423- RISK MANAGEMENT AND INSURANCE

UNTI – I

1. What is Insurance? Explain the Nature and History of Insurance Business?

Ans: Insurance is defined as the equitable transfer of the risk of a loss, from one entity to another, in exchange for payment.

INSURANCE ACT 1938

Dictionary of business and Finance defines "Insurance as a form of contract agreement under which one party agrees in return for a consideration to pay an agreed amount of money to another party to make good a loss, damage or injury to something of value in which the insured has a interest as a result of some uncertain event".

Definition of Insurance:

Insurance is a cooperative form of distributing a certain risk over a group of persons who are exposed to it. **– Ghosh and Agarwal**

Characteristics of Insurance:

- It is a contract for compensating losses Premium is charged for Insurance Contract.
- The payment of Insured as per terms of agreement in the event of loss It is a contract of good faith.
- It is a contract for mutual benefit.
- It is a future contract for compensating losses.
- It is an instrument of distributing the loss of few among many.
- The occurrence of the loss must be accidental.
- Insurance must be consistent with public policy.

Functions of Insurance

- Primary Function o Provision of payment at the time of loss o Provision of protection o Risk sharing
- Secondary Function o Prevention of loss o Provision of Capital o Improvement of efficiency o Ensuring welfare of the Society

IMPORTANCE OF INSURANCE:

- Provides protection against occurrence of uncertain events.
- Device for eliminating risks and sharing losses.
- Co-operative method of spreading risks.
- Facilitates international trade.
- Serves as an agency of capital formation.
- Financial support.
- Medical support.
- Source of employment. **Nature of Insurance:**
- Sharing of Risks
- C0-operative Device
- Valuation of Risk
- Payment made on contingency
- Amount of Payment
- Large Number of Insured Persons

2. What is IRDA? Explain the Opportunities and challenges of Insurance business in India?

Ans: IRDA is the controlling and regulatory apex body in the country for insurance sector and its chairman and members are appointed by Government of India. IRDA's HQ is located at Hyderabad.

History:

- IRDA was setup in 2000 as an autonomous body to regulate and develop the business of insurance and reinsurance in the country as per the insurance regulatory and development authority act,1999.
- The main objective of setting up IRDA was to promote market efficiency and ensure consumer protection.

Mission:

- To protect the interest of and secure fair treatment to policyholders.
- To bring about speedy and orderly growth of the insurance industry, for the benefit of the common man, and to provide long- term funds for accelerating growth of the economy.
- To ensure that insurance customers receive exact, clear and correct information about products and services and make them aware of their responsibilities and duties in this regard.

Functions of IRDA:

- ✓ Registration (licensing) including renewal of registration of insurance companies.
- ✓ Licensing of insurance intermediaries such as agents, surveyors and loss assessors, third party administrators, brokers etc.
- ✓ Official approval of agent's training institutions.
- ✓ Monitoring all non-tariff products including pricing of products, terms and conditions thereof, etc
- ✓ Supervision of the functioning of the companies and intermediaries including review of company annual statements.
- ✓ Formulation of regulations.
- ✓ Enforcement of discipline.
- ✓ Consumer education and assistance.

UNIT – II

3. Explain the Principals of Insurance?

Ans: An insurance contract is a contract of utmost good faith. ... False information or non-disclosure of any important fact makes the contract voidable. **Seven Principles of Insurance:**

1. Principle of Uberrimae fidei (Utmost Good Faith): Principle of Uberrimae fidei (a Latin phrase), or in simple english words, the Principle of Utmost Good Faith, is a very basic and first primary principle of insurance.

2. Principle of Insurable Interest:
The principle of insurable interest states that the person getting insured must have insurable interest in the object of insurance. A person has an insurable interest when the physical existence of the insured object gives him some gain but its non-existence will give him a loss. **3. Principle of Indemnity:**
Indemnity means security, protection and compensation given against damage, loss or injury. **4. Principle of Contribution:**
Principle of Contribution is a consequence of the principle of indemnity. It applies to all contracts of indemnity, if the insured has taken out more than one policy on the same subject matter.

5. Principle of Subrogation:
Subrogation means substituting one creditor for another. Principle of Subrogation is an extension and another corollary of the principle of indemnity. It also applies to all contracts of indemnity.

6. Principle of Loss Minimization:
According to the Principle of Loss Minimization, insured must always try his level best to minimize the loss of his insured property, in case of uncertain events like a fire outbreak or blast, etc.

7. Principle of Causa Proxima (Nearest Cause): It means when a loss is caused by more than one causes, the proximate or the nearest or the closest cause should be taken into consideration to decide the liability of the insurer.

4. What is meant by Tariff Advisory Committee? Explain Legal Aspects of insurance?

Ans: Tariff Advisory Committee (TAC), India. - controls and regulates the rates, advantages, terms and conditions that may be offered by insurers in respect of Indian General Insurance Business relating to Fire, Marine (Hull), Motor, and Workmen Compensation.

Establishment of Tariff Advisory Committee

64U (1) With effect from the commencement of the Insurance (Amendment) Act,.1968, there shall be established a Committee, to be called the Tariff Advisory Committee (hereafter in this Part referred to as the Advisory Committee) to control and regulate the rates, advantages, terms and conditions that may be offered by insurers in respect of general insurance business. (2) The Advisory Committee shall be a body corporate having perpetual succession and a common seal, with power, subject to the provisions of this Act, to acquire, hold and dispose of property, both moveable and immoveable, and to contract, and may, by the said name, sue and be sued.

LEGAL ASPECTS OF INSURANCE:

Economic Perspective:

Insurance is a financial intermediation function by which individuals exposed to a specified contingency each contribute to a pool from which covered events suffered by participating individuals are paid. Individuals purchase the right to collect from the pool if the insured contingency occurs. Insurance then is a contingent claim contract on the pool's assets.

Legal Perspective:

Insurance is an agreement (the insurance policy or insurance contracts), by which one party, called the policy owner, pays a stipulated consideration, called premium, to the other party called Insurer in return for which the insurer agrees to pay a defined amount of money or provide a defined service if a covered event occurs during the policy term.

Insurance contracts have distinct legal characteristics that make them different from other legal contracts. Several distinctive legal characteristics have already been discussed. As we noted earlier, most property and liability insurance contracts are contracts of indemnity, all insurance contracts must be supported by an insurable interest, and insurance contracts are based on utmost good faith. Other distinct legal characteristics are as follows:

- Aleatory contract.
- Unilateral contract.
- Conditional contract. ➢ Personal contract.
- Contract of adhesion.

UNIT – III

5. What is meant by Risk reduction? Explain the Pooling arrangements with correlated losses?

Ans: The attempt to reduce financial and operating risk by withdrawal from high risk ventures of risk pooling resulting in diversification. Refer to loss control and loss financing.

Risk Pooling:

- Pooling arrangement means sharing loss and risks equally or split evenly any accident costs. As a result pooling arrangements reduce risks (standard deviation) for each participant. In pooling arrangements the average loss is paid by each person.
- Risk Pooling is an insurance practice that groups large numbers of people together to minimize the cost impact of the highest-risk individuals.
- Health, car, home and life insurance all practice risk pooling by insurance people who are unlikely to need insurance to cover the costs of people who are more likely to need insurance.

Risk Reduction through Pooling Independent Losses:

- The most important risk management concept may be the diversification of risk. Diversification is an essential aspect of insurance and financial markets.
- We analyze diversification in this chapter, highlighting the factors influencing the extent to which risk can be and is diversified.
- We illustrate diversification in several different contexts, beginning with a simple pooling arrangement between two people and ending with diversification among thousands of people or businesses through insurance and financial markets.

6. Explain the Risk diversification? Ans:
Diversification is a technique that reduces risk by allocating investments among various financial instruments, industries and other categories. It aims to maximize return by investing in different areas that would each react differently to the same event.

Total Risk = Firm Specific Risk + Market Wide Risk

Unique Risk are:
1. Management Risk
   a) Acts of god
   b) Product Obsolescence
   c) Errors
2. Default Risk are:
   a) Financial Leverage
   b) Operating Leverage
3. Industry Risk
4. Liquidity Risk

Market Risks are:
1. Interest Rate Risk
   a) Inflation Risk
   b) Real Rate Risk

2. Market Risk
   a) Business cycles
   b) Economic Policy Dec.
   c) Tax Code Change

Comparison of Derivatives and Insurance Contracts:
An insurance contract can be viewed as a derivative contract where the underlying asset is the value of losses experienced by the insured.

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There are both similarities and important differences.

DERIVATIVES	INURANCE
Market Value	**Specific Losses**
Used to hedge risk arising from unexpected changes in market prices	Hedge risk arising from losses specific to the insured
Options and futures of interest to hundreds of companies that use commodities	An insurance contract derived from liability or property would be specific to only one firm

Basis risk and extent or risk reduction, basis risk is the uncertainty about effectiveness of a hedge.

More Basis Risk A firm may experience a drop in profits as derivatives may have lower payoff	**Less Basis Risk** Little uncertainty about quality of hedge, ignoring insolvency
Contracting Costs Less because of moral hazard and adverse selection. Individuals cannot influence the payoff Outside influence of individual firms results in less costs for investigation and monitoring	Higher Loss payoffs influenced by the actions of the insured party. Moral hazard more severe. Firms have more information about expected losses creating adverse selection. Must incur cost to investigate and monitor.
Capital Costs Bring together user and producer and reduces price risk for both. Do not have to physically trade the commodity. Lower since the matching parities with negatively correlated exposures	Losses experienced by one firm do not trigger a simultaneous gain by another. Losses tend to be independent or perhaps positively correlated across firms. From insurance company standpoint, risks reduced thru diversification. Sell to many different policyholders creating higher marketing and underwriting costs

UNIT – IV

7. What is meant by Life Insurance? Explain the Products in LIC of India?
Ans:
It is a contract in which the Insurer, in consideration of a certain premium, either in a lump sum or in any other

periodical payments, in return agrees to pay to the assured, or to the person for whose benefit the policy is taken, a stated sum of money on the happening of a particular event contingent on the duration of human life. **Features of life insurance:**

- Waiver of Premium
- Accelerated Death Benefit
- Guaranteed Purchase Option
- Long-Term Care Riders
- Spouse or Child Term Riders
- Cash Value Plans
- Mortgage Protection
- Cash Withdrawals and Loans
- Survivor Support Services
- Employee Assistance Programs **Types of Life Insurance:**

- ➢ Term insurance plan
- ➢ Endowment policy
- ➢ Unit Linked Insurance Plan
- ➢ Money Back Policy
- ➢ Whole Life Policy
- ➢ Annuity/ Pension Plan

Benefits of Life Insurance

- ➢ Risk Coverage
- ➢ Difference plans for different uses
- ➢ Cover for Health Expenses
- ➢ Promotes Savings/ Helps in Wealth creation
- ➢ Guaranteed Income
- ➢ Loan Facility
- ➢ Tax Benefits

LIC Proud Position:

INDIA'S largest Financial Institutional Investor both in equity market and term loans. An Institutional Builder promoting NSE, NCDEX, LIC Mutual fund, Stock Holding

Corporation of India, National Insurance Academy, Insurance Institute of India LIC's e-portal (website) has won Webby's Consumers voted best website award LIC Products:

8. What is Non- Life Insurance? Explain the Marine Insurance?
Ans:

General insurance or non-life insurance policies, including automobile and homeowners policies, provide payments depending on the loss from a particular financial event.

General insurance typically comprises any insurance that is not determined to be life insurance.

It is called property and casualty insurance in the U.S. and Non- Life Insurance in Continental Europe.

Types of General Insurance: ✓ Auto insurance.
- ✓ Property insurance.
- ✓ Health insurance.
- ✓ Accident insurance.
- ✓ Travel insurance.
- ✓ Disaster insurance (fire, flood, earthquake, etc.) ✓ Credit insurance.
- ✓ Mortgage insurance. **Defining Marine Insurance:**

Marine Insurance covers the loss or damage of ships, cargo, terminals, and any transport or cargo by which property is transferred, acquired, or held between the points of origin and final destination.

Two Broad Categories:
- ***Ocean marine insurance*** ○ Hull, Cargo, Freight, Protection and indemnity insurance
- ***Inland marine insurance*** ○ Extension of Ocean marine insurance, Domestic goods in transit, Property held by Bailees, Mobile equipment and property, Block Policies- "all-risks" basis,Means of transport and communication.

UNIT – V

9. What is meant by Risk Management? Explain the Threat analysis?

Ans:

Risk management is the identification, assessment, and prioritization of risks (defined in ISO 31000 as the effect of uncertainty on objectives) followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Risk management's objective is to assure uncertainty does not deflect the endeavor from the business goals.

Key Terms of Risk Management:

Risk Tolerance – The amount of acceptable risk

Risk Adverse – Someone that does not want to take risks

Risk Factors –

- Probability of occurrence
- Impact of event
- Range of outcomes
- Timing of event

Definition of threat analysis

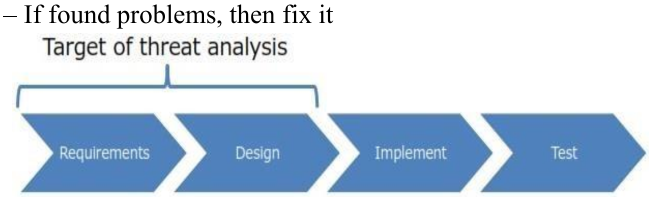
• Methods to identify threats and evaluate risk

• What is a threat?

– It is causes of damage to assets.

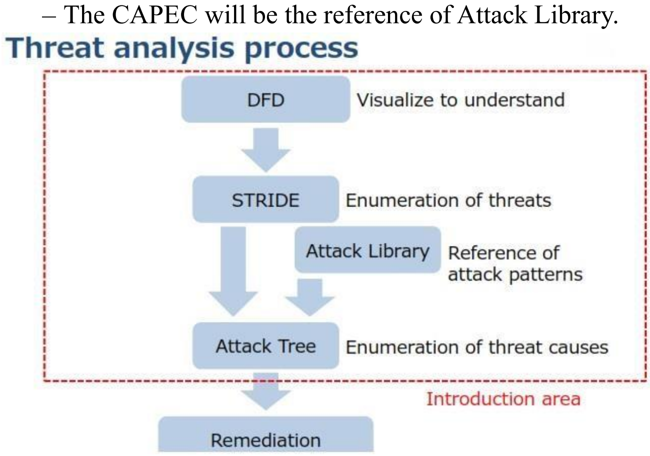
• These can be classified by environmental threats and human threats. • Threat analysis is performed in requirements phase and design phase.

– If found problems, then fix it



- Threat analysis begins from DFD.
- STRIDE is easy to use because the threat's property has been patterned.
- Attack library would help to perform a threat analysis more efficiently.

– The CAPEC will be the reference of Attack Library.



10. Explain Risk Management Methods?

Ans:

"The process involved with identifying, analyzing, and responding to risk. It includes maximizing the results of positive risks and minimizing the consequences of negative events"

Use the six risk management processes

- Risk Management Planning
- Risk Identification
- Qualitative Risk Analysis
- Quantitative Risk Analysis
- Risk Response Planning
- Risk Monitoring and Control

Risk Management Planning:

- Methodology – Approach, tools, & data
- Roles & Responsibilities
- Budgeting – Resources to be put into risk management
- Timing – When and how often
- Risk Categories – Risk Breakdown Structure (RBS)
- Definitions – Risk probabilities and imp
- Probability and Impact Matrix
- Stakeholder tolerances
- Reporting formats
- Tracking