discusses two criteria; Brand image is built up through advertising and other special features and reflects both use and signalling criteria.

(ii) Existing firms in an industry may have built up a good brand image and strong customer loyalty over a long period of time, through advertising, product quality etc.

(iii) A firm might develop a variety of brands to crowd out the competition. Some firms own many brands to make it harder for competitors to get noticed by consumers, as there are so many alternatives. This creates a barrier to entry, because new entrants would have to spend heavily to overcome the existing brand loyalties and to build up a brand image of their own.

(iv) With some brands, there are also quite high switching costs, which is why many people are unwilling to change bank accounts because of the inconvenience of so doing.

(v) Economies of scale are also relevant. A certain amount of volume may be necessary to justify the promotion of the brand. Existing producers may already have built up a distribution network which functions best at this level.

Answer 10. (c)

Financial criteria for assessing different stages of the product life cycle — As each stage of the life cycle involves different risks and has different financial characteristics, no one measure is suitable throughout. The table below offers a summary.

	Launch	Growth	Maturity	Decline
Characteristics	High business risk. Negative net cash flow. DCF evaluation for overall investments.	High business risk, neutral net cash flow.	Medium business risk. Positive cash flow.	Low risk. Neutral - positive cash flow.
Critical success factors	Increasing time to launch.	Market share growth. Sustaining competitive advantage.	Contribution per unit of limiting factor; Customer retention.	Timely exit.
Information needs	Market research into size and demand.	Market growth, share. Diminishing returns. Competitor marketing strategies.	Comparative competitor costs, Limiting factors.	Rate of decline; best time to leave; reliable value of assets.
Financial controls	Strategic mile-stones, Physical evaluation. Mainly non-financial measures owing to volatility.	DCF. Market share, Marketing objectives.	ROI, Profit margin, Maintaining market share.	Free cash flow (for elsewhere).

Q. 11. Acquisition and Internal new venturing are tools that companies use to enter any new business. What factors influence the choice between the two? Why do many acquisitions and internal new ventures fail to create value?

Answer 11.

For many organizations, internal new venturing or internal development has always been the primary method for development of strategy and there are some compelling reasons why this should be so. Very often, particularly with products that are highly technical in design or method of manufacture, companies will choose to develop new products themselves since the process of development is seen as the best way of acquiring the necessary skills and knowledge to exploit the product and compete successfully in the market place. A parallel argument would apply to the development of new markets by direct involvement. Although the final cost of developing new activities internally may be greater than that of acquiring other companies the spread of cost may be more favourable and realistic. This obviously a strong argument in favour of internal development for small companies that simply do not have the resources available, in

the short term, to develop in any other way. A related issue is that of minimizing disruption to other activities. The slower pace of change that internal development brings usually fabourable in this.

Perhaps the most compelling reason for development by acquisition is the speed with which it allows the company to enter new product/ market areas. In some cases the product and/ or market are changing so rapidly that it is the only way of successfully entering the market since the process of internal development is by compassion too slow. Another common reason for acquisition is the lack of knowledge or resources to develop certain strategies internally. The competitive situation may influence a company to choose acquisition. In markets that are static and where market shares of companies are reasonably steady, it is often a difficult proposition for a totally new company to enter the market since its presence would upset the equilibrium. Sometimes also there are reasons of cost efficiency that would make acquisition more favourable.

The first disadvantage or factor disfavouring internal development to create value is that of knowledge necessary for developing certain strategies. Processing this knowledge, as also developing an appropriate strategy, may require resources beyond the scope of the company. Perhaps the worst thing a strategic manager can do is to attempt to develop a strategy that is bound to be hamstrung by an inadequacy of resources. The second major disadvantage is the time likely to be required. Environmental conditions may change significantly between the time a strategic decision is taken and its implementation. The overriding problem with acquisition to create value lies in the ability to integrate the new company into the activities of the old, and this is where the major difficulty often lies. Instead of such integration, innumerable behavioural roadblocks may arise because of cultural incompatibility. Often the experience may become traumatic, with many capable managers and experts of the acquired company leaving, thus causing tremendous drainage of human resource. Those remaining may also be uncooperative, distrustful, and any attempt at placating them may be a source of resentment amongst the manpower in the acquiring company.

Steps to be taken to make successful acquisition are –

- Detailed assessment of the rationale for making a particular acquisition
- Compatibility of the two corporate cultures
- Assessment of synergies between the two businesses
- Anticipation of the potential integration problems
- Evaluation of the acquired firm's
  - Financial position
  - Product-market attractiveness
  - Competitive standing
  - Management capabilities

Q. 12. The sequence of strategies suggested by Ansoff is industry specific. Develop this sequence for two diverse industries like Insurance and Colour TVs keeping in mind the Indian market.

Answer 12.

The Ansoff's Matrix identifies four different kinds of Product market strategy that an Industry should adopt. These are Market Penetration, Market development, Product development and Diversification.

Market penetration involves trying to milk more from the existing products and existing markets. If the market as a whole is growing, this might appear a fairly low risk strategy to adopt. Where the market is stagnant, market penetration might involve market share at the expense of other players in the field.

Market development uses existing products in new markets. This strategy might be attractive if the unit has to achieve high sales volumes to utilize capacity efficiently. Product development involves offering new products to the existing markets.

Diversification involves moving into new market with new product.

Ansoff model is a framework for discussing alternative directions. It is a model for identifying for product-market opportunities. There is no criterion for any choice amongst the strategies suggested by Ansoff. There is nothing to stop a company carrying out all the four strategies simultaneously, provided it has the resources. For example, a firm can pursue simultaneously a penetrating strategy in its existing markets as well as diversifying into new ones.

Insurance Sector :

Insurance sector is a on-going growing industry. Hitherto 'Life Insurance Corporation of India' (LIC) had been monopolizing this sector. But under the changed scenario, following liberalization & Globalization, a number of new players have come in and are posing a real threat to the Industry's Leader viz., LIC.

Further the market size of this Industry is very huge. There is lot of scope to develop many new products.

The market is at a developing stage, with the Industry spreading out mostly across the urban and middle class income group.

The sequence of strategies as suggested by Ansoff for the Insurance Sector should be –

- Product development
- Market development
- Penetration and finally
- Diversification.

Product development

Product development involves offering new products to the existing markets.

The scope for product development in this sector is tremendous and this should be accorded the top most priority. A lot of new ideas are fact filtering into our country from different countries abroad. LIC should offer attractive new policies to its existing millions of clientale and thereby retain its number uno status.

Market development

Market development is taking place because of the huge market size and the unawareness of people across the country, especially in rural areas about the product.

Market penetration

We are already noticing the huge market penetration that is taking place in the Insurance Sector. Market players are lashing the premium and are making attractive offers – specially to the rural folk by undertaking big publicity campaigns.

Diversification

Insurance biggies like ICICI Prudential, Bajaj Alianz, who are the two top private sector players have already diversified into new areas like Mutual Fund etc.

To sum up, Ansoff's model has a lot of relevance for the Insurance Sector. All the strategies, as suggested by Ansoff, are being put into play, as per the sequence suggested above.

Colour TV Industry :

Colour TV came into the market for the first time during The Asian Games, 1984. Before that only Black and White TVs were available. In the language of Strategic Management, we can say that the product 'Black and White TVs' were in the Maturity Phase of Product Life Cycle, whereas the Colour TVs had just been only in the 'introduction' Phase.

The sequence of strategies as suggested by Ansoff for the Colour TV Industry should be –

- Market development
- Penetration

- Product development and
- Diversification.

Market development

The Market development for the Colour TV Industry has been growing exponentially in view of a no. of new TV channels that are entering the Indian market specializing in different areas like Sports Channel, Entertainment channel, kids' entertainment, music, knowledge based channel etc. With the introduction of some populist measures taken by some State Government in the south by distributing TVs for the poor and the under-privileged communities the market has suddenly got heated up. Due to the stiff competition, the price have also tumbled down for a colour TV. The market for Black and White TV has almost come to a 'Zero level. Every one are now going crazy for a colour TV!

Market penetration

Market penetration is going on at a feverish pitch, due to the emerging new technology like LCD, Plasma, LED etc.

Product development

Product development has assumed a special significance for the Colour TV industry. There is a huge stress on quality. The final result as a consequence is a squeeze on profit margin, due to market penetration.

Diversification

Diversification to other areas related to shopping goods are taking place. Many players are moving into new products like Home Theatres, Refrigerators etc.

To sum up, Ansoff's model has a lot of relevance for the Colour TV industry. All the strategies, as suggested by Ansoff, are being put into play, as per the sequence suggested above.

Q. 13. A manufacturing company purchase one of the components required for the manufacture of product from two sources, viz. Supplier M and Supplier N. The price quoted by Supplier M is ₹ 15.00 per hundred numbers of the component and it is found that on the average 3% of the total receipt from this source is defective. The corresponding quotation from Supplier N is ₹ 14.50 but the defective would go up to 5% for the total supply. If the defectives are not detected, they are utilized in production causing a damage of ₹ 15.00 per hundred components.

The company intends to introduce a system of inspection for the components on receipt which would cost ₹ 2.00 per hundred components. Such an inspection will, however, be able to detect only 90% of the defective components received. No payment will be made for components found to be defective in inspection.

Offer your opinion,

(i) Whether inspection at the point of reception is justified.

(ii) Which of the two suppliers should be asked to supply.

Assume total requirements of components to be 10,000 numbers.

Answer 13.

(i) If not inspected

Supplier	**M**	**N**
Units supplied (nos.)	10,000	10,000
Defectives expected (nos.)	300	500
Costs		
Purchase cost of components	1,500.00	1,450.00
Production damage on defective components (@ ₹ 15.00 per 100 components)	45.00	75.00
Total	1,545.00	1,525.00
Good components (nos.)	9,700	9,500
Cost per 100 good components	₹ 15.93	₹ 16.05

(ii) If inspected

Supplier	**M**	**N**
Defectives not detected (nos.)	30	50
Defectives detected (nos.)	270	450
Components paid for (nos.)	9,730	9,550
Costs		
Purchase cost of components	1,459.50	1,384.75
Inspection cost	200.00	200.00
Production damage on defective components (@ ₹ 15.00 per 100 components)	4.50	7.50
Total	1,664.00	1,592.25
Good components (nos.)	9,700	9,500
Cost per 100 good components	₹ 17.15	₹ 16.76

On comparing the cost under (i) and (ii) above, we find that it will not be economical to install a system of inspection. Further, it will be advantageous to purchase the components from Supplier M.

Q. 14. A machine used on a production line must be replaced at least every five years. The costs incurred in running the machine according to its age are : ₹

Particulars	**Age of machine (years)**				
	0	**1**	**2**	**3**	**4**
Purchase price	**3,000**				
Maintenance		**800**	**900**	**1,000**	**1,000**
Repairs			**200**	**400**	**800**
Net realizable value		**1,600**	**1,200**	**800**	**400**

Future replacement will be identical with the same costs. Revenue is unaffected by the age of the machine. Assume there is no inflation and ignore tax. The cost of capital is 15%. Determine the optimum replacement cycle.

Present value factors at 15% for years 1, 2, 3 and 4 are 0.8696, 0.7561, 0.6575 and 0.5718 respectively. Present value of annuity at 15% for years 1, 2, 3 and 4 are 0.8696, 1.6257, 2.2832 and 2.8550 respectively.

Answer 14.

The possible replacement options of the machine are every one, two, three & four years.

The annual equivalent cost of each of these replacement policies are as follows :

Replacement every year ₹

Particulars	**Year**	
	0	**1**
Cost	(3,000)	-
Maintenance	-	(800)
Resale value	-	1,600
Total	(3,000)	800
DCF @ 15%	1.0	0.8696
Present value of cash flows	(3,000)	696
Total PV of costs		= ₹ 2,304

Annual equivalent cost $= \frac{2,304}{0.8696} =$ ₹ 2,649

Replacement every two year ₹

Particulars	**Year**		
	0	**1**	**2**
Cost	(3,000)	-	-
Maintenance	-	(800)	(900)
Repairs	-	-	(200)
Resale value	-	-	1,200
Total	(3,000)	(800)	100
DCF @ 15%	1.0	0.8696	0.7561
Present value of cash flows	(3,000)	(696)	76

Total PV of costs = ₹ 3,620

Annual equivalent cost $= \frac{3,620}{1.6257} =$ ₹ 2,227

Replacement every three year ₹

Particulars	**Year**			
	0	**1**	**2**	**3**
Cost	(3,000)	-	-	-
Maintenance	-	(800)	(900)	(1,000)
Repairs	-	-	(200)	(400)
Net realizable value	-	-	-	800
Total	(3,000)	(800)	(1,100)	(600)
DCF @ 15%	1.0	0.8696	0.7561	0.6575
Present value of cash flows	(3,000)	(696)	(832)	(395)

Total PV of costs = ₹ 4,923

Annual equivalent cost $= \frac{4,923}{2.2832}$ = ₹ 2,156

Replacement every four year ₹

Particulars	Year				
	0	**1**	**2**	**3**	**4**
Cost	(3,000)	-	-	-	-
Maintenance	-	(800)	(900)	(1,000)	(1,000)
Repairs	-	-	(200)	(400)	(800)
Net realizable value	-	-	-	-	400
Total	(3,000)	(800)	(1,100)	(1,400)	(1,400)
DCF @ 15%	1.0	0.8696	0.7561	0.6575	0.5718
Present value of cash flows	(3,000)	(696)	(832)	(921)	(800)

Total PV of costs = ₹ 6,249

Annual equivalent cost $= \frac{6,249}{2.8550}$ = ₹ 2,189

Analysis : The machine is suggested to be replaced every three years.

Q. 15. You are the manager of a paper mill (M Ltd) and have recently come across a particular type of paper, which is being sold at a substantially lower rate (by another company -ABC Ltd) than the price charged by your own mill. The value chain for one use of one tonne of such paper for ABC Ltd is as follows,

ABC Ltd. ⟶ Merchant ⟶ Printer ⟶ Customer

ABC Ltd sells this particular paper to the merchant at the rate of ₹ 1,466 per tonne. ABC Ltd pays for the freight which amounts to ₹ 30 per tonne.

Average returns and allowances amount to 4% of sales and approximately equal ₹ 60 per tonne.

The value chain of your company, through which the paper reaches the ultimate customer is similar to the one of ABC Ltd. However, your mill does not sell directly to the merchant, the latter receiving the paper from a huge distribution center maintained by your company at Haryana. Shipment costs from the mill to the Distribution Center amount to ₹ 11 per tonne while the operating costs in the Distribution Center have been estimated to be ₹ 25 per tonne. The return on investments required by the Distribution Center for the investments made amount to an estimated ₹ 58 per tonne.

You are required to compute the "Mill manufacturing Target Cost" for this particular paper for your company. You may assume that the return on the investment expected by your company equals ₹ 120 per tonne of such paper.

Answer 15.

Computation of Target Cost

		Per tonne (in ₹)
ABC Ltd selling price to the merchant		1,466
Less : freight paid by ABC Ltd	30	
Less : normal sales returns and allowances	60	
M Ltds Capital charge	120	210
Target cost for M Ltd		1,256
Less: Shipment cost Distribution Centre	11	
Operating cost in the Distribution Centre	25	36
		1,220
Distribution centre capital charge		58
Less: Target manufacturing cost of the Mill		1,162

Q. 16. Bharat Electronics makes CD Player model 'MN 200'. It has 80 components. Bharat sells 10,000 units each month at ₹ 3,000 per unit. The cost of manufacturing is ₹ 2,000 per unit or ₹ 200 lakhs per month for the production of 10,000 units. Monthly manufacturing costs incurred are as follows :

	(₹ lakhs)
Direct material costs	**100.00**
Direct manufacturing labour costs	**20.00**
Machining costs	**20.00**
Testing costs	**25.00**
Rework costs	**15.00**
Ordering costs	**0.20**
Engineering costs	**19.80**
	200.00

Labour is paid on piece rate basis. Therefore, Bharat considers direct manufacturing labour cost as variable cost.

The following additional information is available for 'MN 200' :

(a) Testing and inspection time per unit is 2 hrs.

(b) 10 % of 'MN 200" manufactured are reworked.

(c) It currently takes 1 hr. to manufacture each unit of 'MN 200'.

(d) Bharat places two orders per month for each component. Each component is supplied by a different supplier.

Bharat had identified activity cost pools and cost drivers for each activity. The cost per unit of the cost driver for each activity cost pool is as follows :

Manufacturing activity	Description of activity	Cost driver	Cost per unit of cost driver
Machining costs	Machining components	Machine-hrs of capacity	₹ 200
Testing costs	Testing components and finished products (each unit of 'MN 200' is tested individually)	Testing hrs.	₹ 125
Rework costs	Correcting and fixing errors and defects	Units of 'MN 200' reworked	₹ 1,500 per unit
Ordering costs	Ordering of components	Number of orders	₹ 125 per order
Engineering costs	Designing and managing of products and processes	Engineering hrs.	₹ 1,980 per engineering hr.

Over a long-run horizon, each of the overhead costs described above vary with chosen cost drivers.

In response to competitive pressure Bharat must reduce the price of its product to ₹ 2,600 and to reduce the cost by atleast ₹ 400 per unit. Bharat does not anticipate increase in sales due to price reduction. However, if it does not reduce price it will not be able to maintain the current sales level.

Cost reduction on the existing model is almost impossible. Therefore, Bharat has decided to replace 'MN 200' by a new model 'PQ 400', which is a modified version of 'MN 200'. The expected effect of design modifications are as follows :

(a) The number of components will be reduced to 50.

(b) Direct material costs to be lower by ₹ 200 per unit.

(c) Direct manufacturing labour costs to be lower by ₹ 20 per unit. Machining time required to be lower by 20%.

(d) Testing time required to be lower by 20%.

(e) Rework to decline to 5%.

(f) Machining capacity and engineering hrs. capacity to remain the same, Bharat currently outsources the rework on defective units.

***Required* :**

(i) Compare the manufacturing cost per unit of 'MN 200' and 'PQ 400'.

(ii) Determine the immediate effect of design change and pricing decision on the operating income of Bharat.

Ignore income tax. Assume that the cost per unit of each cost driver for 'MN 200' continues to apply to 'PQ 400'.

Answer 16.

(i) Comparison of manufacturing cost per unit ₹

	CD player model	
	MN 200	**PQ 400**
Direct material cost	1,000.00	800.00
Direct manufacturing labour cost	200.00	180.00
Machining cost	200.00	160.00
Testing cost	250.00	200.00
Rework	150.00	75.00
Ordering cost	2.00	1.25
Engineering cost	198.00	198.00
Total manufacturing cost per unit	2,000.00	1,614.25

(ii) Immediate effect of design change and pricing on operating income of Bharat **₹ in lakhs**

Revenue loss on 10,000 units (₹ 3,000 - ₹ 2,600) × 10,000		(40)
Saving in costs :		
Direct material (10,000 × ₹ 200)	20.00	
Direct labour cost : (10,000 × ₹ 20)	2.00	
Rework cost : (5% × 10,000 units × ₹ 1,500)	7.50	29.50
Net effect on operating income		(10.50)

Conclusion : Operating income will be reduced by ₹ 10,50,000 as immediate effect. The effect of reduction in components, machine time and testing time will not have any immediate effect. The question demands ascertaining immediate effect on operating income.

Working notes :

(i) Direct material cost :

₹ 1,000 – 200 = ₹ 800 per unit

(ii) Machine hour and machining cost in modified version

Present machine hours : ₹ 20,00,000 ÷ ₹ 200 = 10,000 hrs.

Machine hours per unit = 10,000 hrs. ÷ 10,000 units = 1 hr per unit

Machine hour after modified version = 1 hr – 0.20 hr. = 0.80 hr.

Per unit machine cost in modified version = 0.80 hr × ₹ 200 = ₹ 160

(iii) Testing time :

Total testing hours (present) = ₹ 25,00,000 ÷ ₹ 125 = 20,000 hrs.

Testing hours per unit (at present) = 20,000 hrs ÷ 10,000 = 2 hrs. per unit

Testing time after modification = 2 hrs. – 0.4 hr = 1.6 hrs.

Testing cost after modification = 1.60 hrs. × ₹ 125 = ₹ 200

(iv) Rework cost :

Rework units = 10,000 × 0.05 = 500 units

Rework cost = 500 units × ₹ 1,500 = ₹ 7,50,000

Rework cost per unit = ₹ 7,50,000 ÷ 10,000 = ₹ 75

(v) Ordering cost :

Orders per month = 50 components x 2 orders = 100 orders

Total ordering cost = 100 orders × ₹ 125 = ₹ 12,500

Ordering cost per unit = ₹ 12,500 ÷ 10,000 = ₹ 1.25

(vi) It is assumed that total available hours will be used for manufacturing 'MN 200' model of CD player.

Q. 17. Star Bicycle Company, produced and sold 1,10,000 bicycle annually, under the brand name 'Smart' with a price tag ₹ 899. Like all other players in the industry, Star too was running under capacity. The manufacturing cost of these cycle was material ₹ 300, labour ₹ 200 and manufacturing ₹ 300, 40% of the manufacturing cost was variable. General and administration expenses were 50% of labour cost.

Star has now received a proposal to sell 25,000 bicycles per year under the brand name 'Shine' to a chain store at a price of ₹ 800. The brand will be exclusive for the chain stores as they will market it as their own product. Expenditure for producing 'Shine' will be the same as that of Smart as design of 'Shine' will exactly be same as that of 'Smart' with only some cosmetic changes. To produce 'Shine' however, ₹ 6,00,000 additional fund will be required on an average. Further it estimated that sale of 'Shine' through the chain store will reduce the sale of 'Smart' by 10,000 units.

You are required to calculate the relevant cost of 'Shine', given that the weighted average cost of capital of Star is 15%.

Answer 17.

Relevant cost of Shine bicycle :	₹
Material	300.00
Labour	200.00
Variable overhead (0.4 × 300)	120.00
Cost of capital (0.15 × 6,00,000/25,000)	3.60
	623.60

If Star Bicycle company accept the offer of making 'Shine' for the chain stores the loss contribution due to sale of Smart is going down by 1,00,000 units is relevant, which causes a loss of ₹ (899 – 300 – 200 – 120) = ₹ 279.

The price of Shine then should be ₹ 623.60 + 279 = ₹ 902.60. This is higher than the price of ₹ 800 as offered by the chain store. So, the offer cannot be accepted.

Since the chain store has decided to launch a product like 'Shine', it will do so whether or not Star bicycle company accepts the proposal. As there is excess capacity in the industry it will be able to do so. In that case, the loss of contribution of ₹ 279 is not relevant and star Bicycle Company can accept the proposal of the chain store. Star Bicycle Company should have a closure look in the market condition and the chain store's ability to get a replica of 'Shine' from other manufacturer before Star Bicycle reaches a final decision.

Q. 18. SV Ltd., which has a fairly full order book is approached by a customer with the offer of a contract for a model that is a variant, in terms of dimensions and materials used, of one of its existing products.

Though the customer expects to pay a normal price for the model, he wants SV Ltd. to take account of an 80% learning curve in its price calculation; this level has been shown to be reasonable in SV Ltd's industry for relevant work.

The prospective contract is for a total 464 units made up of an initial order of 160 units, two subsequent orders of 80 units each, and three subsequent orders of 48 units each. SV Ltd. estimates the following costs for the initial order.

***Direct materials* :**

P-8 mtr.	at ₹ 3.50 per mtr.
Q – 12 kg.	at Re 1.00 per kg.

***Direct wages* :**

Department	Hours	Re. per hr.
1	4	1.25
2	50	1.50
3	15	1.00

Fixed overhead Department	Rate per hour (₹)
1	2.00
2	1.00
3	0.80

The nature of the work in the three production departments is as follows :

Department 1 uses highly automatic machines. Although the operators on these machines need to be fairly skilled, their efficiency only affects the quality of the work but can have little impact in the quantity of his department's output which is largely machine-controlled. Department 2 is partially mechanized, whilst Department 3 is an assembly department.

In both departments 2 and 3 the skill of operators is a major determinant of the volume of output.

The terms of the contract price allow for :

Direct materials cost plus 2 ½% profit margin

Conversion cost plus 12 ½% profit margin

You are required to calculate the price per unit for :

(i) The initial order of 160 units.

(ii) The second, third and fourth orders, if given successively but without guarantee of further orders; and

(iii) The whole contract of six orders if given from the start but on the same basis of production and delivery.

***Note* : An 80% learning curve on ordinary graph paper would show the following relationship between the X-axis (volume) and Y-axis (cumulative average price of element subject to the learning curve) :**

x	*y* %	*x*	*y* %
1.0	100.0	2.1	78.9
1.1	96.0	2.2	77.8
1.2	93.3	2.3	76.8
1.3	91.7	2.4	76.0
1.4	89.5	2.5	74.9
1.5	87.6	2.6	74.0
1.6	86.1	2.7	73.2
1.7	84.4	2.8	72.3
1.8	83.0	2.9	71.5
1.9	81.5	3.0	70.7
2.0	80.0	3.1	70.0

Answer 18.

(i) Initial order

Dept. 2	₹	₹
Labour costs (50 hrs. @ ₹ 1.50)	75	
Variable overhead (20%)	15	
Fixed overhead (50 × Re 1)	50	140
Dept. 3		
Labour costs (15 hrs. @ Re. 1)	15	
Variable overhead (20%)	3	
Fixed overhead (15 × 0.80)	12	30
Total cost affected by L.C. i.e. subject to reduction on (subsequent orders)		170

Other labour costs		
Dept. 1 (4 hrs. @ ₹ 1.25)	5	
Variable overhead (20%)	1	
Fixed overhead (4 × ₹ 2)	8	14
Total conversion cost		184
Materials : P (8 × 3.5)	28	
Q (12 × Re 1)	12	40
Total cost		224
Profit (2.5% of ₹ 40)	1	
(12.5% of ₹ 184)	23	24
		248

Selling price per unit for initial order = 248/160 = ₹ 1.55

Note : Department 1 is highly automatic as such not subject to L.C. effect

(ii) Second order of 80 units

Total output = 240 units (i.e. 160 + 80)

Thus the output due to second order increased by 50%

160 = 1.0 = 100%

240 = 1.5* = 87.6% (overall average time)

*240/160 = 1.5 (1.5 = 87.6% as per given table)

		₹
Cumulative reducible cost*		223.38
Less : Charged to first order		170.00
Reducible cost for this order		53.38
Wages/overhead of dept 1 (50% of ₹ 14)		7.00
Total conversion cost		60.38
Materials (50% of ₹ 40)		20.00
Total cost		80.38
Profit (2.5% of ₹ 20)	0.50	
(12.5% of ₹ 60.38)	7.55	8.05
		88.43

*(1.5 × ₹ 170) = ₹ 255 (₹ 225 × 87.6%)

Selling price for second order of 80 units = ₹ 88.43/80 units = ₹ 1.11 per unit.

Third order of 80 units

Total cumulative output 320 units (i.e. 2 times of the first order of 160 units)

Therefore L.C. as per given table will be 80% (overall average time)

		₹
Cumulative reducible cost*		272.00
Less : Charged to first order & second order		223.38
Reducible cost for this order		48.62
Wages/overhead of dept 1 (50% of ₹ 14)		7.00
Total conversion cost		55.62
Materials (50% of ₹ 40)		20.00
Total cost		75.62
Profit (2.5% of ₹ 20)	0.50	
(12.5% of ₹ 55.62)	6.95	7.45
Selling price of this order		83.07

*(2.0 × ₹ 170) = ₹ 340
(₹ 340 × 80%) = ₹ 272
Selling price per unit = ₹ 83.07/80 units = ₹ 1.04 per unit.

Fourth order of 48 units

Total cumulative output 360 units (i.e. 2.3 times of the first order of 160 units) = 76.8% (overall average time)

		₹
Cumulative reducible cost*		300.29
Less : Charged to previous three orders		272.00
Reducible cost for this order		28.29
Wages/overhead of dept (48/160 × ₹ 14)		4.20
Total conversion cost		32.49
Materials (48/160 × ₹ 40)		12.00
Total cost		44.49
Profit (2.5% of ₹ 12)	0.30	
(12.5% of ₹ 32.49)	4.06	4.36
Selling price for fourth order of 48 units		48.85

*(2.3 × ₹ 170) = ₹ 391
(₹ 391 × 76.8%) = ₹ 300.29
Selling price per unit = ₹ 48.85/48 units = ₹ 1.02 per unit.

(iii) Total contract

Orders	Total units
1 × 160	160
2 × 80	160
3 × 48	144
	464

464 units or 2.9 times of initial order of 160 units

Cumulative average time = 71.5% of initial order time.

		₹
Reducible cost*		352.50
Labour/ overhead Dept 1 (2.9 × 14)		40.60
Total conversion cost		393.10
Materials (2.9 × ₹ 40)		116.00
Total maximum cost		509.10
Profit (2.5% of ₹ 116)	2.90	
(12.5% of ₹ 393.10)	49.14	52.04
Total Selling price 464 units		561.14

*(2.9 × ₹ 170) = ₹ 493

(₹ 493 × 71.5%) = ₹ 352.50

Q. 19. Akash Gadgets Ltd. specializing the household gadgets, has just preferred and test marketed a modified version of a popular gadget. It has three components A, B and C one of each required per gadget. All these components are made and assembled in its own factory and capacity utilization of the machines is full. The modification essentially involves a special machining and fixing a new attachment for which the company has provided for double the existing production capacity to take care of possible increased demand.

The cost structure of the modified gadget is as under :

Component	Machine hrs. per unit	Variable cost per unit (₹)	Fixed cost allocated per unit (₹)	Total cost (₹)
A	16	50	15	65
B	24	56	20	76
C	32	54	30	84
Special machining and assembly	-	60	45	105
		220	110	330
Selling price				500

Since the response to the modified gadget is very good, the company would like to capture the market in the ensuring year itself by increasing sales. While all the existing machines in the factory are capable of making all the components A, B and C, increase of machine capacity cannot be achieved/ made during the budget year. However, the special machining process and capacity permits one of the components, either A, B or C to be bought from outside. The following offers have been received :

Component	Price per unit (₹)
A	66
B	78
C	94

The Marketing Manager feels that sales can be increased at least by 50% during the year and with a little advertisement support even 75%.

You are required to give your recommendations as to which component should be bought from outside if production is to be increased by 50% and 75% respectively.

Answer 19.

It is given that the three components are made and assembled in own factory of M/s Akash Gadgets Ltd. and capacity utilization is full. In other words machine hrs. available is the limiting factor. The component, which results in the least extra cost per hr. released may have to be bought out.

Component	Price quoted (₹)	Variable cost (₹)	Excess of price over variable cost (₹)	Machine hrs. released	Extra cost per machine hr. (₹)
A	66	50	16	16	1.00
B	78	56	22	24	0.92
C	94	54	40	32	1.25

The order of preference for outside purchase is B, A and C

Since only one of the components can be bought-out, the machine hrs. released in each case has to be ensured to be sufficient to manufacture 50% or 75% more of the remaining components.

The position will emerge as follows :

Component	Machine hr. released when bought-out	Total machine hrs. required by other two components for	
		50% increase*	**75% increase@**
A	16	28	42
B	24	24	36
C	32	20	30

*Refer to Note (i)

@Refer to Note (ii)

Recommendation	50% increase	75% increase
Buy	B	C
Make	A and C	A and B

Working notes :

(i) A 50% of (24 + 32) = 28 hrs.

B 50% of (16 + 32) = 24 hrs.

C 50% of (16 + 24) = 20 hrs.

(ii) A 75% of (24 + 32) = 42 hrs.

B 75% of (16 + 32) = 36 hrs.

C 75% of (16 + 24) = 30 hrs.

(iii) Decision when 50% increase is realized

If B is purchased, 24 hrs. will be released and 24 hrs. are required to increase production of A and C by 50%. Therefore B component should be purchased and A and C should be manufactured.

(iv) Decision when 75% increase is realized

Purchase of C from market will release 36 hrs. and 30 hrs. are required to meet the 75% increase in sale of A and B. Therefore C should be purchased and A and B should be manufactured (in case of A, hrs released are 16, and hrs. required for 75% increase are 42. Similarly in case of B, hrs. released are 24 and hrs. required are 36).

Q. 20. XYZ Ltd. manufactures three different products for an industrial market. The cost accounting system used by XYZ is a traditional one in the sense that it is very much like the systems literary thousands of firms have used for many years.

Data regarding sales price and sales volume for the three products are shown below along with basic production and standard cost statistics. There is only one production department – machines – and it takes a little more than 1 labour hr. for each machine hr. (11,250/10,000) at the current product mix. Labour is paid at ₹ 20/hr. including fringe benefits and machine cost is ₹ 70/hr.

Basic Product Information

	Three products			
Production Shipments	A 10,000 units in 1 run 10,000 units in 1 shipment	B 15,000 units in 3 run 15,000 units in 5 shipments	C 5,000 units in 10 runs 5,000 units in 20 shipments	Total
Selling prices :				
Target	₹ 162.61	₹ 134.09	₹ 81.31	
Actual	162.61	125.96	105.70	
Raw material	5 components @ ₹ 4 per component = ₹ 20	6 components @ ₹ 5 per component = ₹ 30	10 components @ ₹ 1 per component = ₹ 10	
Labour usage				
Set-up labour	10 hrs. per production run	10 hrs. per production run	11 hrs. per production run	150 hrs.
Run labour	½ hr. per part	1/3 hr. per part	¼ hr. per part	11,250 hrs.
Machine usage	¼ hr. per part	1/3 hr. per part	½ hr. per part	10,000 hrs.
Other overheads				
Receiving department				3,00,000
Engineering department				5,00,000
Packing department				2,00,000

The total overheads distribution to the three products produced in the machines department (as in presently done) is shown below. Overheads is assigned to products based on direct labour cost.

Calculation of unit cost ₹

		A	B	C
Raw material		20.00	30.00	10.00
Direct labour		10.00	6.67	5.00
Overheads (labour ₹ basis)		75.70	50.49	37.85
Set-up	3,000			
Machines	7,00,000			
Receiving	3,00,000			
Engineering	5,00,000			
Packing	2,00,000			
Total	17,03,000	105.70	87.16	52.85

Overhead rate = ₹ 17,03,000/₹ 2,25,000 = 757.0%

Required :

(i) Do you think that there is anything wrong with the present cost system? Give reasons.

(ii) If XYZ Ltd. was aware of Activity-based Costing, do you think that it would have given a dramatic different assessment of the opinion under consideration?

Answer 20.

(i) Traditional costing systems always use volume-related measures, such as direct labour hours or machine hours to allocate overheads to products. Many organizational resources exist for activities that are unrelated to physical volume. Further, volume-related activities consist of support activities such as material handling, material procurement, performing set-ups and inspection activities. Traditional costing systems, which assume all resources in proportion to their production volume, thus report distorted product costs. ABC is a system that focuses on activities, as the activities cause costs. In other words, activities cause cost and products create demand for activities. In ABC system, costs have the same or similar cause and effect relationship with the cost allocation base.

XYZ Ltd. (with traditional system) has adopted direct manufacturing labour costs as the base for cost allocation for all overheads costs whether in set-ups, receiving and packing.

(ii) Statement showing allocation base presuming ABC system

Activity	Particulars	A		B		C		Total	
		No.	%	No.	%	No.	%	No.	%
Receiving	Receiving each component per run (no. of components × no. of run)	5	4.07	18	14.63	100	81.30	123	100
Packing	No. of shipments	1	3.85	5	19.23	20	76.92	26	100
Engg.	Subjective assessment of long run trend in no. of engg. Orders for each product (W.N. 3)	-	25	-	35	-	40	-	100
		₹ per unit							
Set-up	Set-up labour (W. N. 1)	0.02		0.04		0.44			
Machines	Machine hrs. (W.N. 2)	17.50		23.33		35.00			

Working notes :

1. Set-up cost per unit = (No. of set-up hrs. x Labour rate per hr.)/ Production

   A = (10 hrs. × ₹ 20)/10,000 = Re. 0.02

   B = (10 hrs. × ₹ 20)/(15,000 ÷ 3)@ = Re. 0.04

   C = (11 hrs. × ₹ 20)/(5,000 ÷ 10) = Re. 0.44

2. Machine overheads cost per hr. = Total machine overhead /Total machine hrs.

   = ₹ 7,00,000 ÷ 10,000 hrs. = ₹ 70 per hr.

   Machine overhead cost per unit

   A = ₹ 70 × ¼ = ₹ 17.50

   B = ₹ 70 × 1/3 = ₹ 23.33

   C = ₹ 70 × ½ = ₹ 35.00

3. Sometimes, it is difficult to find a cost driver for an activity. In this case, no cost driver is available for engineering. In this case, different percentage are presumed for engineering activity.

Statement showing cost per unit under ABC system ₹

	A	B	C
Raw material	20.00	30.00	10.00
Direct labour	10.00	6.67	5.00
Overheads :			
Set-up labour cost	0.02	0.04	0.44
Machine overhead	17.50	23.33	35.00
Receiving #	1.22	2.93	48.78
Engineering #	12.50	11.67	40.00
Packing #	0.77	2.56	30.77
Total overheads	32.01	40.53	154.99
Total cost per unit	62.01	77.20	169.99

*It is assumed that JIT system is being followed. Under this system components are received only before the run starts.

@ 15,000 units in 3 runs; Production in one run 15,000 ÷ 3

Production (units)

		10,000		15,000		5,000	
		A		B		C	
	Total (₹)	Total (₹)	per unit (₹)	Total (₹)	per unit (₹)	Total (₹)	per unit (₹)
Receiving (4.07:14.63:81.30)	3,00,000	12,210	1.22	43,890	2.93	2,43,900	48.78
Engineering (25:35:40)	5,00,000	1,25,000	12.50	1,75,000	11.67	2,00,000	40.00
Packing (3.85:19.23:76.92)	2,00,000	7,700	0.77	38,460	2.56	1,53,840	30.77

Q. 21. 'Once a firm has identified the right segment, the appropriate positioning is normally obvious'. Do you agree? Justify your answer with some real life examples.

Answer 21.

'Once a firm has identified the right segment, the appropriate positioning is normally obvious' This statement is absolutely correct and I fully agree with this.

If the segment has clearly defined behavioural characteristics, then it may be 'obvious', in broad terms-how a product must be positioned to appeal to them. But this is predicted on the organization being sufficiently attuned to the desires and ethos of the segment in question, or having the absorptive capacity needed to learn about them and adapt to them.

There are plenty of examples, particularly in the field of cross-cultural marketing, of well-intentioned firms that simply never 'got' the feel of their market places or were convinced that they could win the customers over to the virtues of their home market offerings. Vodafone in Japan, Walt Disney in Europe and Wall-Mart in Germany are cases in point.

The recent tribulations of The Gap, which has a firm grip on a segment and then seemingly lost touch with it, are also evidence that this statement is facile.

Finally, there is the example of the digital music players; Apple targeted the same segments as the first movers in the Industry but was the first to realize the importance of design, ease of use and ease of downloading.

Q. 22. You have recently appointed as the Management Accountant of ABC Ltd., ABC Ltd. is a small engineering company. It manufactures precision parts. The market in which it sells is small.

It faces severe competition. With its existing production facilities, it can undertake only small engineering jobs. Large scale works are turned away. So the volume of work turned away is increasing. The company has achieved steady increase in profit over the past few years. The Board of the company feels that it can increase its profits further by having additional facilities to carry on large scale works that are being turned away now.

Budgetary Control and Standard Costing are the sole outputs of the current management accounting system. These reports are comprehensive and are being produced punctually. Jobs are priced by adding a percentage to the total costs calculated on the basis of standard costs. The annual bdget is split into monthly parts and is flexed to take into account the particular month's actual production. Monthly variance reports are produced to the concerned managers.

You are required to :

(i) Comment critically on the Management Accounting Reports currently produced in consideration of the need for the board of ABC Ltd., to be provided with information that assists in strategic decision making.

(ii) State the critical success factors of any Strategic Management Accounting.

Answer 22.

(i) Current Management accounting Information System is not appropriate. Some of the information now being generated are not relevant for many of the tasks faced by ABC since they lack external focus. Further the Board of ABC Ltd., are not being provided with such information that could assist the company in taking strategic decision-making.

The following are some of the criticism being leveled against the Management Accounting Reports currently being produced :

(a) Backward looking : Primarily the information available are historical.

(b) Not relevant to decision-making : The data available are more concerned with cost allocation only and as such are found to be inadequate for strategic planning, where competitors' costs are more relevant.

(c) Entirely financial :Other performance indicators, e.g. value of business actually turned away etc., are not available.

(d) Cost plus pricing : Market-oriented pricing, rather than 'cost plus', is needed in a competitive industry.

(e) Standard Costing system is inappropriate : ABC Cost System may be considered.

(f) Relevant and required competitor information : Not available now.

(g) Customer information : Large scale orders are coming in. the firm should put a question – 'Why', and prepare the data – base for strategic planning.

(h) Current information system is not appropriate even though it is accurate, timely and comprehensive.

(ii) Critical success factors :

Most strategic decision are unique : Strategic Management Accounting System should satisfy the following critical factors :

(a) Aid to strategic decisions

(b) Close the communication gap

(c) Identify decision types
(d) Suitable performance indicators
(e) Economic and Managerial Performance
(f) Provide relevant information only e.g., market share, lost business, repeat orders, etc.
(g) Use standard costs strategically
(h) Separate committed costs from discretionary costs

Q. 23. Describe asset liability model and its utility for managing liquidity risk and exchange rate risk.

Answer 23.

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

Liquidity risk management through asset liability management

It is difficult to measure liquidity risk as it entails expecting likely inflow of deposits, loan dispersals, changes in competitive environment, etc. The most commonly used techniques for measurement of liquidity risks is the gap analysis. The assets and liabilities are arranged according to their maturity pattern in time brackets. The gap is the difference between the maturing assets to the maturing liabilities. A positive gap indicates that maturities of assets are higher than those of liabilities. A negative gap indicates that some rearrangement of funds will have to be done during that time bracket. It can be from sale of assets or issue of new liabilities or rolling over existing liabilities.

Exchange rate risk management through asset liability management

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

Q. 24. What, in your opinion, are the ways one needs to equip himself to be a strategic cost management accountant.

Answer 24.

A Cost and Management Accountant has to equip himself in the following ways so as to become a Strategic cost and Management Accountant :

(i) He needs exposure to multi-disciplines; Functional mileu has changed and watertight compartments do not exist any more. Teamwork with peers in different areas is also a must.

(ii) He needs to be the change agent. He should help the firm to understand the environment and introduce necessary changes within the system to cope up with the fast changing world in the context of the third wave.

(iii) He should help in building strategic cost management. He should develop analytical skills for benchmarking exercises, SWOT analysis, activity orientation, Target costing, focus on both cost leadership and product differentiation.

(iv) Integrate customer satisfaction into total cost management using value-chain analysis. This aspect identifies the area of optimum value addition and the need to relate value to customer satisfaction in quantitative terms.

(v) Be a part of the management team; Step outside the ivory tower and mingle with the main stream to introduce total cost Management practice. This aspect incorporates use of cost tables, shop floor exercises, interpretation of technical and efficiency improvements in terms of value.

(vi) Ability to undertake environmental scan and in carrying out SWOT analysis.

(vii) Be a part of cross-functional team to lay down strategic initiatives in a chronological order over the time horizon of the strategy.

(viii) Ability for developing targets, measuring and interpretation of deviation through proper tools like Balanced Scorecard, EVA, Strategy mapping, etc.

(ix) Sustain 'Kaizen'.

Thus the management accountant takes on the strategic change portfolio to a great extent because he is the thread, which runs through formulation, implementation and sustaining momentum for further modification and improvement.

Q. 25. 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 on 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.

Q. 26. What is Risk Management? Discuss the strategies involved in risk management.

Answer 26.

Risk management is the identification, assessment, and prioritisation of risks followed by coordinated and economical application of resources to minimise, 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 prioritisation 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 organisational 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 materialise. 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 or 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 dowse 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 organisation 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 nonavailability 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 an 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., and 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 optimisation : Risk optimisation means utilising 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.

Q. 27. Bring out the difference between 'Marketing and societal Marketing' concepts. Why is the latter so important?

Answer 27.

The marketing concept is a business philosophy that believes that the customer's satisfaction is the reason for the business's existence. The marketing concept holds that achieving organizational goals depends on the needs and aspirations of the target consumers and delivering the desired satisfactions more effectively and efficiently than competitors do.

The marketing concept starts with a well-defined target market, focuses attention on understanding those customers' needs, co-ordinates all the marketing efforts by creating long-term customer relationships based on customer value and satisfaction. Under such marketing concept, companies produce what consumers want, thereby satisfying consumers and making profits.

The societal marketing concept holds that a company should make good marketing decisions by considering consumers' wants, the company's requirements and society's long-term interests. It is closely linked with the principles of Corporate Social Responsibility and of Sustainable development.

The concept has an emphasis on social responsibility and suggests that for a company to focus on exchange relationship with customers might not be in order to sustain long-term success. Rather, marketing strategy should deliver value to customers in a way that maintains or improve both the consumer's and the society's well-being.

Importance of societal marketing concept :

The societal marketing concept is a new marketing philosophy. It is important because it not only encompasses all activities that ensures delivery of what the customers want, but also ensures that the rights of the society are not infringed while delivering to customers who form a particular segment of society.

Most companies recognize that socially responsible activities improve their image among customers, stockholders, the financial community, and other relevant publics. Ethical and socially responsible practices are simply good business, resulting not only in favourable image, but ultimately in increased sales.

The societal marketing concept questions whether the pure marketing concept is adequate in an age of environmental problems, resource shortage, world wide economic problems and neglected social services. It asks if the firm that senses, serves and satisfies individual wants is always doing what's best for consumers and society in the long-run.

According to the societal marketing concept, the pure marketing concept overlooks possible conflicts between short-run consumer wants and long-rum consumer welfare.

Q. 28. Describe the following in the context of risk management :
(i) Solvency related measures, (ii) Performance related measures.

Answer 28.

(i) Solvency related measures in the context of risk management :

These measures concentrate on the adverse 'trail' of the probability distribution and are relevant for 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 specific 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 organisation 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 is typically calculated daily and used to monitor trading activity.
- Expected Policy holder Deficit (EPD) or Economic Cost of Ruin (ECOR) -is an enhancement to the probability of ruin concept (and thus shortfall risk at VAR) in which the severity of the ruin is also affected. Technically, it is the expected value of 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.

(ii) Performance related measures in the context of risk management :

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

- Return on Equity (ROE) i.e. , net income divided by net equity.
- Operating earnings- i.e. , net income from continuing operations, excluding realised investment
- Earnings before interests, dividends, taxes, depreciation and amortisation (EBIDTDA) 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) =EBIDTDA divided by tangible assets.

Q. 29. How are decisions taken with regard to brand selection and its use in the Indian context?

Answer 29.

Branding removes anonymity and gives identification to a company and its goods and services. Branding is actually a very general term covering brand names, designs, trademarks, symbols, a distinctive letterhead; an identifiable shop front or van etc., which may be used to distinguish one organisation's goods and services from another's. According to Kotler, a brand is a name, term, sign, symbol or design or combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. Branding and a firm's reputation are heavily linked.

As appropriate branding is one of the most important activities in the area of marketing of products, especially consumer products, several decisions need to be taken with regard to brand selection and its use.

These are :

(1) Should the product be branded at all?

The decision to brand or not to brand a product can be taken only after considering the nature of the product, the type of outlets envisaged for the product, the perceived -advantage of branding and the estimated costs of developing the brand. Historically, it is found that brand development is closely correlated with the increase in the disposable income, the sophistication of the distribution system and the increasing size of the national market. The same trend is visible in India now. Several firms have started marketing branded products in such product categories as wheat, flour and refined salt. The reason for such a trend is that a class of consumers are willing to pay more for uniform and better quality product represented by the brand.

(2) Who should sponsor the brand?

The question of sponsorship of a brand refers to the decision as to whether it should be a manufacturer's brand, also known as a national brand or a private -brand, also known as a middlemen's brand. This is a major decision in most developed countries, where large chain/ departmental stores dominate the retail distribution system. This is however, largely a hypothetical question in India where retail distribution system is highly fragmented. Only super markets have started marketing a few products that are specially packed and sold under their names. However, some retailers' brand names in product categories such as car accessories have already been established.

(3) What quality should be built into the brand?

A very crucial decision is with regard to the quality and other attributes to be built into the product. The matrix of such attributes will decide the product positioning. A marketer has the option to position his product at any segment of the market: top, bottom or the intermediate. Taking an example, "Ariel" is positioned as a premium quality and high priced product. At the other end of the scale, "Wheel" is positioned as low priced.

(4) Should each product be individually branded or a family brand should be adopted for all the products?

The marketer also has to decide at the outset whether he would like to adopt a family brand under which all the products of the company would be sold or he would like to brand each product separately. Kissan follows the former policy. The same brand name is used for jam, squashes, juices and sauces. 'Hindustan Lever' follows the latter policy. Some firms follow a slightly modified strategy. This involves using brands individually but also giving prominence to the company name or logo in all promotional campaigns as well as in product packaging. For example, Tata group Companies follow this strategy. In many cases a brand extension strategy is adopted for securing additional mileage from a particularly successful product. For example, 'Lifebuoy Gold' and 'Lifebuoy Plus' are extensions of 'Lifebuoy'.

(5) Should two or more brands be developed in the same product category?

A firm may decide to have several brands of the same product, which to some extent are competing inter se. The basic reason is that, at least in the consumer products, various benefits, appeals and even marginal differences between brands can win a large following. Example: 'Hindustan Lever' markets several soaps under different brands for different segments.

(6) Should the established brand be given a new meaning (repositioning)?

Over the life cycle of a product, several market parameters might undergo a change. All and each of such changes call for a relook as to whether the original positioning of the product is still optimal or not. Stagnating or declining sales also point to a need for reassessment of the original product positioning. For example, 'Lifebuoy Soap' has been repositioned several times in the recent past.

Q. 30. What are the strategies adopted to combat hostile take-over?

Answer 30.

A target company which faces the threat of a hostile take-over can adopt the following strategies :

(i) Poison pill tactics

(ii) Green mail tactics

(iii) White knight tactics

(iv) Golden parachute tactics

(v) Divestiture tactics

(vi) Crown jewel tactics and

(vii) Legal tactics.

Poison pill tactics : This strategy aims at initiating action against the predator destroying the attractiveness of the firm. The following are some methods of doing this :

- The acquiring company may issue substantial amount of convertible debentures to its existing shareholders.
- The target firm may either sell off or mortgage or lease some of its precious assets.
- The target firm may dispose off its liquidity by acquiring some asset.
- The target company may grant its employees stock options that immediately vests if the company is taken over.

Green mail tactics : the target firm can purchase its own stocks at a premium to avert a takeover bid. The incentive is offered by the management of the target company to the potential bidder for not pursuing the takeover bid.

White knight tactics : The target company's management may seek out a friendlier potential acquiring company, who could offer a higher offer price, which would eventually drive away the original bidder. The purpose of 'white Knight Strategy' is to seek to find a bidder. The objective is to make the take-over exercise as much unviable and unprofitable as possible for the original bidder.

Golden parachute tactics : This is adopted by the target company by offering hefty compensations to its managers if they manage to get ousted due to takeover. This is pursued to reduce their resistance to takeover.

Divestiture tactics : The target company arranges to divest or spin off some of its businesses in the form of an independent subsidiary company, thus reducing the attractiveness of the existing business to the predator.

Crown jewel tactics : In this, the target company arranges to sell of its crown jewel, namely highly profitable part of the business or ones which the market values better in order to dissuade the predator.

Legal tactics : A target firm can forestall the possible takeover bid through legal mode. It takes the form of 'legal strategy' for guarding against hostile take-over. In this case, it is possible for the target firm to move a court of law for obtaining injunction against the offer.