## **Risk management and Insurance**

## **Answers for Internal 1**

- 1. R isk involves the chance an <u>investment</u>'s actual <u>return</u> will differ from the expected return. Risk includes the possibility of losing some or all of the original investment. Different versions of risk are usually measured by calculating the <u>standard deviation</u> of the <u>historical returns</u> or <u>average returns</u> of a specific investment.
- 2. **Risk exposure** is a quantified loss potential of business. **Risk exposure** is usually calculated by multiplying the probability of an incident occurring by its potential Losses .
- **3. Risk control** is the method by which firms evaluate potential losses and take action to reduce or eliminate such threats.
- 2.a. In finance, **diversification** is the process of allocating capital in a way that reduces the exposure to any one particular asset or **risk**. A common path towards **diversification** is to reduce **risk** or volatility by investing in a variety of assets.
- 2.b. Financial exposure is the amount that can be lost in an investment. For example financial exposure of purchasing a car would be the initial investment amount, minus the insured portion. Knowing and understanding financial exposure, which is just another name for risk, is a crucial part of the investment process.
- **2.c.** Objective of Risk Management
- The objective risk management is to reduce the cost of risk
- Components of cost of risk include:
- Expected cost of losses
- Cost of loss control
- Cost of loss financing
- Cost of internal risk reduction
- Cost of any residual uncertainity

3.a.\_Assessment is a process of gathering and documenting information about risk. Computer-aided assessment is increasingly employed as a supplement to other forms of assessment. A key advantage in the use of computers is the capability of an interactive assessment to

provide immediate feedback on responses.

risk assessment - A "risk analysis" is the process of arriving at a risk assessment, also called a "threat and risk assessment." A "threat" is a harmful act such as the deployment of a virus or illegal network penetration. A "risk" is the expectation that a threat may succeed and the potential damage that can occur.

risk management - The optimal allocation of resources to arrive at a cost-effective investment in defensive measures within an organization. Risk management minimizes both risk and costs.

3.b.

Pooling Arrangements and Diversification of Risk

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. The probability distribution of accident costs facing each person is reduced by pooling arrangements. The pooling arrangement decreases the probabilities of the extreme outcomes. In pooling arrangements each person's risk is reduced but each person's expected accident cost is unchanged.

## 4.a. Types of Risk

Major types of business risk that produces fluctuations in business value include price risk, credit risk, and pure risk

Price risk refers to uncertainty over the magnitude of cash flows due to possible changes in output & input prices.

Credit risk arises when the firms customers & other parties fail & delay in making promised payments

Pure risk exists when there is uncertainty as to whether loss will occur

- No possibility of gain is presented- only the potential for loss
- 4.b.\_At the time of the *injury* or illness, the employee was present in the *work* environment as a member of the general public rather than as an employee. The *injury* or illness involves signs or symptoms that surface at *work* but result solely from a non-*work-related* event or *exposure* that occurs outside the *work* environment.