

ERM 57

Chapters 1-15 Sample Exam Questions and Answers

Chapter 1

- 1) **Provide an example of the upside of risk?** An upside risk is the risk that the organization will outperform its strategic goals. Examples of upside risk include situations in which a business venture experience an unexpected increase in revenue or market share. Such changes can present the organization with both opportunities and threats.
- 2) **Explain how ERM strategic integration varies from traditional risk management?** By linking risk to the entire enterprise, the organization decouples its financial, strategic, operational, hazard, and other risks from individual operational silos and addresses them within strategy as a whole. Thus, ERM considers the global array of risks that affect the organization.
- 3) **Explain how ERM differs from traditional with regards to organizational structure?** The traditional risk manager generally reports to an organizational department such as finance, operations, or legal. Quite often, the responsibility for pure risk management may be localized within a risk management department, which then orchestrates the risk management plan as a central authority. Conversely, in ERM, risk management responsibility is decentralized and integrated into all levels of the organization.
- 4) **Summarize the two important benefits of ERM approach?**
 - a) ***Enhanced decision making***-An ERM approach allows an organization to systemically explore new opportunities for economic efficiencies while managing threats that stem from internal and external contexts.
 - b) ***Improved risk communication***-ERM also encourages an organization to widely communicate its risk management approach across all of its layers. This includes making all managers aware of the need to identify obstacles that could interfere with achievement of the organization's strategic goals.

- 5) Explain how an ERM approach increases profitability?** An ERM approach monitors systemic risks inherent in the organization that can adversely affect its long-term financial outlook. When an organization adopts an ERM approach, unexpected occurrence or variations cause much less disruption because the organizations to deploy capital through organization-wide decision making, which ultimately results in stable earnings projections to fund future projects.
- 6) Explain how an ERM approach can result in reduced earnings volatility for an organization?** In addition to maintaining cash flows and balancing its budget, an organization must manage its cash flows to ensure an adequate pipeline of capital to meet challenges and to explore strategic growth opportunities. ERM provides a systematic framework that allows organizations to deploy capital through organization-wide decision making, which ultimately results in stable earnings projections to fund future projects.
- 7) Explain how ERM process can lead to increased management accountability** Those closest to a particular risk are in the best position to evaluate and manage it. The board and senior executives establish the organization's overall mission, vision, and strategic goals, but each manager is responsible and accountable for decision making about risks within his or her individual units. ERM increases management accountability, leading to improved corporate practices and greater managerial understanding of and consensus regarding corporate strategy.
- 8) Summarize how management consensus is achieved in an organization utilizing an ERM approach?** ERM improves management consensus by creating a corporate culture that embraces risk as an additional component of each division. By empowering all managers to consider risk optimization and the cost of risk, ERM provides them with complete information about the potential effects of a decision, including its downside and upsides. This builds a sense of management by consensus, as opposed to the traditional hierarchal model of management, in which a series of decisions is driven from the top down.

- 9) Describe how an ERM approach will improve an organization's acceptance by internal and external stakeholders** ERM improves acceptance by internal stakeholders by building a spirit of cooperation among management. Managers will build an understanding that the way they manage risk will have a positive impact on the organization, which, in turn will benefit them personally.

Chapter 2

- 1) What are some examples of internal drivers of an organization's risk culture?** Resource allocation, risk attitude, risk appetite, risk tolerance, employee records
- 2) What are some examples of external drivers of an organization's risk culture?** Political, social, economic, and technological
- 3) How can an organization's risk management function create organizational value?** An organization risk management function creates organizational value by demonstrating the ability to reasonably predict future risk costs and trends, but offering focused information concerning both threats and opportunities, and by providing a balanced factoring of business risk (one that is neither too high nor too low).
- 4) What steps can a risk professional take to ensure the success of ERM within their organization?** These are the steps risk professional can take to ensure the success of ERM within an organization:
 - a)** Go beyond merely influencing a line manager to adopt ERM practices
 - b)** Energize the line manager to the extent that the line manager incorporates the organization's risk management objectives into his or her tactical objectives
 - c)** Position the line manager to become a true believer in the program-a true risk owner
- 5) Explain the sustainability challenge for an organization in regard to moving beyond the directive for profitable growth?** An organization achieves its own sustainability development by preserving, protecting and growing its capital base while giving investors reasonable returns. However,

organizations are interrelated and dependent upon people, the environment, and governmental entities. They must seek a balance between actions they undertake for their own financial self-interest and those they undertake for the good of society. Challenges faced by organizations are competitors' actions and the resulting product/service pricing implications, increasing environmental concerns, and stricter government regulations.

Chapter 3

1) Explain the five steps of strategy implementation?

- a) Create a documented roadmap of the specific processes, tasks, and responsibilities necessary to disseminate the corporate strategies throughout the organization
- b) Communicate information regarding the strategies clearly, frequently, and completely throughout the organization
- c) Assign specific responsibilities, tasks, authority, and accountability throughout the organization
- d) Allocate adequate resources for successful implementation. Resources include finances, staff, training time, equipment, data and technology
- e) Manage variance between the goals and the mid-year results and make necessary adjustments to achieve the goals.

2) Identify the three steps in the process of developing corporate policy?

- a) Define the vision, mission, and core values
- b) Articulate the strategy
- c) Consider risks to strategy

3) Define risk criteria? Are references, standards, measures or expectations used in judging the significance of a given risk in context with strategic goals

4) Describe strategy formation, implementation and evaluation?

Strategy formation-creating the plan

Strategy implementation-putting the plan in action

Strategy evaluation-checking the results to determine whether the plan is working as envisioned

5) List the eight factors an organization should consider when determining relevant risk criteria?

- a) Its comfort level in accepting risk (appetite for risk)
- b) The nature and types of consequences that can occur
- c) Its definition of unacceptable risk
- d) How likelihood will be defined and depicted
- e) The immediacy of the risk and development of the consequences
- f) Impact measured in financial or operational terms
- g) Impact to its reputation and/or sustainability
- h) How combinations of risks could affect it

6) Describe the two major components of the Risk and Insurance Management Society Risk Maturity Model?

Attributes-organizational characteristics that drive business value

Maturity levels- descriptions that measure each attribute's key drivers

- 7) **One attribute of a risk maturity model is the adoption of an enterprise-wide approach to risk management. What are the key drivers of this attribute?** Executive support is one of the most important components of success. Support must go beyond regulatory compliance aspects and include all processes, functions, business lines, roles, and locations. Communication and coordination between the internal audit, compliance, information technology control, and risk management functions are also assessed within this attribute
- 8) **One attribute of a risk maturity model is the adoption of risk appetite management. What are the key drivers of this attribute?** Risk appetite is the events or perils and levels of impact an organization intends to retain, treat, and monitor. Risk tolerance is the level of residual risk that an organization and its stakeholders willing to bear within a given strategy

context. Throughout an organization, management should understand the trade-offs between the risk and reward and opportunities and threats faced. Leadership should be accountable for their risk-reward decisions.

9) **Describe how SWOT analysis is applied in the ERM process to assess and organization's external environment?**

Physical environment-For example, an organization in San Francisco is concerned with earthquakes, but not with hurricanes ; an organization in New Orleans is concerned with hurricanes, but not with earthquakes

Social environment-Society, with its cultural norms and values, expects an organization to manage its risks. Often, these expectations are expressed through political actions, such as the formation of nongovernment organizations. The competitive environment within a society also influences an organization's risk management

Legal environment- Government regulations, statutes, and case law impose mandates for desired risk control

Economic environment-The macroeconomic influences on an organization are systemic and nondiversifiable. Nevertheless, an organization must be aware of business cycles, employment conditions, and levels of gross national output in order to make realistic long-range plans

10) **What is one's risk position**-Risk appetite + risk tolerance level

11) **What is one's triple bottom line?** The expansion of traditional reporting framework to take into account ecological and social performance in addition to financial performance

Chapter 4

1) Organizations need economic intelligence for what purpose?

Organizations use economic intelligence (EI) to make determinations about current strategy and projections affecting future strategic planning. EI data gathering helps control exposure to risk, protect proprietary technologies and strategies from competitors, and enhance opportunities

2) Business intelligence systems are used to transform economic intelligence information into monitoring reports. What is the purpose of monitoring reports? Monitoring reports capture risk information and relate it to key performance indicators and key risk indicators to enable drill-down analysis from senior management goals to root-cause factors

3) Define the terms key performance indicators (KPI) and key risk indicators (KRI) ?

KPI are financial or nonfinancial measurements that define how successfully an organization is progressing

KRI are financial or nonfinancial metrics used to help define and measure potential losses

4) List the primary business intelligence (BI) system functions that apply to ERM practices?

- a) Performance management scorecards
- b) BI information user roles
- c) BI reports
- d) BI data mining and risk notification
- e) Master data management

5) Explain the purpose of performance management scorecards?

Performance management scorecards summarize performance status information from multiple source systems. They enable management to

monitor both changes in financial results and progress toward key operational targets that are linked to strategic plans and goals

6) Describe the three access review levels for assessing risk management accountability and data privileges?

Primary decision role-which originates or complete transactions and have direct impact on expense

Contribution decision roles-which are responsible for quality control activities and risk monitoring of work that originates in other work functions

Status decision roles-which are responsible for certifying business results and releasing external reports that cover their areas of organizational responsibility

7) List the five phases in BI ERM implementation?

- a) Enterprise risk identification
- b) Risk information mapping
- c) ERM program evaluation
- d) ERM information compliance
- e) BI reports for risk control roles and notification (monitor results and revise)

8) Define risk information mapping? Risk information mapping connects, or maps enterprise risk information source applications to business reporting cycles and process responsibilities for managing risk control activities at specific points in the organization. Risk information maps are developed for all the business areas that affect the organization's strategic value chain.

9) State the importance of creating BI reports for risk control roles and notification? BI administration audits provide the basis for monitoring how

well report utilization matches ERM role responsibilities for enterprise risk monitoring, drill-to-detail analysis, and timely reporting.

- 10) Explain how a BI system can assist an organization with risk factor evaluations for emerging risks?** Unlike traditional risk management reporting, BI relates risk analysis to the enterprise data structure. This relationship allows senior management to evaluate how different risk types affect potential losses in the workflow processes and financial results. BI data structures create the organizational links that show the underlying processes supporting risk assessment and related actions plans.

Chapter 5

- 1) Identify and describe the three dimensions that constitute the exposures space model?**
 - a. *Resources***-any element that can change in value or level
 - b. *Events***-occurrences or a series of occurrences that cause a change in a resource's level of value
 - c. *Impacts***-a positive or negative consequence or change in value or level of a resource
- 2) Identify the classes of resources that are the focus of the exposures spaces model?**
 - a) Human resources
 - b) Technical resources
 - c) Information resources
 - d) Partner resources
 - e) Financial resources
 - f) Free resources
- 3) Identify the classes of events that are the focus of the exposure space model?**
 - a) Economic events
 - b) Natural events
 - c) Industrial events
 - d) Human events

- 4) **Distinguish between the primary impacts and the tertiary impacts of losses in an ERM context?** Primary impacts create direct consequences for the organization, either positive or negative, while tertiary impacts affect third parties, including the organization's stakeholders and others linked to the organization, as well as, society and the environment.
- 5) **Identify and briefly describe the two primary measures used in ERM to quantify and impact?**
- a) **Frequency**- which is the number of times an impact is observed in a sample from a specific population. When related to the total possible number of observations it produces the relative frequency or probability of that event
 - b) **Magnitude**-degree of change in a resource's value and level is often analyzed by measures of central tendency
- 6) **Qualitative impacts are important in assessing the overall impact to resources. What are three basic types of qualitative assessments?**
- a) The impact on the organization's culture
 - b) The impact on the other stakeholders
 - c) The impact on the organization's goals

Chapter 6

- 1) **List the three steps necessary in creating risk centers?**
- a) Subdivide the larger organization into smaller more manageable components called risk centers that each have risk owners
 - b) Identify and assess the specific risks that each risk center faces
 - c) Consolidate the individual risk assessments at the corporate level to assess and monitor the risks that the entire organization faces
- 2) **Describe the advantages of creating risk centers?** The advantage of creating risk centers are reduce the scope of risk analysis, making the process more user-friendly; allows for the involvement of operational managers ; helps focus the analysis on the organization's strategic goals and operational objectives and the risks and the threats and opportunities that can briefly affect those goals and objectives ensures that risk are managed at the most appropriate and efficient level within the organization

- 3) List the categories of tools needed in order to identify an organization's resources and the risk and opportunities associated with them?**
- a) Risk assessment questionnaires
 - b) Historical data and scenario analysis
 - c) Financial statements and underlying accounting records
 - d) Other records and documents such as advertising, packaging, user manuals or human resources documents
 - e) Flowcharts and organization charts
 - f) Personal inspections and interviews
 - g) Expertise within and beyond the organization
- 4) What is the drawback of the empirical distribution technique is that it makes the following assumptions**
- a) The data gathered was complete
 - b) The time span over which the data were collected includes the full spectrum of potential outcomes
- 5) How can management use the scenario produced with stochastic differential equation?** The scenario produced with stochastic differential equation can be summarized as probability distributions for each point in time over the forecast timeline and are then used by management to make predictions and strategic determinations.
- 6) What is regression? Give an example how it could be used?** Regression is an analysis of casual relationships among variables. It tries to explain what effect the change in one variable will have on another variable will have on another variable. As an example, regression can be used to determine what effect an increase in the cost of labor or raw materials would have on the price of a product
- 7) The Delphi technique is a method that attempts to move a group of experts toward a consensus opinion. In practice, how is this accomplished?** When using the Delphi technique, each individual expert in the group is asked a question. The answer that each expert develops individually (without consulting the others in the group) is reported to the entire group. The question is then posed again separately to the expert, who is instructed to consider revising their response based on the results

that were reported to the group. This question and response cycle continues for a predetermined number of rounds or until a consensus is achieved.

8) Describe what is fuzzy logic and how is it used?

- a) Fuzzy logic is often used in modeling complex systems and interactions
- b) Fuzzy logic takes complex, descriptive language expert inputs and converts them to mathematical equivalents. A fuzzy logic model is simple and flexible and it can manage complex problems with nonlinear or incomplete data

9) Influence diagrams are extended Bayesian Networks. What can they provide to the risk professional? Influence diagrams can provide additional information for all types of decision making under uncertainty. Their application is used to support or enlighten a decision-making process, especially in the risk management field.

Chapter 7

1) To what extent is reputation, an intangible asset, also a measurable asset? The value of some intangible asset, such as trademarks and licenses, is quantifiable. In comparison to quantifiable, tangible assets, reputation as an intangible asset is not quantified on an organization's financial statements. Nonetheless, reputation is a key asset whose value is based on the beliefs of the organization's stakeholders. For example, an organization's reputation might facilitate the recruitment of high-potential employees, who will turn, enhance the organization's value over time.

2) What three steps can an organization take to manage its risk to reputation?

Identify, evaluate, and prioritize reputational risks-Identify key drivers of risk to reputation, evaluate the tangible consequences of the increase or decrease in reputation as an asset, and prioritize accordingly

Develop and implement risk response- The appropriate response to a risk affecting reputation is contingent on the source of the risk (for example, sources be a recently acquired company, supply chain practices, or revised regulatory requirements) whether the risk is a threat or an opportunity, the exposure relative to the organization's risk appetite (risk assessments regarding whether an exposure is acceptable or unacceptable differ among organizations) whether the risk is reasonable, and the cost of treatment

Monitor and report- after risks to reputation have been identified, evaluated, and prioritized and risk response have been designed and implemented, risks should be continually monitored by management, who should be on guard for early detection so that

3) Identify four basic stakeholder concerns that must be addressed in an organization's response to a business disruption?

- a) Concern for safety and security
- b) Demands for transparency in executive decision making
- c) Need for clarity in communication
- d) Perceived lack of trust

4) Explain why transparency in executive decision making is demanded by stakeholders? Stakeholders demand transparency in executive decision making because of government regulations impose additional layers of responsibility on decision makers. The Sarbanes-Oxley Act promotes accuracy of financial reporting and accountability by executives, who are subject to fines and imprisonment for any financial misreporting.

5) Explain how enterprise crisis management better prepares managers to deal with the unexpected than traditional crisis management? Enterprise crisis management training includes brainstorming sessions that stimulate creativity and provides opportunities to strengthen the organization. Enterprise crisis management can inspire resourcefulness in an organization, adding to its competitive advantage even during non-crisis times.

Traditional crisis management training has not proven to adequately prepare managers to deal with the unexpected and they are also unlikely to become engaged in the process. Traditional training is most effective only for testing the functionality of equipment or response times to preserve critical business relationships

6) Summarize the three important elements for preparing managers to deal with the unexpected?

Team building- Team building teaches managers how to work together without pointing fingers or wasting time on recriminations

Data room exercises or computer simulation- as part of enterprise crisis management, the data room should be available to run various scenarios exercises

Designation of a recovery team leader- The recovery team leader is in charge of crisis management during a disruption. He or she receives information from the field, filters it, and reports to top executives. The recovery team leader communicates the status of the condition of the organization.

7) What is the purpose of a business impact analysis? The purpose of a business impact analysis is to identify and assess risks that an organization may face

8) What is a contingency model? A contingency model is one of the organizational strategies used to maintain critical functions during disruptions. A contingency model is an organizational strategy that is developed as an alternate way to maintain production.

9) What are the three levels of planning required by each business continuity management strategy?

- a) BCM organizational strategy
- b) BCM process level strategy
- c) BCM resources recovery strategy

10) List the four stages of strategic redeployment plan?

- a) Emergency stage
- b) Alternate marketing stage
- c) Contingency production stage
- d) Communication stage

11) Describe the three objectives of the emergency stage of a strategic redeployment plan

- a) ***Protect people***- contact emergency authorities, evacuate the area, warn neighbors
- b) ***Protect physical assets***-guard the site, organize salvage operations
- c) ***Protect reputation***-communicate with all economic stakeholders , maintain control of all media release

12) List consideration an organization must address during the contingency production stage

- a) What products or services it will provide depending on the facilities available and whether its technology and machinery are adequate
- b) Its supply chain with respect to the quality of resources needed and their cost
- c) Whether the product packaging needs to be adapted for a new product
- d) The availability of transportation
- e) Possible routes to distribute products and services

Chapter 8

1) Define supply chain risk management. Supply chain risk management entails assessing and mitigating all the risks that might interrupt the normal flow of goods and services from and to an organization's stakeholders. When applied to the production of goods, supply chain risk management encompasses managing the volatility related to producing, transporting, and storing goods, as well as managing the distribution channels from the initial raw materials to the final consumer product.

2) Summarize six internal supply chain exposures and vulnerabilities

- a) **Production location**-Facilities may be vulnerable to natural disaster, manmade disaster, or terrorism
- b) **Production bottleneck**-Production may depend on a key machine or material; a malfunction or breakdown in the machine would slow or halt production.
- c) **Information technology**- The data center may be vulnerable, information backup may be unavailable, or staff may fail to follow restoration protocols.
- d) **Infrastructure**- Damage to infrastructure can impede or halt production altogether
- e) **Strikes or other employment issues**- Production may cease, inventory cannot be moved, and orders are not filled
- f) **Machinery breakdown**-Production may stall, or a critical backup in production may occur while new parts (or new machines) are ordered and installed

3) Summarize eight external supply chain exposures and vulnerabilities

- a) **Third-party suppliers**-Disruption in production from the supplier could undermine an organization's ability to generate its product and to satisfy customer demand
- b) **Sole source supplier**- Disruption in supply when only one supplier of goods is available will reduce or potentially shut down an organization's ability to produce and satisfy customer demand
- c) **Single source supplier**-Disruption in supply can also occur when an organization chooses to rely on only one supplier, even when multiple suppliers are available
- d) **Change in demand level**-Incremental or substantial changes in demand due to changes in customer taste or to competition can cause over-or-under production. If demand is not accurately forecasted, market reputation could be damaged.
- e) **Financial risks**- Increases in the cost of materials or transportation changes will cause costs to rise. Organizations may not be able to pass on increased costs due to customer preferences, prior contracts, and competition. Exchange rate fluctuation may cause increases in materials

costs and may also reduce the attractiveness of the product in overseas markets.

- f) **Geopolitical environments**-Imports and exports may be affected by government regulations or taxation. Unstable governments increase the risk of nationalization of an organization's overseas assets
- g) **Natural and manmade catastrophes**- Storms, earthquakes, volcanic eruptions, and other natural disasters can damage an organization's facilities or interfere with its transportation routes. Pandemics may interrupt an organization's activities if too few employees are available to work. Terrorist activity can disrupt normal supply and distribution channels for extended periods.
- h) **Merger of a key supplier with a competitor**-Change in ownership of key supplier can affect the price of materials and the availability of supplies

4) What are the attributes of a good general communication plan in the event of a crisis?

- a) When a crisis occurs, the organization's message must be candid, address the prominent issues, and engage all stakeholders to be effective in restoring and maintaining stakeholders' trust
- b) As part of its crisis communication plan, the organization should maintain an open dialogue with the media (press, television and radio)
- c) Effective communication conveying to various stakeholders that the organization has considered all risks promotes distinctiveness in the minds of those stakeholders
- d) Message should have a core theme that addresses corporate involvement in safety and security
- e) Communications must demonstrate that senior management is committed to maintaining an environment of transparency in its decision making
- f) All crisis communication must be consistent, with each message tailored to its specific audience

5) What specific communication should be addressed to internal stakeholders during and following a crisis?

- a) Internal stakeholders' individual needs must be acknowledged. Employees must be informed continuously especially regarding how the crisis will affect their jobs and working conditions.
- b) New safety concerns may emerge and, if so, will need to be addressed. This can be done through meetings, display of visual aids in the workplace , hands-on training, and the organization's intranet site
- c) Unit and operational managers must be informed of all steps taken to manage, mitigate, and even prevent future crises
- d) Communicating organizational health in the annual report and during quarterly meetings is imperative. Senior management must report major trends and pending claims as well as demonstrate corporate resilience
- e) The board of directors must also be informed regularly about strategic exposures, governance, issues, and long-term resilience

6) What specific communication should be addressed to external stakeholders during and following a crisis?

- a) Suppliers must be notified of procedures for scheduled deliveries during the period of disruption and of how the organization will make required payments
- b) Customers should be assured of the organization's continuity and safety. A sound communication plan can help to build trust and maintain consumer loyalty during the period of recovery
- c) Public officials and local authorities must informed of the organization's efforts to ensure public safety and health and to demonstrate its commitment to the community
- d) Statutory compliance must be monitored and reported
- e) Other external stakeholders include local associations and special interest groups, which should be informed of the organization's recuperation efforts immediately after a crisis and as part of an ongoing effort to maintain strong relationship with these groups.
- f) News releases to the media can be used to transmit information to many internal and external stakeholders. Releases and

interviews to health, safety, and financial progress can help to restore and retain marketplace confidence.

- g) Every communication from the organization must be truthful. Risk professionals must speak clearly and honestly about current conditions, known risks, and potential risks

Chapter 9

- 1) **Explain Modern Portfolio Theory?** MPT is the concept that investors, through diversification, can optimize their overall risk and returns by carefully considering how the risks and returns of the various available investments interact when constructing a portfolio
- 2) **Explain the concept of Efficient Frontier?** The efficient frontier is a line plotted on a graph that represents the set of available investment portfolios for which risk and return are optimized. Each point on the efficient frontier represents the highest expected return for a given level of risk or, conversely, the lowest risk for a given expected return. The slope of the line shows the optimal risk/return trade off available to the organization.
- 3) **What is Capital Asset Pricing Model?** Is a method of pricing securities based on the relationship between risk and return. Under CAPM, to calculate the cost of equity K_e that is the required rate of return on equity use formula on page 9.34 where r is the expected rate of return on a risk-free investment, B is the beta, a measurement of the relative risk of a specific share compared to the market as a whole and r_m is the expected rate of return on the market as a whole over the period being analyzed.
- 4) **Explain the purpose of at-risk metrics and the two major types** At-risk metrics are used to characterize the level of uncertainty (risk) present in a portfolio. Most at-risk metrics are used to measure the likelihood that the value of an asset will fall below a threshold level. The two major types of at-risk metrics are value at risk (VaR), which measures variability in asset values, and cash flow at risk (CFaR) which measures variability in cash flows

- 5) **What is the purpose of using NPV?** NPV is an indicator of how much value an investment or project adds to the firm. Appropriately risked projects with a positive NPV could be accepted.
- 6) **How do you use correlation and covariance?** Correlation is purely a statistical relationship between the movements of two variables and is not a measure of casualty. Covariance is a measure of how much two variables change together.

Chapter 10

- 1) **There are two types of financial contracts that are based on the insurance derivatives concept. One of them is an insurance option. Briefly describe what an insurance option is.** An insurance option derives its value from insurable losses-either an organization's actual insurable losses or an insurance industry index of losses. The value of an insurance option increases as the underlying insurable losses increase beyond the value of the strike price (specific price at which the option holder can buy or sell the underlying asset) Therefore an organization can use gains from an insurance option to offset its losses from insurable losses.
- 2) **Why would an organization decide to form a captive insurance company?** An organization may decide to form a captive insurance company if commercial insurers are not responsive to its availability, capacity, pricing stability needs. An organization also may decide to form a captive insurance company if it is not deriving sufficient value from its traditional insurance transaction or if that transaction lacks flexibility in coverage and/ or limits.
- 3) **What types of captives can an organization form?**
 - a. Association captives
 - b. Agency captives
 - c. Protected cell captives
 - d. Rent-A-Captive
 - e. Risk Retention

Chapter 11

- 1) Describe the requirement for integrating governance and compliance with risk management?** Integrating governance and compliance with risk management requires that the separate business disciplines of governance and compliance develop a common language, systems, and goals in conjunction with the risk management discipline.
- 2) What are the potential benefits of integrating compliance and governance with risk management?** Integrating compliance and governance with risk management provides for a better understanding of threats and opportunities. It also allows the organization to exploit risks, enhance opportunities, and manage threats.
- 3) From a risk management perspective, what are the drivers of compliance?**
 - a) Risk appetite
 - b) Risk tolerance
 - c) Levels of compliance to which an organization aspires or adheres
- 4) Describe the strategies an organization can use to resolve compliance conflicts?**
 - a) Terminate one or more of the activities that produce the conflict
 - b) Tolerate the compliance conflict
 - c) Treat the compliance conflict
 - d) Transfer the activity or risk that produces the conflict elsewhere, for example externalize the given activity
- 5) Identify five decisions areas in which an organization demonstrates its social responsibility?**
 - a) Adhering to law and regulations
 - b) Resisting employee layoffs that improve profits
 - c) Outsourcing
 - d) Controlling pollution
 - e) Maintaining a level of corporate commitment to the local community

- 6) Differentiate between social responsibilities and governance?** While social responsibilities are based on organizational beliefs, governance is a set of parameters within which governments and organizations operate

Chapter 12

1) Identify the levels at which review and monitoring of the ERM program can occur

- a) Self-assessments, lower-level assessment also known as feedback loops
- b) Audits, both internal, which are lower-level assessments, and financial audits, which are higher-level assessments
- c) Compliance reviews, higher-level assessments that (if external) can involve fines, restitutions, loss of license, or other administrative proceedings
- d) Legal proceedings, the highest-level assessment, whether through administrative law courts, tort laws, or criminal law

2) Explain how risk register are used in reviewing and monitoring the risk management process. A risk register is a tool developed at the risk owner level that links specific activities, processes, projects, or plans to a list of identified risks and results of risk analysis and evaluation and that is ultimately consolidated at the corporate level.

3) Explain why internal audits are less effective than self-assessment for monitoring the risk management process. Internal audits are less effective than self-assessments because audits occur less frequently and are less detailed than self-assessments undertaken by operational or line managers.

4) Explain how the assurance process in the audit and risk management discussion relates to an organization's board and managers. The assurance process provides information essential to the decision-making process of organization stakeholders. An organization's board of members and managers need assurance that the organization's processes are performing

at the level intended and within the established parameter so that planned goals are achieved.

5) List and describe the three assurance process reviews generally utilized by organizations. Most organizations will perform three types of assurance process reviews that may overlap and at time even contradict one another. They are :

- 1) Continuous reviews, which regularly measure and monitor activities
- 2) Management reviews, which are periodic reviews of each manager's area of responsibility
- 3) Independent reviews, which are both internal and external audits that validate the systems and processes for the output and compliance

6) List and describe the three most common risk management process assurance audit formats.

- 1) Process elements-reviews each element in the risk management process, including risk identification, analysis, evaluation, communication throughout the organization, continuous monitoring, and promptly making the appropriate changes based on emerging trends.
- 2) Key principles- determine the degree that the risk management program has met the specified set of principles defined in the international standards and guidelines adopted by the organization as well as ethical considerations that are critical to the organization's social license to operate in relationship to its stakeholders. Important risk management process principles include the use of systematic approaches to provide consistent results, integration of the risk management system process into organizational decision making and the use of a process responsive to change.

- 3) **Maturity model-** progress is tracked by correlating the results of the organization's risk management process to a predetermined set of performance measurements. This format can be used to review the risk management process and then communicate the degree of an organization's progress to its senior management and board of directors.

7) What is a risk-adjusted return? A measure of an asset's financial value that considers the volatility incurred in producing the result.

8) What are the four S&P ratings of an ERM program?

- 1) *Excellent*-The organization consistently identifies, measures, and manages risk within its preset tolerance levels. It can consistently optimize risk-adjusted returns. Risk management is an important element in all its decisions
- 2) *Strong*- The organization has a developed vision of its overall risk tolerance. It also has a process for developing risk thresholds that are correlated with risk-adjusted returns
- 3) *Adequate*-A fully functioning risk control system exists for major risks, risk management efforts are silo based (as opposed to ERM based); and no clear vision can be demonstrated of the organization's overall risk profile or risk appetite and risk tolerance and therefore there is no optimization of risk-adjusted returns
- 4) *Weak*- The organization is unable to demonstrate a consistent risk management program across the company; its risk management efforts are sporadic; risk management is not considered consistently during organization-wide decision making and losses are not limited by management 's risk tolerance

9) What general steps can an organization take to achieve a higher S&P ERM rating?

- 1) Hire a chief risk officer to take responsibility for filling in the compliance gaps that S&P has identified in the organization's ERM program

- 2) Develop a formal management statement regarding which risks the organizations finds acceptable and which it does not
- 3) Engage in regular communication regarding risk and organization stakeholders

Chapter 13

- 1) **Briefly describe what role employees have as risk owners.** All employees must be aware of their role as risk owners. Employees must also understand the culture of an organization's to fully implement ERM. Employees must be educated to understand how their actions may affect the organization as a whole. While owners, board members, and managers own certain types of risks, labor is responsible for managing volatile situation that arise in the course of its work. An effective way to ensure that labor's risk ownership is understood and accepted is to clearly define the risks associated with each position in its job description. The risks, and each employee's ownership of them, should be unambiguously presented in each employee's recruitment and training.
- 2) **Explain why risk ownership is essential to the success of an ERM program.** Risk ownership is essential to the success of an ERM program because it places the responsibility, accountability and authority for risk on those stakeholders affected by risks.
- 3) **Identify six classes of external stakeholders that are essential to optimize ERM program**
 - a) *Suppliers*- Those that provide capital, labor, or commodities
 - b) *Customers*-Including households, businesses and government
 - c) *Society*- Including the public at large, nongovernmental organizations, and governments
 - d) *Competitive organizations*
 - e) *Co-operation*-Many organizations, both public and private, enter into strategic alliance with other organizations. For example, a manufacturer may enter into a joint venture with

another manufacturer to supply goods to a consumer. These two organizations are considered to be in co-opetition

- f) *Intermediate*-Parties that facilitate transactions between stakeholders

4) List six questions that should be answered by a business case for ERM.

- a) Why does the organization need ERM?
- b) What resources must be committed to ERM?
- c) How will the success of the ERM program be measured?
- d) Who will be in charge of the ERM program?
- e) What could go wrong or derail the ERM program?
- f) Why might an organization not want to implement an ERM program?

5) How can ERM strategies, be driven through the organization from the board level. An organization can use ERM in implement and monitor a consistent cross-functional program to more effectively address threats and opportunities. Implementing such a program can ensure that decisions throughout the organization are consistent with stakeholders' risk tolerance.

6) Identify the seven characteristics of an effective measurement tool for ERM

- a) Quantifiable in terms of currency, percentage, number , or a compared to internal or external benchmarks
- b) Consistent and traceable over time using standards that are readily identifiable
- c) Related to the probability or severity of the organization's key risks exposures
- d) Representative of predictive and historical indicators
- e) Useful in supporting management decisions
- f) Timely and cost effective
- g) Simplified, but not overly simplistic, monitoring process

Chapter 14

- 1) Why is it important to define a project's constraints in a project scope statement?** A project's constraints are the quantifiable criteria that must be met for the project to be successful. A scope statement is the documentation of the constraints, which are usually in the form of quality, timeliness, budget, and boundaries. Without a well-defined project scope statement, the project will be subject to scope-creep, which can lead to a failure to meet the budget and the schedule allowed for the project.
- 2) How can a project manager determine the activities on the critical path of the project?** To determine the critical path, which is the sequence of activities in the project that will add up to the longest overall duration, the project manager and the project team must define and order all of the activities to be completed in the project. Time estimates are then assigned to each activity. The activities and times are then plotted in a Gantt Chart and PERT diagram software which color-codes the critical path. Alternatively, the project manager can perform a critical path calculation by identifying all of the paths in a project, adding the time estimates for the activities in each path, and identifying the path with the longest item as the critical path.
- 3) What actions can managers take to ensure that changes are entrenched and prevent regression?** Managers should examine all of the organization's activities to ensure they align with the change. Systems, processes, and structures should be revamped to eliminate any opportunity for reverting to prior norms. The organization's culture must also be aligned with the change in the form of shared values based on the new vision. The leadership team should articulate the connection between new behaviors and processes and the organizational success so that employees understand the connection between the activity and the positive outcome.
- 4) What is the purpose of creating PERT diagrams and Gantt charts in the planning phase of an ERM project life cycle?** PERT diagram and Gantt charts document the required activities, the sequence of activities, and the

timeframe for the activities that are determined in the planning phase. These documents can then be used to track the execution of the project.

5) Why is continuous change a concept that is central to the ERM process?

The environment of any organization, which includes the market, competition, risks, and consumers' needs, is constantly changing. Because ERM is woven throughout the decisions the company makes regarding risks. ERM must react continuously to improve products, services, and processes incrementally as the environment changes and new decisions are made.

6) In an ERM project, what tools are useful in promoting continuous change?

Tools that are effective at conveying large amounts of information visually promote continuous change in an ERM project. Examples include dashboards and heat maps.

Chapter 15 (Questions You Need to Ask About Your Own Organizations)

1) Why does the organization need ERM?

2) What resources must be committed to ERM?

3) How will ERM success be measured?

4) Who will be in charge of ERM?

5) What can go wrong with ERM?