Paper – 13: Management Accounting –Strategic Management

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

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

Working Notes should form part of the answer
"Wherever necessary, suitable assumptions should be made and indicated in answer by the candidates."

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

(i) Marketing mix" is a general phrase used to describe the different kinds of choices organizations have to make in the whole process of bringing a product or service to market. The 4Ps is one way—probably the best-known way—of defining the marketing mix, and was first expressed in 1960 by
A. Boom and Bitner
B. Lauterborn
C. Borden
D. McCarthy

(ii) The role of leadership can be best evaluated by looking at
A. Mission
B. Strategy
C. Communication
D. All of the above

(iii) As per Peter F. Drucker, father of management principles, mission to give answers to following except
A. Present business
B. Present customer
C. Values to be delivered to customers to secure their delight
D. Business our competitor want to develop

(iv) The following is not a Primary Measure in a balanced score card.
A. Customer Perspective
B. Competitor Perspective
C. Internal Perspective
D. Learning and Growth Perspective

(v) 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 makes existing ones obsolete.
D. For those companies who are strong in the market but not leaders and might capture the market share from the leader.

(b) State whether the following statement are 'True' or 'False' with justification for your answer. **[1x5=5]**

- **(i) A 'Cost-Plus' policy can lead to inflexibility in a firm's pricing decisions.**
- **(ii) Performance measures for monitoring strategies cannot be mainly financial.**
- **(iii) 'Dogs' are the products in a high-growth market but where they have a low market share.**
- **(iv) 'Merger' is the purchase of controlling interest of another company.**
- **(v) 'Repositioning' does not involves moving the product or brand into a different market segment.**

(c) Define the following terms in not more than two sentences: **[1x5=5]**

- **(i) Barriers to entry**
- **(ii) Non-price competition**
- **(iii) Conglomerate diversification**
- **(iv) Values**
- **(v) Going-rate pricing method**

Answer:
(a)

- **(i)** (D) McCarthy
- **(ii)** (D) All of the above
- **(iii)** (D) Business our competitor want to develop
- **(iv)** (B) Competitor Perspective
- **(v)** (D) For those companies who are strong in the market but not leaders and might capture the market share from the leader.

(b)

(i) True
A 'Cost-Plus' policy can lead to inflexibility in a firm's pricing decisions.

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

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

(iv) False
Merger is the combination of two or more companies in which one of the companies survives and the other one cease to exist. A merger occurs when two companies combine to form a single.

(v) False
'Repositioning' is a strategic marketing approach and involves moving the product

into different market segment.

(c)

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

(ii) **'Non-price competition'** is a marketing strategy in which one firm tries to distinguish its product/service from competing product/service on the basis of attributes like design, workmanship, quality of service, extensive distribution, customer focus, or any other sustainable competitive advantages than price.

(iii) **Conglomerate diversification –** consists of making entirely new products for new classes of customers. These new products have no relationship to the company's current technology, products or markets.

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

(v) **'Going-rate pricing'** method refers to a pricing policy whereby the prices are fixed in consideration of the prices of the competitors and the firm's cost. This is like 'follow the leader' i.e., price leadership. Under this method, price is fixed near about the prices of the leaders. This pricing policy does not have any scientific basis like considerations of cost and marketing factors.

Section I

<u>Question.2</u>
(i) Explain how different Forecasting Models assist in management decisions. [10]

Answer:

Uses of different Forecasting Models in management decisions:

Forecasting models happens to be important constituents of the category of decision support system models. These are extremely helpful in transforming user inputs into useful information. Planning for the future is the essence of any business. Businesses need estimates of future values of business variables. Commodities industry needs forecasts of supply, sales and demand for production, planning, sales, marketing and financial decisions.

Some businesses need forecasts of monetary variables e.g., costs or price. Financial institutions face the need to forecast volatility in stock prices. There are macro economic factors that have, to be predicted for policy-making decisions in Governments. The list is endless and forecasting is a key "decision-making practice" in most organizations. Forecasting models are needed to develop strategic plans for long range perspectives. Forecasting models are of 4 types, as listed below:

I. Qualitative Models:

- Delphi model-Collects and analyses panel of expert opinions.
- Historic data-Develop analogies to the past data.
- Normal group technique-participative group process.

II. Naive (Time Series) Quantitative Models:

- Simple average-Averages past data to project the future based on that average.

- Exponential smoothing-Weighs differently earlier forecasts and the recent one to project into the future.

III. Causal Quantitative Model:
- Regression analysis-defines functional relationships among variables as to whether it is linear or non-linear.
- Economic Modeling: offers an overall forecast for a variable like Gross National Product (GNP)

IV. Combination of monetary & physical projections:
- Marketing projections-Monetary by region, product and product group.
- Economic projections-Monetary by region, industry and broad product group.
- Historical projections-In units, monetary by product and product group.
- Demand forecast-In units by product and product group for operations management and monetary for sales and financial planning

(ii) Define e-business as per in Judy Strauss and Raymond Frost's E-marketing model. [5]

Answer:

Judy Strauss and Raymond Frost‟s E-marketing model:
Judy Strauss and Raymond Frost‟s E-marketing model defines E-Business as a continuous Optimisation of a firms business through digital technology.
EB=EC + BI+ CRM + SCM + ERP
Where EB is the Electronic Business,
EC is Electronic Commerce,
BI is Business Intelligence,
CRM is Customer Relationship Management,
SCM is Supply Chain Management and
ERP is Enterprise Resource Planning.
EC uses digital technologies to enable buying/selling, BI uses digital technologies for collecting primary/secondary information. CRM is the strategy to satisfy customers and build long lasting relationships on the basis of high interaction with customers. This high interaction has been enabled through web conferences. SCM relates to delivery of products efficiently and effectively both by the vendors to the manufacturers and manufacturers to the distributors/customers. The high interaction with-vendors and customers has been possible through EDI (electronic data interface), paperless transactions. ERP has helped optimization of business processes and lowering costs. Order entry and purchasing, invoicing and inventory control have been speeded up and also optimized through MRP, JIT, Kanban, etc., using digital technologies.

<u>Question.3</u>

(a) Why New Products Fail? [5]

Answer:

Following are the reasons for the failure of new products.

- In-adequate market analysis and market appraisal,
- In-sufficient and in effective marketing support,
- Bad-timing of introducing a new product,
- Failure to recognize rapidly changing market environments,
- Absence of formal product planning and development procedure,
- Failure of the product to fill the customer's needs,
- Technical and production problems,

- Higher costs than estimated costs,
- Product problems and its defects,
- Failure to estimate the strength of the competitors,
- Too many new products entering the market.

(b) Discuss the different policies taken by the Government of India to improve the productivity and competitiveness of the Indian economy. [10]

Answer:

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

(i) Real sector policies

➢ **Agriculture and allied activities**

Agricultural sector has remained a problem area and there has been a declaration in its growth. To arrest this trend and reverse the deceleration, number of policy inputs has been made. A National Rain Fed Area Authority (NRAA) has been created in November 2006 to support up-gradation and management of dry land and rain fed agriculture. The authority would coordinate all schemes relating to watershed development and other aspects of land use. The accelerated irrigation benefit programme is also being revamped to repair, renovate and restore water bodies in various states.

The National Agriculture Insurance Scheme (NAIS) and the National Rural Employment Guarantee Scheme (NREGS) are two important schemes which have been implemented. These have been extended to more number of villages, so that the under employment in agriculture sector is mitigated and business risk in agricultural farming due to natural calamities are also taken care of.

➢ **Manufacturing and infrastructure policies**

If the increased activity in the manufacturing sector since 2003-2004 has to be sustained focus on upgrading the infrastructure facilities in the country is the need of the hour. Up gradation of human skills, work on golden quadrilateral, introduction of public private partnership model, increase in the power production capacity, etc, have already been identified as the areas which need robust growth in the immediate future. Spiraling of crude oil prices has had a deleterious impact on production and logistics costs through higher fuel costs. Alternatives to fossil fuel are being looked into. Wind energy is being harnessed increasingly apart from utilizing the large coal reserves available in our country. The credible alternative of producing nuclear power is one of the salient government policy. In regard to the industrial policy, the micro, small and medium enterprises development act 2006 has modified the previous act to increase the threshold investment. A new national pharmaceutical policy has also been announced during the year 2006 to strengthen drug regulatory system and patent office. The public-private partnership model has enabled greater private sector participation in the creation and maintenance of infrastructure. Concepts of special economic zone are under introduction and there have been a lot of hiccups in this area. New modifications are on the anvil to take care of the displaced land owners as also protection of the fertile lands. The information technology amendment bill 2006 will put in place technology applications, security practices and procedures relating to such applications.

(ii) Fiscal policy

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

(iii) External sector policies

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

(iv) Monetary policies

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

(v) Financial sector policies

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

Question.4

Write short note on the followings: [3x5= 15]

(a) Horizontal Integration.

(b) DMAIC (define, measure, analyse, improve, control) Six Sigma Approach.

(c) Public-Private Partnership (PPP).

Answer:

(a) Horizontal Integration

Horizontal Integration is the effort to achieve a competitive edge with increased size and scope. Acquisitions and mergers are the means through which such an increase in the size and scope are attempted. An acquisition takes place when a company uses its resources to purchase another similar company and the acquired company continues to remain as a separate entity. In a merger two companies agree to combine their operations and create a new entity. E.g. — Cement Companies acquiring manufacturing facilities.

Horizontal Integration has acquired more significance in a global market with a view to achieving competitive advantage by growing in size as the organic mode of substantial expansion and green field projects take long gestation time, acquisitions and mergers are becoming more important to take advantage of a growing market expeditiously. The main benefits of horizontal integration are:

- Reduction in mining cost

- Possibility of offering a range of products through differentiation
- Managing existing rivalry through market operations; and
- Augmenting bargaining capacity over buyers and suppliers

However there are certain limitations to horizontal integration, they are:

- The problems associated with mergers and acquisitions
- Conflicts that can arise due to statutory requirements while the process of acquisition are mergers is pursued

(b) DMAIC (define, measure, analyse, improve, control) Six Sigma Approach.

The DMAIC-Six Sigma Approach:

Define

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

Measure

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

Analyse

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

Improve

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

Control

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

(c) Public-Private Partnership (PPP).

The concept of Public-Private Partnership (PPP) has been a comparatively new one in our national economic development scenario. It has been observed that the growth of infrastructure has lagged behind and may assume serious proportions impeding our economic growth. To overcome this, Government of India has been actively pursuing PPP to bridge the gap in the infrastructure.

Under the overall guidance of the committee of infrastructure, headed by the Prime Minister, the PPP programme formulation and implementation are being closely monitored by the relevant ministry/departments. An appraisal mechanism has been given a mandate and guidelines for drawing up time-frame for according approvals to proposals in a speedy manner.

PPP projects normally involve long term contracts between the Government and the private parties detailing the rights and obligations of both the contracting parties. Government has decided to develop standardized frame-work, based on due diligence and agreements will follow international practices. They will also create a framework with a right matrix of risk allocation, obligations and returns.

Planning Commission has also issued Model Concession Agreement (MCA) for ports, state highways and operation maintenance agreements for highways. To promote PPP programme, all state governments and central ministries are setting up PPP cell with a senior level officer as a nodal officer. Technical assistance has been obtained from Asian Development Bank (ADB) including hiring of consultants and training of personnel.

Question.5

(a) State the term Corporate Mission. List out the benefits of Mission Statement. [2+5=7]

Answer:

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

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

BHEL describes its mission as follows:

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

Through its mission, a company indicates what it is trying to achieve and in what field. Mission represents company’s objectives in qualitative terms. Ackoff refers to such objectives as stylistic objectives

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

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

(b) Difference between 'Marketing' and Societal Marketing' concepts. Why is the 'Societal Marketing' concept so important? [4+4=8]

Answer:

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, coordinates 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 improves both the consumer's and the society's well-being.

The societal marketing concept holds that the organization should determine the needs and interests of target markets. It should then deliver the desired satisfactions more effectively and efficiently than competitors in a way that improves 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 shortages, worldwide 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-run consumer welfare.

Section II

Question.6
(a) Choose the most appropriate one from the stated options and write down: [1x5=5]

(i) Unsystematic risk relates to
- **A. Market risk**
- **B. Beta(β)**
- **C. Inherent risk**
- **D. Inflation risk**
- **E. All of the above**

(ii) Life Insurance do not include
- **A. Whole life**
- **B. Pension**
- **C. Motor vehicle**
- **D. Endowment**
- **E. None of the above**

(iii) MTS stand for
- **A. Make to sell**
- **B. Make to stock**
- **C. Move to sell**
- **D. Move to store**

(iv) ECOR in risk management means
- **A. Expected cost of ruin**
- **B. Expected cost of opportunity loss**
- **C. Economic cost of ruin**
- **D. Economic cost of opportunity loss**
- **E. None of the above**

(v) Physical Risk includes
- **A. Natural calamities: fire, tsunami, floods, earthquake, etc.**
- **B. Factory accidents due to fire, mishandling of equipment, breakdown and explosions**
- **C. Occupational hazards**
- **D. Both b and c**
- **E. All of the above**

(b) State whether the following statements are 'True' or 'False'. [1x5=5]

(i) VAR means Value at Risk.

(ii) Product Liability Policy is one of the products of "Industrial Insurance"

(iii) MTS stands for "Make to assembly".

(iv) The concept of Pooling risk is the process of identification of separate risks and put them all together in a single basket, so that the monitoring, combining, integrating or diversifying risk can be implemented;

(v) RAROC in Risk Analysis means Risk and return on capital.

Answer:
(a)

(i) (C) Inherent risk

(ii) (C) Motor vehicle

(iii) (B) Make to stock

(iv) (C) Economic cost of ruin

(v) (E) All of the above

(b)

(i) True

(ii) True

(iii) False; The correct is „Move to assembly‟ and not to „Make to assembly‟.

(iv) True

(v) False; RAROC in Risk analysis means Risk-Adjusted Return on Capital.

<u>Question.7</u>
(a) Why is Risk Reporting considered to be an important step in Risk Management? [7]

Answer:
Risk Reporting is an important step in Risk Management because:
- A transparent and effective risk reporting system is essential for a company, as it is obligatory on its part to disclose all material risks that it faces and its risk management practices. In recent years, the concept of risk reporting has assumed significant importance, after the collapse as well as other corporate failures. Existence of an adequate Risk Reporting System in an organization makes the managers more accountable for their actions. In the light of this, the importance of risk reporting system can be summarized as under:
- It can assist the Board to discharge its responsibilities, enabling the company to go for higher profits at lower risks.
- It helps in decision-making at all levels with objectivity.
- It can help investors to evaluate market situations with a view to building optimum portfolio of securities.
- Lenders can be supported in their lending operations and policy decisions.
- It can help a company in getting a better credit rating and access to cheaper source of

finance.
- It develops transparency between managers and investors-leading to reduced agency cost, which in turn reduces the cost of capital and increases the basket of investment opportunities available to a firm.

It can create a niche for the company and can act as a trendsetter for others.

(b) Role of Insurance Industry in Service Sector. Explain. [4]

Answer:

In Service Sector the Insurance Industry ranks very high and is particularly relevant to growing economy like India. As the insurance Industry encourages and mops up Savings of the Society and also provides a safety net for personal and institutional risk this industry needs to be properly run and the structure properly regulated. In this regard, structure of the insurance industry is given below:

Insurance Market -> Policy holder or customer (insured) -> Various insurance products -> Agents broker etc. -> The insurer -> Re insurer -> I R D A

Insurance is classified into the following types: Non-Life (General) Insurance, and Life Insurance in most of the countries except in USA. IN USA the insurance industry is classified into property & Casualty, Life and Health. In India, General insurance includes Property & Casualty, Fire, Engineering Projects, Motor, Aviation and Marine Insurance.

General Insurance also includes legal liability to others like collision liability, employers' liability. etc. The Insured gets compensation only if the event occurs. The insured does not get any return if the event does not occur. Almost all insurance contracts are annual contracts other than the individual life insurance contracts which are long term contracts.

(c) State asset liability model and its utility for managing liquidity risk. [2+2]

Answer:

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.

<u>Question.8</u>

(a) "Mathematical Models as well as Statistical analysis have been helpful in risk assessment/evaluation". Recognize the models and measures and discuss them. [3+4=7]

Answer:

While applying Statistical analysis, two concepts are applied for assessment of risk. They are:
- Measures of Central Tendency and
- Measures of Variation.

- **Measures of Central Tendency:** Aims of this concept is to arrive at one single value that will denote the characteristics of the total data collected. Such a value is known as the Central Value or Average and can be expressed as Mean, Median and Mode according as the nature of risk being measured.

- **Measures of Variation:** They are studied to gauge the dispersion or scatteredness from the Central Value or Average. The Statistical Analysis is based on the methods like Range, Mean Deviation, Standard Deviation, Variance and Coefficient of Variation

- **Mathematical Models:** As risks are of different types, Probabilistic Models are used for obtaining the expected values e.g., Launching of a new product with uncertain demand, Launching of a product in a known area, where competition is keen with penetration prices, etc. Frequency distribution of a random variable can be discrete or continuous. When it is discrete, the probability function is known as probability Mass Function and its distribution is known as Discrete Probability Distribution. When it is continuous, then its probability function is known as Probability Density Function and its Distribution is known as Continuous Probability Distribution.

- **Financial Model:** Conversion of a value can relate to different points of time in the future. Present value of future losses or earnings, in the form of Discounted Cash Flows, is one of such models.

(b) State the term Insurance. Describe the requirements & characteristics of an insurance contract. [2+2+4=8]

Answer:

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.

Question.9

Write short notes on the following: [3x5=15]

(a) Agro and Bio liabilities,

(b) Corporate Risk Governance;

(c) Performance related measure

Answer:

(a) Agro and Bio liabilities:

The basic liability issues arise as follows:

- Farmers credit liability
- Consequential losses liability
- Genetically modified crop seed liabilities
- Consulting expenses and royalty liabilities
- Casualty liabilities on farmer‟s assets
- Latent deficiencies liabilities (public and professional liabilities)
- Inflation liabilities (dynamic risks in risk management) affecting the farming community

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

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

(b) Corporate Risk Governance:

Responsibility of a corporate body encompasses

- Identifying the organisation‟s appetite for risk in the areas of capital leverage, credit rating, etc
- The capability of the organisation to manage risk and support it‟s business strategy
- Establishing the structural relationship between the roles and responsibilities for risk management
- Pooling of risk and develop such integrated risk measures encompassing the various spheres of activity like finance, marketing, human resources and operations

- Establishing proper tools for risk assessment, measurement and analysis
- Developing a proper culture and awareness in the organisation through leadership
- Educating the various layers of organisation about risks absorption and management through case studies. Corporate governance has become a buzzword in Indian corporate world and SEBI has laid down guidelines in this regard. Every annual report contains a section on corporate governance along with management‟s discussion on performance and future outlook.

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

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

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