

CA FINAL

Risk Management

July 2021

Question Paper Analysis

- Sanjay Saraf Sir

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INTRODUCTION

CA Final RM July 21 paper Deep Dive Analysis is being presented herein. There has been a regime-switching event that took place in Case Study papers from November 2020, and the trend continues. This is across all elective papers which are open-book exams and got to be application-based instead of just searching through mapping sheets. The current set of Cases requires the candidate to use reason & logic –not just quote lines from the RM book in exam paper.

If I were to compare November 20, January 21 and July 21 Risk Management papers--I will admit that November 20 was the toughest while July 21 is the easiest out of the three.

Ofcourse, there are some foolish avenues (ignorant gossip mongers if I may call them) who have not come to terms with the essence & logic of Case Studies. They feel that Case Studies should be repeated from the past just like questions in SFM are...Well, it doesn't work this way and I am happy and pray that it never does! It defeats the very purpose of an open-book exam...I don't care if you hate me for this opinion and wish.

Case studies will always be new and ought to be that way...In fact, I will be the 1st person criticizing ICAI if they were to start repeating past Case Studies!

I have come out with an in-depth analysis of each Case Study with the help of a dedicated team of CA Finalists-- formed via announcement on telegram channel of SSEI. I am grateful to the team members and wish them good luck for the November 21 exams.

In each Case study, you will find:

- A. Synopsis**
- B. Breakdown in terms of chapter and page no from ICAI study mat and SSEI book 2**
- C. Answer discussion...explanation of each MCQ has been done in excruciating details...**

There are certain points which should be kept in mind while answering the questions:

- While answering the MCQ's focus on the key word used in the question like RCSA, BCP , Risk appetite and so on. Once the key word is identified, one should straight away look for that keyword in the index sheet (**Arranged alphabetically**) in SSEI book 1. It saves lots of time from searching it in mapping sheet and you can straight away reach at the ICAI study MAT respective page no. and look for the reference there.
- While answering to questions which by now you know that it can't be found in any of the books. It should be answered calmly by reading the question carefully and linking it with the existing knowledge of RM, SFM , Audit, etc.
- There are certain descriptive questions which clearly gives reference to the names/events used in a particular case study and it wants us to give solutions for a particular event. We know that these are from a particular topic Say Cyber Risk and where we are going to find it in the Mat. We should not only copy those points from the Mat but also should link it with the Case study under consideration.

At some places alternate solutions have been provided.

My comments are there at the end of most of the questions.

Finally, remember that RM **was, is and shall be** the best choice of Elective for a CA Final student-- just 9 chapters, SFM connection, Audit connection, lack of regulations, practical aspects, classes, notes, audio podcast, mapping sheet, QForum.....all available.

There may be some answer which doesn't match with ICAI answers and logic, and in case suggested answer are released before the exam, please don't forget to review the same.

Thanks and Regards

Sanjay Saraf & The Brainstorming Risk Management Team

The Brainstorming Risk Management Team



Aditya Arora

City: Lucknow



Gaurang Sharma

City: Jaipur



Raman

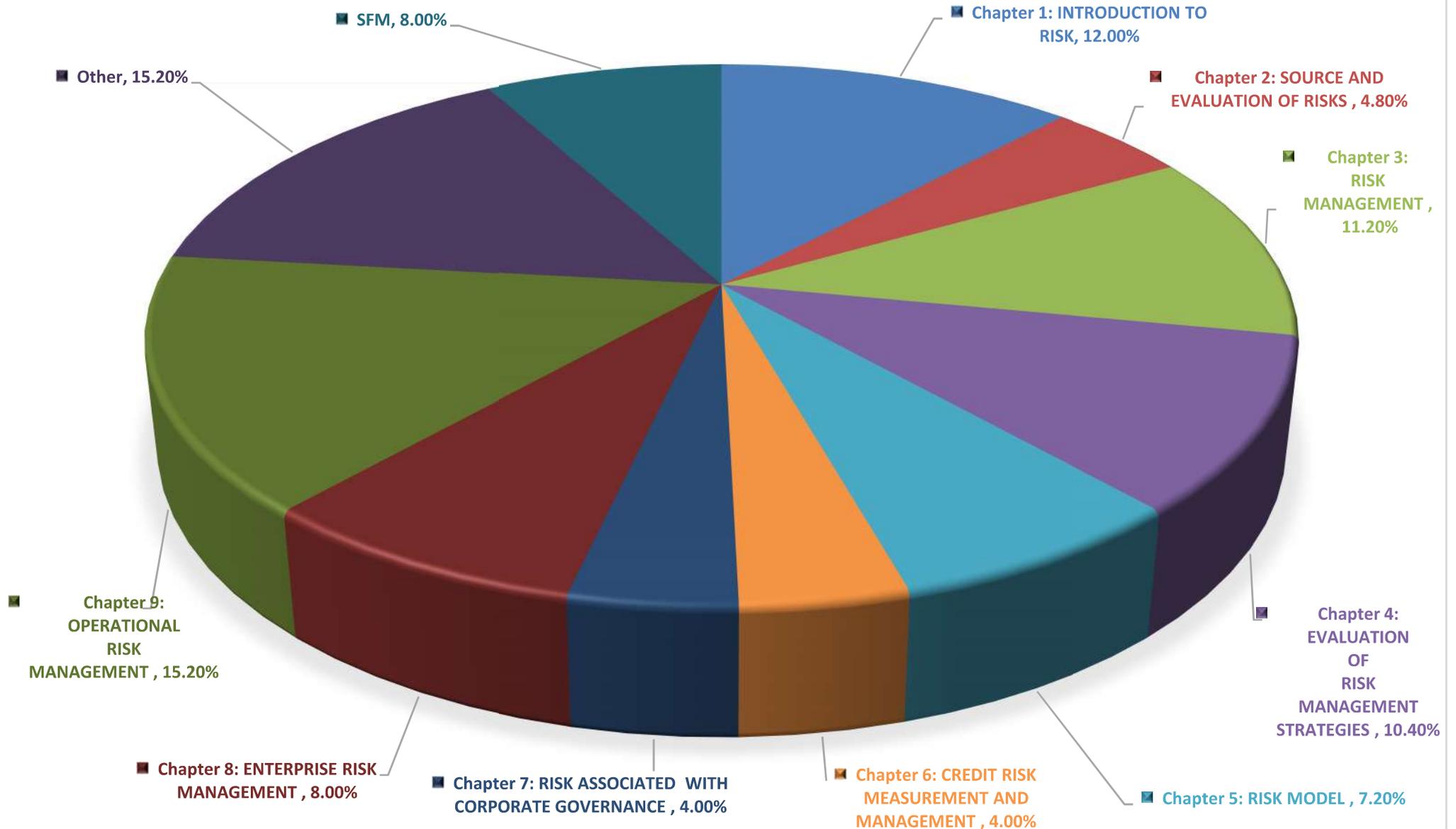
City: Fatehgarh Sahib



Sushmita Kurkure

City: Kalyan

RM PAPER- COMPONENT ANALYSIS



CASE STUDY – 1

INTRODUCTION

Alpha Mining Ltd. (AML) is a big player in mining industry in India. Currently there is no formal risk management process in the company and is more regulatory focused. The Chief Financial Officer (CFO) is responsible for risk management activities also. The board of AML believes that in the current environment of mounting economic, regulatory, and marketplace pressures and constant technological disruption, virtually all industries face increasing strategic risk and so is the case of AML. The board is concerned that the same is not being managed properly currently and has asked the CFO to make a presentation in this respect.

OBSERVATIONS BY THE BOARD

1. In fact, in a recently concluded board meeting the chairman of the board wanted to know whether risks of AML are being managed to a high standard. Further, the rising number of litigations against AML is cause of concern especially considering the fact that there is no policy framed by the board in this respect. Such risks are not only increasing operational risks of AML but also there is potential for misrepresentation in the financial statement. The board has also expressed its concerned about the manner in which settlements against litigations are negotiated.
2. Mr. S Lal who has been recently inducted on the board and is a recognised expert in risk management has suggested that the primary way to receive assurance will be through confidence that AML has an effective risk appetite framework.
3. During the board meeting, the CFO of AML informed the board that AML has undergone an extensive performance audit by the regulator and numbers of observations have been made by them on environmental issues.
4. AML has in place information security policy but the internal auditors have pointed out number of breaches including breaches by end users.

5. Improving risk management framework is the key agenda for the board and the CFO has been authorized to take external help in this respect.

ACTIONS TAKEN ON THE DIRECTIONS GIVEN BY THE BOARD

1. Considering the various issues raised by the regulators and the board, the CFO hired a risk management consulting firm. The risk management consultant has advised for the development of a risk management framework and Risk Appetite Statement (RAS) in order to articulate AML's risk position on all key risks including human health and the environment in contaminated environments. He further advised that by developing a risk management framework, AML would be able to state its accepted level of risk relating to managing the environmental audits it conducts and would be conscious when making decision to either accept or manage risk more effectively and efficiently.
2. The consultant has also advised to express risk appetite into number of key areas to align with statutory responsibilities and strategic objectives of AML. In addition to this, the consultant also wants AML to focus on 'soft elements' identified by them that would influence the risk appetite. In a nutshell, he advised to define risk capacity in order to ensure that AML is remaining within constraints implied by its regulatory obligations, state its risk appetite and specific desires to achieve AML's objectives and distinguish limits and thresholds for its key risk categories and dimensions.
3. The internal auditors have suggested that issues relating to breaches by end users are to be addressed more appropriately in the information security policy especially covering end user computing (this refers to computing facilities made available to users based on the business requirements for accessing and/or processing the information independently), internet and email usages.

Multiple Choice Questions

- 1.1. (1) Risk appetite, (2) risk capacity, (3) risk target, (4) risk tolerance and (5) risk limits are closely associated in risk management. Which one of the following arrangement shows the correct sequence in risk management in practice?
- (A) 1-2-3-4-5
 - (B) 2-1-4-3-5
 - (C) 3-1-2-5-4
 - (D) 4-1-3-2-5
- 1.2. Which one of the following is incorrect about the strategic risks ?
- (A) Unique to the organization.
 - (B) Damaging to the entire organization.
 - (C) Associated with primary objectives of the organisation.
 - (D) Easy to address with customary risk management methods.
- 1.3. While considering risk and uncertainty, the risk management team must be aware of that :
- (A) Risk assessment is the sole method of reducing uncertainty.
 - (B) Risk can apply to both opportunities and threats.
 - (C) Uncertainty should always be considered completely separate from risk.
 - (D) Uncertainty should only be considered when reviewing long-term objectives.

- 1.4. The Board of AML has asked your help so as to decide which type of risk framework is expected to improve efficiency by aligning strategy, processes, technology and people?
- (A) Controls, risk and supervision.
 - (B) Corporate governance and control.
 - (C) Governance, risk and compliance.
 - (D) Supervision, audit and compliance.
- 1.5. One of the board members raised the question about potential benefits of the risk management to AML. Which one the following is not the potential benefits of risk management?
- (A) Reduced cost of capital.
 - (B) More effective resource allocations.
 - (C) Increased understanding of entity objectives.
 - (D) Decreased inherent risk.

Descriptive Questions

- 1.6. Describe any three 'soft elements' that in your opinion influence the risk appetite of an organization.
- 1.7. What are the advantages of viewing strategic risks as dynamic processes in an organisation?
- 1.8. While framing the Policy on Management of Litigation, what are the important factors which AML should consider for negotiating settlement so that operational risk arising from litigations can be minimised?

- 1.9. While assuming ownership of information assets, what are the points relating to end users that you would consider in the information security policy which the end users in general and particular for internet and email usages would be required to adhere to?

Solution to Case Study 1

Synopsis

- AML- Big Player in Mining Industry
- No formal RM process in the company.
- Regulatory focused
- Facing strategic risk
- Rising no. of litigations- No policies framed
- Concerned about the manner in which settlements against litigations are negotiated.
- Ineffective information security policy - breaches by end users.
- Advised to focus on soft elements that influence the risk appetite.

Answers to Multiple Choice Questions

There are 3 type of Multiple Choice Questions which ICAI manufactures -

Type 1: Jinka answers hi nahi hay!

Scattered terms ICAI study mat me idhar udhar diye hue hay without any cohesion.....ICAI bol raha hay "dhundo to jaane".....in fact, wo bol raha hay "Bujho to jaane" This is the case with 1.1

Type 2: Jinka answers RM ke thore se knowledge se obvious hay!

Smartness naam ki ek cheez hoti hay.....1.2, 1.3 and 1.4 belong to this category.

Type 3: Jinka answers ICAI SM se directly mil jaayega!

Saab ne milke itna maara hay ICAI ka, waisa questions aaj kal kamti de raha hay!! Iss Case Study me to waisa nahi diya. This is question 1.5

.....*ohh bhulgaya -*

Type 4: WRONG QUESTIONS! Not a surprise though - Jai matadi!

Very important - It is not that ICAI keeval RM me hi aisa kar raha hay...baaki subjects me to isse bhi zyaada.....since students elective subjects thik se parr rahe hi nahi hay, aur yaa bolna chahiye, koi thik se parharahe hi nahi hay.....to usska audit hi nahi horaha hay and ICAI criticism se bach ja araha hay!

Case Study 1 Reference Table

Question No.	Marks	Chapter No.	Reference From	Page No.	Description
1.1	2	3	ICAI Study Material	3.3	Risk Management
1.2	2	1	ICAI Study Material	1.20	Introduction to risk
1.3	2	3	ICAI Study Material	3.1	Risk Management
1.4	2	7	ICAI Study Material	7.1, 7.2	Risk Associated with corporate Governance
1.5	2	3	ICAI Study Material	3.9, 3.10	Risk Management
1.6	6	3	ICAI Study Material	3.3, 3.4, 3.5	Risk Management
1.7	3	1	ICAI Study Material	1.11	Introduction to risk and own knowledge of strategic risk and importance (20% from chapter 1 and 80% from own understanding)
1.8	2	9	ICAI Study Material	9.11	Operational Risk and own understanding of legal risk and implementation (70% from ICAI points in the chapter and 30% additional points from own understanding)
1.9	4	9	ICAI Study Material	9.25, 9.26	Operational Risk (Cyber Risk)

1.1. (1) Risk appetite, (2) risk capacity, (3) risk target, (4) risk tolerance and (5) risk limits are closely associated in risk management. Which one of the following arrangement shows the correct sequence in risk management in practice?

- (A) 1-2-3-4-5
- (B) 2-1-4-3-5
- (C) 3-1-2-5-4
- (D) 4-1-3-2-5

Answer:

B is correct.

Explanation:

2-1-4-3-5

Step 1: An enterprise first defines its risk capacity (Capacity to take risk) based on it's type of business and amount of capital.

Step 2: Board and Senior Management then decide upon the risk appetite (willingness to take risk)

Step 3: Risk Tolerance = Min (Risk Capacity, Risk Appetite)

Step 4: Now, this Risk Tolerance is to be allocated across various business units based on unit's profitability (measured via some Risk Adjusted measure like RAROC). This allocated Risk Tolerance is known as Risk Target for the Business Unit.

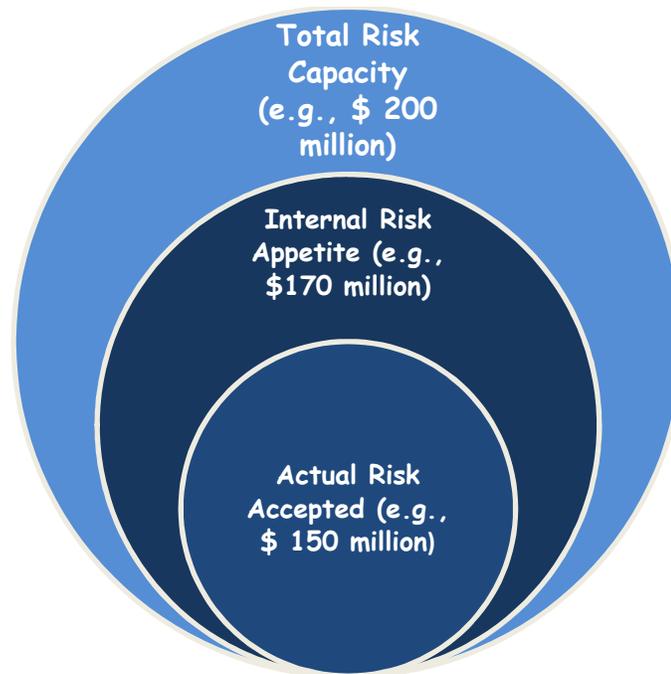
Step 5: In order to provide Unit Managers, with some degree of flexibility, we fix a range around the risk target, i.e. Lower limit and Upper limit.

Note: Refer to the circle which I had made during the first class of RM (also available on YouTube) explaining Risk Capacity and Risk Appetite.

Risk Capacity – Risk that the organization can take, say \$200m

Risk Appetite – Risk that the organization is willing to take, say \$170m

Actual Risk – Say \$150m.



Refer:

YouTube Link: <https://youtu.be/v4cnDsMmHUY> (All English)

https://youtu.be/SYz_eqY4Xfg (All Hindi)

Class Note:

<https://forum.ssei4forum.com/question/ca-final-risk-management-notes-class-1/>

1.2. Which one of the following is incorrect about the strategic risks ?

- (A) Unique to the organization.
- (B) Damaging to the entire organization.
- (C) Associated with primary objectives of the organisation.
- (D) Easy to address with customary risk management methods.

Answer:

D is correct.

Explanation:

Easy to address with customary risk management methods.

Let me exemplify how we did Strategic Risk in Class. We covered the same exhaustively using prominent examples of how failed business strategy contributed to a complete massacre of the organization (Remember the **Kodak** example we did in class? How can you forget about **Nokia's** collapse on account of not adopting the Android Technology in the Telecom Space? In fact, leave all this and just imagine how **CA Coaching Institutes** and teachers have failed on account of not adopting the DTH (Direct to Home) platform.

Refer:

Kodak Case Study - ICAI Study Material Page no. 3.12

Strategic risk is not easy to address as it involves the whole process of identification, analysis/assessment, risk response strategies and communicating it to the stakeholders.

It is the risk of the organization setting sub-optimal strategic objectives or having a faulty strategic plan in achieving the objectives. The customary methods of RM like putting in place Internal Controls, KRIs, RCSA, etc. are not sufficient to address Strategic Risk.

Strategic Risk is not a matter of choice. All organizations face the same.

- 1.3. While considering risk and uncertainty, the risk management team must be aware of that :
- (A) Risk assessment is the sole method of reducing uncertainty.
 - (B) Risk can apply to both opportunities and threats.
 - (C) Uncertainty should always be considered completely separate from risk.
 - (D) Uncertainty should only be considered when reviewing long-term objectives.

Answer:

B is correct.

Explanation:

Risk can apply to both opportunities and threats.

Risk is "uncertainty that matters"- this is the dialogue with which I started the RM classes and ended the same - anybody who has done RM classes with me must have internalized the same. I had kept on saying that Risk can be both positive or negative. Therefore, risk can be both threats and opportunities. A risk enabled organisation can also convert threats into opportunities.

- 1.4. The Board of AML has asked your help so as to decide which type of risk framework is expected to improve efficiency by aligning strategy, processes, technology and people?
- (A) Controls, risk and supervision.
 - (B) Corporate governance and control.
 - (C) Governance, risk and compliance.
 - (D) Supervision, audit and compliance.

Answer:

C is correct.

Explanation:

Governance, risk and compliance.

Since Strategic Risk is involved, Governance comes into play. This is given in Option B and C. As AML does not have any formal risk management policy and it's facing compliance issues with regulatory authorities, the best RM framework can be Governance, Risk and compliance.

- 1.5. One of the board members raised the question about potential benefits of the risk management to AML. Which one the following is not the potential benefits of risk management?
- (A) Reduced cost of capital.
 - (B) More effective resource allocations.
 - (C) Increased understanding of entity objectives.
 - (D) Decreased inherent risk.

Answer:

D is correct.

Explanation:

Decreased inherent risk.

Potential benefits of RM - Aha!!

RM ki wajah se company apna objectives better define kar sakta hay (Option C) - Yehi to apne Strategic Risk ke andar 1.2 me discuss kar rahe the. RM ki wajah se company ka perception logo ke mann me sudharta hay and company kamti byaaj pe paisa utha sakta hay(Option A). RM ki wajah se hum acknowledge karte hay ki resources scarce hay and unko optimally allocate karna parega(RAROC ka feeling) - Option B.

Inherent risk is the level of risk assuming no internal controls, while residual risk is the level of risk after considering the impact of internal controls. For example, the risk of 'over/ understatement of revenue' without considering any internal controls indicates inherent risk. The above risk when considered with internal controls in place (say, monthly reconciliation of revenue and follow up, correction of discrepancies, etc.) indicate **residual risk**.

So, inherent risk to organization me hoga hi.....RM and controls to ussko residual risk ke level pe le aata hay. In fact, decreased inherent risk is known as residual risk. So, answer is Option D.



1.6. Describe any three 'soft elements' that in your opinion influence the risk appetite of an organization.

Answer:

Risk appetite is the risk taking capacity and looks at how much risk one is willing to take. There can still be deviations that are within the risk appetite.

Risk appetite is the hard stop limit within which the Board would like to restrict its business actions. On account of such policy statement on the risk appetite, the business managers would not be allowed to take decisions that have the potential to go beyond the risk appetite limits of the entity.

Soft elements that influences risk appetite of the organization:

- Involvement of Companies executives and management team in determining and providing clear directions on the contours and definition of the risk capacity, appetite and tolerance levels.
- Risk appetite should be developed in the context of the organization's risk management capability, which is a function of risk capacity and risk management maturity.
- Risk appetite must be integrated with the control culture of the organisation . The risk management framework explores this by looking at both the propensity to take risk and the propensity to exercise control.

Note: This answer has been drafted from the write up provided in ICAI Study Material from Chapter 3- Risk Management page 3.3 , 3.4 and 3.5. Hence, it is a safe answer - high chance of matching with ICAI's suggested answer (whenever they release it)

1.7. What are the advantages of viewing strategic risks as dynamic processes in an organisation?

Answer:

If you really want to understand the question, let me share a story -

Imagine, a student Raghav coming from a well to do family (say per capita income ₹3,00,000 per month) and accumulated family wealth of say ₹10 Cr.

Raghav has a strategic objective of doing an MBA from the IVY leagues (Harvard Business School, in particular). Accordingly, after plus 2, he doesn't join any certification programs like CA/CFA and has his eye on appearing for GMAT at the end of second year of Graduation. Suddenly, COVID strikes havoc. He unfortunately loses his father and the entire business crumbles down. There is a destruction of wealth and permanent loss of per capita income. He has to manage his family business to ensure survival in the short to medium term. He changes his strategic objective and decides to apply his whole Body, Mind and Soul into reclaiming the economic well-being of his family and taking family business into new dimensions using modern technology.

Strategic risks are associated with the primary long term purpose, objectives and directions of the business.

Refer:

ICAI Study Material Chapter- 1 Introduction to risks Page 1.11

The only thing certain in today's world is “**Uncertainty**”. Environment is not static - it's dynamic characterised by the **VUCA** world. Strategic risks should be viewed as dynamic process in an organisation as:

1. External events which are rapidly changing due to which an organisation has to position itself with the changing needs and adapt to the latest trends in the market therefore these changes should be incorporated while

- determining the strategies of an organisation which affects the long term objectives of the business.
2. Even internally, firms' shareholding pattern, Board Composition, Senior Management, etc. may change significantly such that there is a change in their Business Model, Risk Appetite and Strategic Goals.
 3. Strategic risk arise from risk of failure in long term strategies. Some situations showing the dynamic characteristics of Strategic Risk are:
 - Change in operating environment.
 - Rapid growth.
 - New and continuously evolving Technologies.
 - New Business models, products, or activities.
 - New accounting pronouncements.

So, entity has to understand the dynamic nature of Strategic Risk and put in place a dynamic culture to manage the same.

1.8. While framing the Policy on Management of Litigation, what are the important factors which AML should consider for negotiating settlement so that operational risk arising from litigations can be minimised?

Answer:

AML is facing high number of litigations. This is mainly because AML does not have any policy framed in this regard which also gives rise to **Legal Risk**.

While framing the policy on management of Litigation, factors that AML should consider among many other things should include:

1. While entering into the contractual agreement, due diligence should be given the utmost importance so that the contract entered has all the relevant covenants which will reduce the litigations currently being faced by AML.
2. Contract should be well defined so as to minimize chances of any disputes with respect to settlements and terms of agreement. Contract should be drafted after considering all the regulatory requirements which are being faced by AML in the mining industry.
3. The management should study the root causes which of huge number of litigations against the company.
4. Since there are some unavoidable litigations that are not under the control of the organisation, company should try settling these litigations out of court because the risk of reputational damage is far worse than the risk of financial loss in the form of compensation.
5. Check type of dispute resolution clause
6. Be clear on limitation of claims whether contractual or otherwise
7. See scope / time line of operation of any interim relief orders
8. Make sure pre dispute rights are reserved and position of Co. recorded in writing

9. Maybe litigation insurance or keeping in touch with litigation funders
10. Keep complete record of claims, dues and payments
11. Document all critical correspondence including any agreement.
12. Ensure documents are sufficiently stamped including when brought into different jurisdictions
13. Decide on jurisdiction of courts / seat in contracts based on whether you're going to be claimant / respondent
14. On general lit management if they have day to day matters there are a number of things like keeping a record of dates and timelines for filing, nature of claims available, cost and counsel management, document retention including originals
15. No signing of waivers or no claims confirmations just to receive immediate funding
16. Panel of trusted lawyers and law firms including low cost high cost with a soft allocation

Refer:

Chapter 9- Operational Risk, ICAI Study Material page no. 9.11 (Legal Risk.)

- 1.9. While assuming ownership of information assets, what are the points relating to end users that you would consider in the information security policy which the end users in general and particular for internet and email usages would be required to adhere to?

Answer:

AML is facing issues regarding breaches by end users which has given rise to cyber risk. AML has an information security policy in place but the controls in those policies are not enough to prevent breaches by end users as pointed out by the internal auditors.

Therefore, the information security policies should be revised to prevent any major cyber attack in future. **The policies should include the following:**

1. An entity intending to create fraudulent transactions and benefit financially may send emails to organisations pretending to be from an organisation. This happens on an email that looks identical to the ones from the actual organisation which may result into financial losses by the organisation. To mitigate such risk access of the person from whom the mail has been received should be checked and proper controls should be established to identify the authority of the person from which such mails are being sent.
2. Access to the internal systems and software's should be restricted by password protection at various levels, from common users to administrator level .
3. Technology solutions should be explored that creates an adequate firewall of the organisations system to protect them from hacking from outside over the internet.
4. Proper IT controls should be establish having regard to the complexity of business operations and the kind of system networks used to take adequate measures on cyber risk.

5. Entity should introduce level wise restrictions for its own employees, so that employees can access limited number of websites and mails, that help them in fulfilling their responsibility at work.
6. In today's fast-moving world everything revolves around data, so data protection and handling is key to success for any organisation, AML should implement software's which tells the management which data point was accessed by which end user, what were the additions/deletions/edits made in the data. AML should also ensure that no data is leaked or stolen by some end user by implementing a check on emails and also creating restrictions in hardware/software of the system such that no user can transfer the data.
7. Proper Backup plan or BCP should be made in case there is some sought of breach due to cyber security, Entity should perform stress testing under different types of scenarios and plan action scenario if these types of lapses happen in the organisation. For example, if some data loss happens in an organisation, so organisation should have procedure of regular backup of data which are not directly linked with the current systems, So that in situations of data loss entity can still run its day to day operations.

Refer:

Chapter 9 - Operational Risk, ICAI Study Material page no. 9.25 and 9.26 related to Cyber Risk and Information Security Controls.

CASE STUDY – 2

INTRODUCTION

Star Pharma is a leading player in the pharmaceutical industry. It is an integrated global pharmaceutical company engaged in the development, manufacturing, marketing, sale and distribution of generic, brand pharmaceutical and over the counter (OTC) products. The Company competes with different companies depending upon product categories, and within each product category, upon dosage strengths and drug delivery systems. Such competitors include the major brand name and generic and OTC manufacturers of pharmaceutical products. In addition to product development, other competitive factors include product quality and price, reputation and service and access to proprietary and technical information.

Star Pharma has commercial operations in a number of established international markets with the opportunity for rapid growth in many emerging markets around the world. The chief operating officer (COO) believes that a global presence will allow the company to expand revenue base and manage risk through diversification. The COO and his team is expecting to capitalize on opportunities for growth within new markets that have opened up after the COVID-19. The company has set a separate treasury in order to manage the forex risk and is headed by Chief Financial Officer (CFO). Two employees have been hired to monitor forex positions, exchange rates and use appropriate hedge products.

ISSUES FACED BY STAR PHARMA

1. Star Pharma has several OTC brands that are hugely popular in the market. In recent time quality issues have been raised by a significant number of customers. The management investigation in the matter has revealed that this happened because of weak control over the raw materials. In fact, audit team identified many more operational risks issues including the gaps in the procurement system. Frequent rejections in highly competitive OTC products segment have exposed the company to reputational risk.

2. As the Company operates on a global basis with offices or activities in Europe, Africa, Asia, and North America, it faces several risks inherent in conducting business internationally, including compliances. These laws and regulations include data privacy requirements, labor relations laws, tax laws, anti-competition regulations, import and trade restrictions, export requirements etc. Given the high level of complexity of these laws, however, there is a risk that some provisions maybe inadvertently breached. Violations of these laws and regulations could result in fines, criminal sanctions against the Company, officers or employees, and prohibitions on the conduct of our business. Any such violations could also include prohibitions on products in one or more countries and could materially damage reputation, brand, international expansion efforts, and ability to attract and retain employees, business and operating results. The management believes that success depends, in part, on their ability to anticipate these risks and manage these difficulties.
3. In addition to the foregoing, engaging in international business inherently involves a number of other difficulties and risks such as longer payment cycle, potentially adverse tax consequences, tariffs, customs charges, bureaucratic requirements and other trade barriers, difficulties and costs of staffing and managing foreign operations. These factors or any combination of these factors may adversely affect revenue or overall financial performance of Star Pharma.
4. Star Pharma has now started using extensively online mode of order taking, payment and delivery. The company has hired number of vendors for this purpose. The operating model has now been completely revamped. The company has now created data base of customers which helps in marketing new products. This has started showing results but has also exposed the Company with new risks including cyber risks. Recently, the Company was attacked by Malware which affected the operations of the Company for one day. Cyber security was not an agenda in the past. But with change in the operating model this has become one of the key risk of Star Pharma. The Board believes that now the Company will have to invest in cyber security to minimize the possibility of a having a cyber-loss and make the Company cyber resilient. For this reason they want a comprehensive review of Business Continuity Planning (BCP).

5. Currently Star Pharma has risk management system in place but it is not integrated. In other words it is looking for a unifying philosophy that draws together management of all types of risks. The Board wants that risk management team must look at the risks that could affect the core process or stakeholder expectation on an enterprise-wide basis. The Board is fully aware that risk management has become more important because of increasing stakeholder expectations and the ever-increasing ease of communication. The Board wants to be confident that risks have been identified and that appropriate steps have been taken to manage risk to an appropriate level. Also, there is greater emphasis on accurate reporting of information by organizations, including risk information. In this backdrop, implementation of enterprise risk management (ERM) is being evaluated. While the management agrees with the need of ERM they are yet to take decision considering the cost involved in this decision.

Multiple Choice Questions

- 2.1. Control Risk Self-Assessment (CRSA) is a powerful tool that may be used to support ERM. Which one of the following is incorrect with respect to ERM and CRSA ?
- (A) ERM covers all risks whereas CRSA covers specific risks.
 - (B) CRSA is driven by risk policy whereas ERM is driven by desire for improved operations.
 - (C) ERM is mainly risk concepts for entire operations CRSA is mainly workshops on risk and controls.
 - (D) CRSA is based on local risk registers whereas ERM is based on corporate risk reporting system.

- 2.2. As a part of the treasury team of AML, the CFO has asked you to do hedging by borrowing foreign currency, converting it to domestic currency, and investing the domestic currency. Which one of the following derivatives is close to the above mentioned activities ?
- (A) Forward purchase contract.
 - (B) Option contract.
 - (C) Interest rate swap.
 - (D) Currency swap.
- 2.3. During the review of receivables, the CFO found that a bill amounting to GBP 10,00,000 was overdue for payment for more than 30 days. The CFO has asked you to verify whether the overdue bill has been crystallized by the Authorised Dealer by applying correct exchange rate. Which one of the following is the correct exchange rate for crystallization of the overdue export bills ?
- (A) Bill selling rate
 - (B) TT selling rate
 - (C) FC selling rate
 - (D) TT buying rate
- 2.4. Star Pharma is expecting EUR 5 million in six months' time and the treasury has decided to carry out cross-hedge. Which one of the following explains the cross-hedge ?
- (A) It involves the use of forward contracts, a combination of spot and market and money market transactions, and other techniques to protect from foreign exchange loss.
 - (B) It is a technique designed to hedge exposure in one currency by the use of futures or other contracts on another currency that is correlated with the first currency.

- (C) It involves an exchange of cash flows in two different currencies between two companies.
- (D) It involves a loan contract and a source of funds to carry out that contract in order to hedge transaction exposure.

2.5. The CFO of Star Pharma has asked the treasury team to negotiate a forex swap with the bank. In this context, what type of forex-swap is to be negotiated when it is to be done from tomorrow until the next date ?

- (A) Tom-next
- (B) Spot-next
- (C) Cash-next
- (D) Forward-next

Descriptive Questions

- 2.6. In the changed business model, the management of Star Pharma has identified vendor risk management as the key area of cyber security risk management. In the light of this what would be your suggestions to the Company for vendor risk management?
- 2.7. What are the two defining characteristics of cyber-resilient organization ? What is 'Reverse Stress Testing' in case of a cyber-resilient organization ?
- 2.8. You are required to prepare a short note for the board explaining what the ERM is and list its features of so that the board can take a decision about the implementation of the same. Also, explain how ERM is linked with the BCP ?
- 2.9. The treasury team of Star Pharma has been using forward contracts as tool to hedge forex risks. The CFO is not satisfied with this after the performance review of the treasury function. Prepare a note for CFO listing advantages of a 'currency option contract' as a hedging tool compared with the 'forward contract'.

Solution to Case Study 2

Synopsis

- Star Pharma is a leading player in the pharmaceutical industry and competes in different aspects of business ranging from development, manufacturing, marketing, sale, and distribution of generic, brand pharmaceuticals and OTC products.
- Star pharma CFO believes that global presence, especially in emerging markets will allow the company to expand revenue base and manage its risk through diversification.
- **ISSUES Faced by Star pharma**
 - There has been significant number of quality complaints against its OTC products. Reasons for the same are weak control over raw material procurement. Such quality issues can lead to reputational risk.
 - Due its global presence, company is facing several inherent risks -
 - Compliance of innumerable laws and regulation of different countries.
 - Longer payment cycle.
 - Potentially adverse tax consequences, tariffs etc
 - Star Pharma has started extensive use of online order taking, payments and delivery, etc. Accordingly, company is now exposed to cyber risk. Board thinks Co. should invest in cyber security.
 - Star Pharma has a Risk management team in place but it is not integrated. Board wants to focus on ERM as a concept now.

Case Study 2 Reference Table

Question No.	Marks	Chapter No.	Reference From	Page No.	Description
2.1	2	8 & 9	RM ICAI Study Material	NA	ERM and CRSA
2.2	2	9	ICAI SFM Study Material	NA	Type of contracts.
2.3	2	General Question SFM	NA	NA	Bid-Ask Rates
2.4	2	General Question SFM	NA	NA	Cross hedge
2.5	2	General Question SFM	NA	NA	Type of Forex-swap contract
2.6	4	9	RM ICAI Study Material	9.27	Cyber risk at vendor level
2.7	3	9	RM Suggested Answer Jan 21	Q 5.7	Cyber resilient
2.8	6	8	RM ICAI Study Material	8.2	Benefits of ERM
2.9	2	9	SFM Study Material	9.38	Option Vs Forward Contracts

- 2.1. Control Risk Self-Assessment (CRSA) is a powerful tool that may be used to support ERM. Which one of the following is incorrect with respect to ERM and CRSA ?
- (A) ERM covers all risks whereas CRSA covers specific risks.
 - (B) CRSA is driven by risk policy whereas ERM is driven by desire for improved operations.
 - (C) ERM is mainly risk concepts for entire operations CRSA is mainly workshops on risk and controls.
 - (D) CRSA is based on local risk registers whereas ERM is based on corporate risk reporting system.

Answer:

C is correct.

Explanation:

ERM is mainly risk concepts for entire operations, CRSA is mainly workshops on Risk and Controls

CRSA; when a test step is tagged to each of the controls and management functions performs the test, the exercise is known as CRSA, CRSA is not workshops on risks and controls.

Refer:

Operational Risk Chapter 9, page no. 9.10

Option A is correct because ERM covers all risks whereas CRSA covers identification of all risk but which may lead to operational risk event.

Option B is correct because the main objective if ERM is that organisation achieves its desired objectives, whereas CRSA is driven by risk policy.

Option D is also correct because ERM we take holistic view of an organisation.

Sanjay Sir's Comment:

A tricky MCQ where you have to use your brain to eliminate the different options, by referring to ERM in Chapter-8 and CRSA in Chapter-9.

2.2. As a part of the treasury team of AML, the CFO has asked you to do hedging by borrowing foreign currency, converting it to domestic currency, and investing the domestic currency. Which one of the following derivatives is close to the above mentioned activities ?

- (A) Forward purchase contract.
- (B) Option contract.
- (C) Interest rate swap.
- (D) Currency swap.

Answer:

A or D is correct.

Explanation:

(If A is Answer)

Forward Purchase Contract

This is Money Market Cover for receivable- Borrow, Sell, Invest (*naam to suna hoga*).

So, it's equivalent to Selling the Foreign Currency Forward. Unfortunately, Option A says Forward Purchase contract - it is not a big surprise if ICAI chooses this answer meaning that "*hum to forward sale contract bolna cha rahe the*".

(If D is Answer)

Currency Swap

A Currency Swap is a portfolio of Currency Forward Contracts. If Star Pharma wishes to hedge by borrowing foreign currency (say \$), converting the same into domestic currency (say ₹) and investing the domestic currency (say at a certain percentage) on a continuous basis, a Currency Swap would be ideal.

Let's keep our fingers crossed and see what answer ICAI provides.

Sanjay Sir's Comment:

This was a general question which could have been answered with your knowledge of the SFM subject.

2.3. During the review of receivables, the CFO found that a bill amounting to GBP 10,00,000 was overdue for payment for more than 30 days. The CFO has asked you to verify whether the overdue bill has been crystallized by the Authorised Dealer by applying correct exchange rate. Which one of the following is the correct exchange rate for crystallization of the overdue export bills ?

- (A) Bill selling rate
- (B) TT selling rate
- (C) FC selling rate
- (D) TT buying rate

Answer:

D is correct.

Explanation:

TT Buying Rate

Since the CFO was reviewing the receivables, the Company has a pending bill of GBP 10,00,000 which was overdue for payment for more than 30 days. We are expecting to receive GBP, and we will convert the same by selling GBP to bank @ TT buying rate.

Sanjay Sir's Comment:

A tricky question indeed. Customer GBP sell kar raha hay, matlab Bank i.e. dealer GBP buy kar raha hay--- konse market me? : Retail market me.hence, konsa rate? - TT buying Rate. Issliye SFM bohot zaroori hay!

- 2.4. Star Pharma is expecting EUR 5 million in six months' time and the treasury has decided to carry out cross-hedge. Which one of the following explains the cross- hedge ?
- (A) It involves the use of forward contracts, a combination of spot and market and money market transactions, and other techniques to protect from foreign exchange loss.
 - (B) It is a technique designed to hedge exposure in one currency by the use of futures or other contracts on another currency that is correlated with the first currency.
 - (C) It involves an exchange of cash flows in two different currencies between two companies.
 - (D) It involves a loan contract and a source of funds to carry out that contract in order to hedge transaction exposure.

Answer:

B is correct.

Explanation:

It is a technique designed to hedge exposure in one currency by the use of futures or other contracts on another currency that is correlated with the first currency.

Cross hedge is a technique designed to hedge exposure in one currency by the use of futures or other contracts on another currency that is correlated with the first currency.

Sanjay Sir's Comment:

This was the first straight forward MCQ of this case study, which can be answered easily. Similar question was asked in January-21 paper as well.

- 2.5. The CFO of Star Pharma has asked the treasury team to negotiate a forex swap with the bank. In this context, what type of forex-swap is to be negotiated when it is to be done from tomorrow until the next date ?
- (A) Tom-next
 - (B) Spot-next
 - (C) Cash-next
 - (D) Forward-next

Answer:

A is correct.

Explanation:

Tom-Next

Tomorrow next (tom next) is a short-term foreign exchange (forex) transaction where a currency is simultaneously bought and sold over two separate business days: those being tomorrow (in one business day) and the following day (two business days from today).

Meaning of the other options are:

Spot next (S/N) is a term used in foreign currency trading. It denotes the delivery of purchased currency on a day after the spot date. Spot-next contracts are short-term swaps where a currency is rolled out one further day, the next day after the spot. Spot-next is otherwise known as "next business day." Since the CFO has asked the treasury team to negotiate a forex swap, in which it is to be done from tomorrow until next day.

There is no such thing called **Cash Next** or **Forward Next**.

Sanjay Sir's Comment:

This was a difficult question beyond the concepts covered in SFM or RM

2.6. In the changed business model, the management of Star Pharma has identified vendor risk management as the key area of cyber security risk management. In the light of this what would be your suggestions to the Company for vendor risk management?

Answer:

Cyber risk term broadly refers to the risk an organisation/individual is exposed to, due to a situation where its data, or network systems, or its transactions are disrupted, compromised or damaged/destroyed by an intrusive access for an external entity.

Star Pharma has started using online mode of order taking, payments and delivery. The company has hired number of vendors for this purpose. So company has to go for the vendor risk management to be a cyber resilient organisation. Here are few suggestions for vendor risk management-

- a. **Identification of Risk areas:** Organisation has to first identify weak links or gaps in information system of the organisation, then move forward to identify weak link with vendors Information system. Prioritization of resources and efforts can be managed accordingly.
- b. **Access Restrictions:** Company has to make uniform rules and regulation regarding granting access of systems at vendor's place. And since data is very important for the organisation, Vendor should have access to only that data which is required for their daily workings.
- c. **Encryptions:** Encryption solutions on individual computers is also done in a manner that that if lost, the unauthorised entity cannot download the data into external storage devices.
- d. A regular vulnerability testing of the firewall and periodic review to upgrade it is one of the main tasks of the information security manager. Detection of a test-attack is very important part of the preventive

- mechanism; an attacker may attempt to cause a minor violation to test the organisation's network security before causing a major incident.
- e. A response strategy to a cyber-attack incident is also important as part of risk management. The measures to prevent or mitigate customer disputes, legal indemnities, assess and minimize the financial impact of a cyber-attack, and governance over decision making and investments to restore the system functionalities to its secure state, are all important considerations. The root cause of these incidents and the impact must be adequately documented.

Sanjay Sir's Comment:

This was a question from Chapter-9 Operational risk, cyber risk part. We have to suggest how to prevent cyber risk at vendor level, try connecting the suggestion with case study.

2.7. What are the two defining characteristics of cyber-resilient organization ? What is 'Reverse Stress Testing' in case of a cyber-resilient organization ?

Answer:

Defining characteristics of cyber-resilient organization are as follows:

- **Identification of risk areas:** whether it is own or outsourced network, internet, individual computers, mobile devices etc. Prioritization of resources and effort can be managed accordingly.
- Adequately restricting access to systems is the common way to prevent cyber risk; this is done by password protection at various levels, from common user to administrator level.
- Encryption solutions on individual computers is also done in a manner that if lost, the unauthorised entity cannot download the data into an external storage device.
- There are several technology solutions that create an adequate firewall of the organisation's systems to protect them from hacking from outside.
- A regular vulnerability testing of the firewall and periodic review to upgrade it is one of the main tasks of the information security manager. Detection of a test-attack is very important part of the preventive mechanism; an attacker may attempt to cause a minor violation to test the organisation's network security before causing a major incident.
- A response strategy to a cyber-attack incident is also important as part of risk management. The measures to prevent or mitigate customer disputes, legal indemnities, assess and minimize the financial impact of a cyber-attack, and governance over decision making and investments to restore the system functionalities to its secure state, are

all important considerations. The root cause of these incidents and the impact have to be adequately documented.

Like some institutions failed during global financial crises, this period represented stress to default scenario. It involves extremely unlikely events which force the companies to think about the firm's most serious vulnerabilities and design stress to default scenarios accordingly.

Alternative Answer:

Due to fast pacing improvements in technology, data is getting more and more important for an entity to thrive in such a competitive environment. As data importance is growing, entity are now starts facing a very new risk i.e., cyber risk, which can lead to huge losses to an organisation in both financial and non-financial terms. An organisation is referred to as cyber resilient organisation, if the organisation is able to nicely deal with the cyber attacks and data losses, i.e. in case of cyber-attacks or data loss due to an events, entity daily operation should not get halted, like in case of Star Pharma due to an malware attack, operations of the company were on halt for one day, which could have lead to financial, reputational and legal risk for the organisation. So here are two characteristics of an cyber resilient organization:

1. An cyber resilient organisation will identify, assess and evaluate various cyber risks, and how such risks can affect the organisation. Organisation should maintain adequate documentation on technical standards followed and aspired to followed by the organisation. Different sets of employees whether they are users/custodians of data, need different kind of awareness and training to maintain information security.
2. An entity should have an Business Continuity Plan(BCP) in case of such vulnerabilities, so that the operations works usually as they would have run on other days.

Reverse stress testing involves extremely unlikely events which force companies to think about the firm's most serious vulnerabilities and design stress to default

scenarios accordingly. For a cyber resilient organisation, reverse stress testing means defining a event in which organisation can default, then make an action plan for such events or make BCP in case such event happens.

Sanjay Sir's Comment:

Not a direct question, you have to refer to Chapter-9 Operational risk, cyber risk part, and you have to pick some stuff from book and some stuff you got to add by yourself. Or same question was asked in Jan-21 exam, you can refer to that answer.

- 2.8. You are required to prepare a short note for the board explaining what the ERM is and list its features of so that the board can take a decision about the implementation of the same. Also, explain how ERM is linked with the BCP?

Answer:

ERM is the process of assessing risk and acting in such a manner, or prescribing policies and procedures, so as to avoid or minimize loss associated with such risk.

Specifically, ERM can help organizations:

1. Identify strategic risk opportunities that, if undertaken, can facilitate achieving organizational goals.
2. Introduce a common language within the organization where people recognize problems and adopt a problem solving approach by developing risk treatment actions.
3. Provide senior management with the most up-to-date information regarding risk that may be used in the decision-making process.
4. Establish linkage between the ERM initiative and adherence to capital market reporting disclosures and other corporate laws and regulations.
5. Align annual performance goals with risk identification and management.
6. Encourage and reward upstream reporting of business-risk opportunities and challenges.
7. Align other risk monitoring initiatives such as self-appraisals, internal auditing activities, control assessments, continuous control monitoring, to organizational objectives.
8. Imagining key Risk Scenarios that could potentially result in a stress on the financial position of the company.
9. Financial Risk monitoring a part of the ERM initiative can balance the financial stability equation of the company.

BCP refer to the concept that encompasses technology and business process framework that ensure that in times of unscheduled disruption of the routine process, an alternative mode of management of priority, technology solution and business process is undertaken. Some example where BCP is required - Natural disasters, Civic infrastructure failure, keyman risk etc. So in ERM entity makes a major distribution towards helping organization manage risks to achieve its objectives. So, while implementing ERM we identify potential threat that will most likely decrease the chance of attainment of objections after identification, we prepare appropriate response of such threat, so BCP forms a part of ERM as a response to such potential threats.

Note: This was a very straight forward Question given from Chapter-8 ERM, in which first we have to describe Benefits/features of ERM, then after mix matching both ERM and BCP, we have to write a short note. Easy 6 Marks.

2.9. The treasury team of Star Pharma has been using forward contracts as tool to hedge forex risks. The CFO is not satisfied with this after the performance review of the treasury function. Prepare a note for CFO listing advantages of a 'currency option contract' as a hedging tool compared with the 'forward contract'.

Answer:

The following are the advantages of a currency option contract over forward contract:

1. In an option contract, buyer has a right to exercise a contract at a particular price(no obligation), whereas a forward contract has both right and obligation to perform. Dialogue - "*Agar Option Buy karke hedge karoge, and rate adverse direction me change ho gaaya, to Option bacha lega and rate agar favourable direction me chala gaya, to Option bolega "Jaa beta, jeele Aapni Zindegi".*"
"Forward Contract, bachayegabhi, aur phasayegabhi.....no flexibility man!!"
2. In case of Options, there is Upfront premium, i.e. Price of the Option. There is no such premium in case of Forward Cover.
3. Options are a non-linear derivative, while Forwards are a linear derivative.
4. Options are contingent claims while Forwards are commitments.
5. Losses are restricted while there is an unlimited gain potential for option buyer, whereas in case of forward contract there is unlimited gain/loss.
6. An American option can be exercised any time during its period by buyer, whereas forward contract is to be honoured by both the parties on date specified.

Sanjay Sir's Comment:

This was a straightforward question which can be easily answered by referring SFM book Chapter-9 page 9.38, or it can be answered using common sense as well.

CASE STUDY – 3

INTRODUCTION

Mr. Shyam, an entrepreneur, came across the Taxation Laws (Amendment) Act, 2019 which offered a low tax rate of 15% (plus surcharge and cess) to new manufacturing companies, subject to fulfilment of certain conditions. After thinking over, he consulted his like-minded business colleagues and decided to commence a new manufacturing public limited company. They also agreed to Mr. Shyam's proposal and agreed to be promoters of the company along with him. They discussed various modalities and procedures involved in commencement of the company.

DISCUSSIONS OF THE PROMOTERS

- i. They had two alternatives, i.e., to pursue Project X (manufacturing Product A) or Project Y (manufacturing Product B). The following are the data for both the Projects with five possible events :

Possible Event	Project X		Project Y	
	Cash Flow (₹000)	Probability	Cash Flow (₹000)	Probability
L	18,000	0.22	28,000	0.25
M	16,000	0.18	25,000	0.19
N	21,000	0.14	29,000	0.16
O	19,000	0.25	27,000	0.24
P	22,000	0.21	16,000	0.16

- ii. The promoters are very much aware that the activities, whether financial or non-financial, would get affected by the external environments. They want to have a comprehensive understanding of the significant factors and the aspects underlying the same.
- iii. The above referred Act allowed the import of new machinery which can be used in the manufacturing of the product.

- iv. The promoters are convinced that the risk management is one of the important pillars of Governance and arguably the only tool to deal with business uncertainty. Risk management is recognised as an integral component of good management and governance. It is an iterative process consisting of steps, which, when undertaken in sequence, enable continual improvement in decision making.
- v. Right from day one, they wanted to go in for the implementation of Enterprise Risk Management (ERM) which is a tool that assists an organisation in meeting its business objectives.
- vi. They want to employ a team of internal auditors i) for the audit of internal controls to ensure that they are meticulously designed and operate efficiently ii) look into the risk governance framework established by management to confirm that they operate as intended and iii) monitor constantly the risk management program for its effectiveness and improvements.
- vii. The promoters are also aware that as public limited company of a particular size, it has to comply with more number rules and regulations than a private limited company especially in reporting of internal financial controls over financial reporting.
- viii. Today's business is constantly changing and seems to become more complex every day. Therefore, the decisions of the management involve the recognition of risk and opportunity.
- ix. They also agreed to consider exporting the products manufactured by the proposed company, after exploring the market feasibility. Few spare parts for imported machinery will have to be paid in foreign exchange only. Mr. Shyam is made in-charge to handle the foreign exchange transactions for the same.
- x. The promoters realised the importance of Information Technology (IT) and its pivotal role in the business. IT is no longer an enabler, but it has now become the driver of business.
- xi. The proposed company, Shyam Polyfibres Limited (SPL) would have to face challenges such as, i) finding out enough finances to commence and run the

company, ii) proper planning, iii) employing qualified and dedicated workforce, iv) stiff competition etc. The promoters are aware of these issues and have decided to boldly face and resolve them by proper planning.

- xii. SPL would use a Risk Monitoring Tool (RMT) to track progress of risk management using qualitative assessment of probability and impact of risk.
- xiii. In order to predict the sales of the proposed manufacturing of the new product, SPL would use a computer software that generates thousands of possible outcomes from the distribution of inputs which are specified by a user.

Multiple Choice Questions

- 3.1. During the execution of the project of SPL, a new risk was identified, which was not identified earlier in the Risk Identification exercise. Which of the following would not potentially enable a new risk to be identified ?
- (A) Running some trend analysis reports to analyse incidents.
 - (B) Recording incidents in a register.
 - (C) Conducting root cause analysis.
 - (D) Flow-charting the significant business processes.
- 3.2. The auditor of SPL is trying to discharge his liability on the company's Internal Financial Controls over Financial Reporting in an IT environment. He is assessing the strength of the control environment used in the automated control activities. For ensuring timeliness, accurate and reliability of the information used in the financial control, the auditor most likely would focus his attention on the underlying :
- (A) Application systems
 - (B) Operating systems

- (C) Financial reports
- (D) Database management systems

3.3. SPL most likely would have employed which of the following in the software referred to in item (xiii) of the 'outcome of discussion of the promoters' ?

- (A) Bootstrap Simulation
- (B) Monte Carlo Simulation
- (C) Historical Simulation
- (D) Linear Simulation

3.4. In the context of ERM, proposed to be implemented by SPL, which of the following would best refer to a 'hazard risk' ?

- (A) Risk associated with the strategic planning of the company.
- (B) Risk associated with the operations of the company.
- (C) Adverse financial losses of the company those are associated with pure risks.
- (D) Adverse financial losses of the company those are associated with diversifiable risks.

3.5. The RMT employed by SPL is known as :

- (A) Risk Event Maps
- (B) Risk Scorecards
- (C) Risk Heat Maps
- (D) Flow Charts with Risk Flags

Descriptive Questions

- 3.6. Calculate Coefficient of variation of Project X and Project Y and suggest which Project should be undertaken by the promoters. Show your workings.
- 3.7. 'External environment can affect the company directly or indirectly.' Examine the statement by discussing various aspects of the significant factors affecting the external environment which in turn could affect SPL's ability to create value in the short, medium and long term.
- 3.8. What is foreign exchange exposure and discuss foreign exchange exposures that SPL might face in its proposed transactions ?

Solution to Case Study 3

Synopsis

- Corporate tax cut to 15% for new manufacturing units announced in September 2019, by Hon' Finance Minister, Nirmala Sitaraman, excited many visionary businessmen, such as Mr. Shyam and his friends to start a new Manufacturing Unit in India.

Note - "Chal Chal naya manufacturing unit baythate hay!!! Ab to tax keval 15% dena hay!!! And aapna CA bhi to hay!!! Jo effectively tax 0 kardega!!"

- Promoters are aware of various external factors that could affect the business

Note - Har project me risk hay - Risk Analysis important(Chapter 1)

- They decided to go for implementation of ERM(Chapter 8)
- Appointment of internal auditors took place
- Foreign Exposure also exist, as imported machinery to be paid in foreign currency (Related to SFM).
- Usage of RMT (Risk Monitoring Tool) such as Risk Heat Maps to track progress(Chapter 3)
- Usage of Monte Carlo Simulation for generation of thousands of possible outcomes from the distribution of inputs which are specified by a user(Chapter 5)

Case Study 3 Reference Table

Question No.	Marks	Chapter No.	Reference From	Page No.	Description
3.1	2	2	ICAI Study Material	2.12	10 th Point, Incident Analysis
3.2	2	9	ICAI Study Material	9.4	Auditor's responsibility. 5 th point
3.3	2	5	ICAI Study Material	5.5	Point c, Monte Carlo Simulation
3.4	2	1/ RM Book 2	ICAI Study Material/SSEI RM Book 2	1.16/11	Pure/Hazard risk
3.5	2	3	ICAI Study Material	3.12	Risk Management Techniques
3.6	6	RM Book 2	SSEI	44	Coefficient of Variance
3.7	5	4	ICAI Study Material	4.11	External Environment Factors
3.8	4	SFM 9	ICAI Study Material	9.19	Type of Foreign Exchange Exposure

- 3.1. During the execution of the project of SPL, a new risk was identified, which was not identified earlier in the Risk Identification exercise. Which of the following would not potentially enable a new risk to be identified ?
- (A) Running some trend analysis reports to analyse incidents.
 - (B) Recording incidents in a register.
 - (C) Conducting root cause analysis.
 - (D) Flow-charting the significant business processes.

Answer:

D is correct.

Explanation:

Flow-charting the significant business processes

Recording incidents in a register, conducting root cause analysis, and periodically running some trend analysis, can potentially enable new risks to be identified. In addition, a high frequency of similar incidents can be a lead risk indicator to a potentially larger problem.

Sanjay Sir's Comment:

This is a direct question, you should jump to Chapter-2 as it talks about risk identification, and directly visit page. 2.12, 10th Point Incident Analysis.

3.2. The auditor of SPL is trying to discharge his liability on the company's Internal Financial Controls over Financial Reporting in an IT environment. He is assessing the strength of the control environment used in the automated control activities. For ensuring timeliness, accurate and reliability of the information used in the financial control, the auditor most likely would focus his attention on the underlying :

- (A) Application systems
- (B) Operating systems
- (C) Financial reports
- (D) Database management systems

Answer:

A is correct.

Explanation:

Application Systems

Assessment of control environment, including use of technology to automate control activities, to ensure timeliness, accurate and reliability of info used in financial controls are dependent on underlying **application systems** that are used to generate, process, store and report the information in a manner that adequately addresses effectiveness, efficiency, confidentiality, integrity, availability, compliance, and reliability.

Sanjay Sir's Comment:

This question though asked with reference to case study, it appears to be a direct question, as it talks about IFCFR in IT Environment we can go to Chapter-9, page 9.4, 3rd Point.

- 3.3. SPL most likely would have employed which of the following in the software referred to in item (xiii) of the 'outcome of discussion of the promoters' ?
- (A) Bootstrap Simulation
 - (B) Monte Carlo Simulation
 - (C) Historical Simulation
 - (D) Linear Simulation

Answer:

B is correct.

Explanation:

Monte Carlo Simulation

It basically refers to computer software that generates thousands of possible outcomes from the distribution of inputs which are specified by a user, e.g., **distribution of monthly returns of hundreds of stocks in a portfolio**. Remember, MCS is the only type of simulation which considers distribution of the inputs.

Sanjay Sir's Comment:

This is again a direct question can be attempted with prior knowledge of the concept of Monte Carlo simulation, though we can refer to Chapter- 5, Page 5.5.

- 3.4. In the context of ERM, proposed to be implemented by SPL, which of the following would best refer to a 'hazard risk' ?
- (A) Risk associated with the strategic planning of the company.
 - (B) Risk associated with the operations of the company.
 - (C) Adverse financial losses of the company those are associated with pure risks.
 - (D) Adverse financial losses of the company those are associated with diversifiable risks.

Answer:

C is correct.

Explanation:

Adverse financial losses of the company those are associated with pure risk

Pure risk is also known as hazard risk or absolute risk. As per Paul Hopkins, Pure risks are associated with uncertainties which may cause loss.

Sanjay Sir's Comment:

This is a direct question from Chapter 1 - it can be answered if one knows that hazard risk is also known as pure risk. Page 11 from RM Book 2 a reference.

3.5. The RMT employed by SPL is known as :

- (A) Risk Event Maps
- (B) Risk Scorecards
- (C) Risk Heat Maps
- (D) Flow Charts with Risk Flags

Answer:

C is correct.

Explanation:

Risk Heat Maps

A **monitoring tool** to track the progress of risk management using qualitative assessment of probability and impact of risk is termed as **Risk heat maps**. It is one of the technique used in risk enabled and managed organisation.

Sanjay Sir's Comment:

A direct question, jump to Chapter- 3, Page 3.12, Covered and explained in depth in class multiple times, can be solved without reference.

3.6. Calculate Coefficient of variation of Project X and Project Y and suggest which Project should be undertaken by the promoters. Show your workings.

Answer:

Calculation of project A					
Possible events	Probability(P)	Cash Flow(X)	PX	x-mean	P(x-mean) ²
L	0.22	18,000	3,960	-1,150	2,90,950
M	0.18	16,000	2,880	-3,150	17,86,050
N	0.14	21,000	2,940	1,850	4,79,150
O	0.25	19,000	4,750	-150	5,625
P	0.21	22,000	4,620	2,850	17,05,725
			19,150		42,67,500

Mean = 19,150

Variance = 42,67,500

SD = 2,065.80

CV of Project X = $SD/Mean = 2,065.8/19,150 = 0.1079$

Calculation of project B					
Possible events	Probability(P)	Cash Flow(X)	PX	x-mean	P(x-mean) ²
L	0.25	28,000	7,000	2,570	16,51,225
M	0.19	25,000	4,750	-430	35,131
N	0.16	29,000	4,640	3,570	20,39,184
O	0.24	27,000	6,480	1,570	5,91,576
P	0.16	16,000	2,560	-9,430	1,42,27,984
			25,430		1,85,45,100

Mean = 25,430

Variance = 1,85,45,100

SD = 4,306.40

CV of Project Y = $SD/Mean = 4,306.40/25,430 = 0.1693$

Conclusion- lower the Coefficient of Variation the better it is, Since Mr. Shyam is taking decision regarding acceptance of project considering CV it should accept Project X which has a lower CV than project Y, which should be rejected.

Sanjay Sir's Comment:

Very easy question for 6 marks from Chapter-5, in which we just have to calculate CV of two projects and compare the same and give your conclusion regarding it. Very scoring question.

- 3.7. 'External environment can affect the company directly or indirectly.' Examine the statement by discussing various aspects of the significant factors affecting the external environment which in turn could affect SPL's ability to create value in the short, medium and long term.

Answer:

Events can have negative impact, positive impact or both. Events with a negative impact represents negative risks, which can prevent value creation or erode existing value. The promoters of Shyam Polyfibres Ltd are aware that activities whether financial or non-financial, would get affected by external environment, that could possibly prevent value creation or erode existing value. The external risks are risks arising from the events taking place outside the organisation. The factors affecting external environment are as follows:

1. **Compliance with regulatory changes:** It arises when there are changes made in policies and procedures by the regulators. Any changes in the rules and regulations which may have a negative impact on business activities may be classified as regulatory risk. Suppose that if this 15% taxation rule which is recently launched and its gets revoked without giving any previous notice to the companies.
2. **Market Risk:** The risk of losses caused by the adverse changes in the market variables such as interest rates, forex rates, equity prices etc. Market risk is known as systematic risk which can not be diversified, but it can hedged against. Here polyfibre will be mainly facing foreign exchange because it plans to export and import machinery and parts of machinery. And like most of the organisation it will have its fair share of exposure to interest rate risk.
3. **Economic Conditions:** A lot of things depend on economic conditions of country where Shyam polyfiber is manufacturing and supplying its products. Suppose if due to inflation in country of manufacturing raw material has

- becomes more costly, so margins will get reduced. Another example is where the Shyam Polyfibres are supplying its product is currently going through recession, it will lead to less demand for its products and hence less profit for the company. So economic conditions play an important role in financial terms.
4. **Risk of natural calamity:** Risk on account of natural calamity like floods, earthquake etc can affect the operations of the organisation. In terms of availability of Raw material or labour or even leading completely shutting down the production.
 5. **Technology risk:** Risk of not keeping the pace with the fast changing technologies for business operations. Usage of outdated technologies could impact the business operations adversely thereby resulting in loss of reputation, market share etc. Mr Shyam has to keep an eye on external environment specially the competition, and invest in R&D, such that there organisation don't become worthless in just matter of few days.

Comment:

This question was from Chapter-1, Page 1.19, there are external environment factors mentioned, we have to just add some points regarding those factors, and try connecting it with the case study, in the above answer we could have also added information risk.

Alternative answer:

External Environment can affect the organization directly or indirectly (e.g., by influencing the availability, quality and affordability of a capital that the organization uses or affects). Significant factors affecting the external environment that affects the organization's ability to create value in the short, medium or long term include aspects of:

- Legal
- Commercial
- Social
- Environmental
- Political context

Sanjay Sir's Comment:

A direct question - just got to refer the case study for the points mentioned above, Page 4.11.

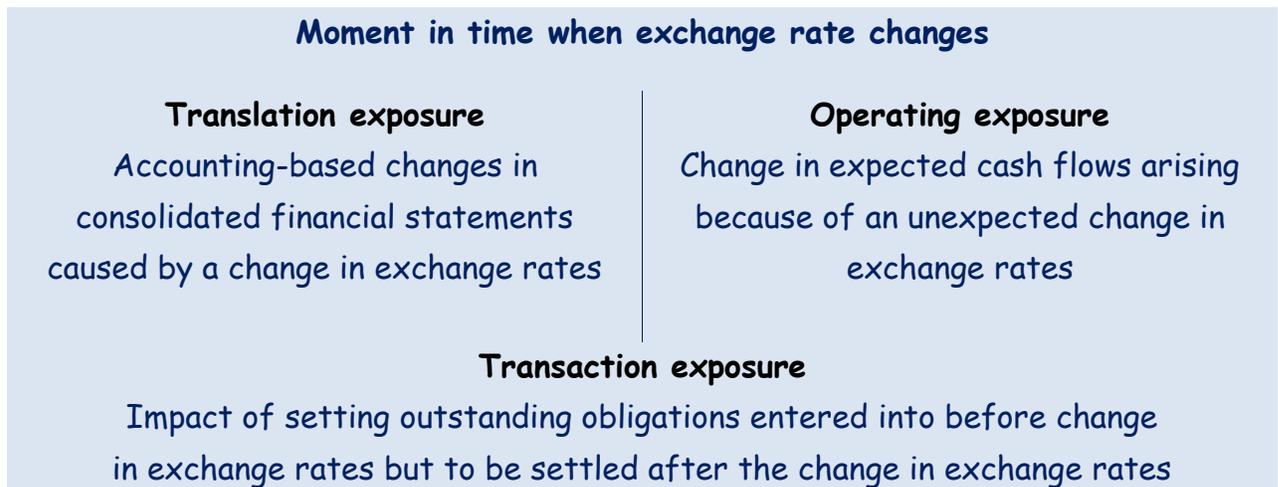
3.8. What is foreign exchange exposure and discuss foreign exchange exposures that SPL might face in its proposed transactions ?

Answer:

Foreign Exchange Exposure Meaning:

"Foreign Exchange Exposure can be defined as a Contracted, Projected or Contingent Cash Flow whose magnitude is not certain at the moment. The magnitude depends on **the value of variables such as Foreign Exchange rates.**" In other words, exposure refers to those parts of a company's business that would be affected if exchange rate changes. Foreign exchange exposures arise from many different activities.

Foreign Exposure that SPL can face:



Transaction Exposure:

It measures the effect of an exchange rate change on outstanding obligations that existed before exchange rates changed but were settled after the exchange rate changes. Thus, it deals with cash flows that result from existing contractual obligations.

It measures the changes in the value of outstanding financial obligation incurred prior to a change in exchange rates but not due to be settled until after the exchange rates change. Thus, it deals with the changes in the cashflow which arise from existing contractual obligation.

As SPL has to pay for imported machinery, it is truly exposed to transaction exposure

Translation Exposure:

Also known as accounting exposure, it refers to gains or losses caused by the translation of foreign currency assets and liabilities into the currency of the parent company for consolidation purposes.

Translation exposure, also called as accounting exposure, is the potential for accounting derived changes in owner's equity to occur because of the need to "translate" foreign currency financial statements of foreign subsidiaries into a single reporting currency to prepare worldwide consolidated financial statements. Translation exposures arise due to the need to "translate" foreign currency assets and liabilities into the home currency for the purpose of finalizing the accounts for any given period. A typical example of translation exposure is the treatment of foreign currency loans.

Operating Exposure:

Change in expected cash flows arising because of an unexpected change in exchange rates.

As SPL is exposed to make payment for imported machinery in Foreign exchange only, changes in expected cash flows can occur due to unexpected change in exchange rates.

Thus to conclude, SPL can face the above mentioned foreign exchange exposure.

Sanjay Sir's Comment:

A direct question- just refer to ICAI SFM book, Chapter 9 Page 9.19

CASE STUDY – 4

INTRODUCTION

Organic Tea Limited (OTL) is a fast growing chain of tea stores that are typically located close to places like educational institutions, railway stations and bus stations across India. It has company-operated as well as licensed stores. Licensed stores generally have a lower gross margin but a higher operating margin than company-operated stores. Under the licensed model, OTL receives a reduced share of the total store revenues, but this is more than offset by the reduction in Company's share of operating costs as these are primarily incurred by the licensee.

In licensed store operations, OTL leverage the expertise of our local partners and share its operating and store development experience. Licensees provide improved access to retail space at strategic locations. Most licensees are prominent retailers with in-depth market knowledge and access. As part of these arrangements, OTL receives royalties and license fees from the licensees and it also sells certain kitchen equipment to licensees for use in their operations. Employees working in licensed retail locations follow the detailed store operating procedures and attend training classes similar to those given to employees in company-operated stores.

After the success of tea business, OTL has incorporated a wholly owned subsidiary named Organic Toys Limited. The management has an ambitious target for this business segment.

OBSERVATIONS ON BUSINESS REVIEW BY THE MANGEMENT

1. OTL depends upon relationships with tea producers, outside trading companies and exporters for supply of quality tea. The management believes that the supply-chain management is one of the key reasons why the Company has been able to reduce operating costs and improve operating margin and the risk of non-delivery on such purchase commitments is remote.

2. The management believes that customers choose among tea vendors primarily on the basis of product quality, service and convenience, as well as price. However there is a direct competition from large competitors in quick-service restaurant (QSR) sector with restaurants and other retailers for prime retail locations and qualified personnel to operate both new and existing stores.
3. Many of information technology systems, such as those we use for our point-of-sale (POS), web and mobile platforms, including online and mobile payment systems, delivery services and rewards programs, and for administrative functions, including human resources, payroll, accounting and internal and external communications, as well as the information technology systems of licensees and other third-party business partners and service providers, whether cloud-based or hosted in proprietary servers, contain personal, financial or other information that are critical for business growth. The board is concerned about a material breach of information technology systems that result in the unauthorized access, theft, use, destruction or other compromises of customers' or employees' data or confidential information of the Company stored in such systems, including through cyber-attacks or other external or internal methods, it could result in a material loss of revenues from the potential adverse impact to reputation and brand.
4. The management is aware that cyber attacks can result in enormous business losses — financial, investor confidence, and corporate image. They can also lead to serious legal issues, especially when more and more private data are being captured, stored, and transmitted across the public Internet. These losses and legal challenges can have a small, short-term impact but more often than not, they have a significant, long-term impact. According some basics of disaster recovery plan (DRP) is in place but there is no focus on business continuity plan (BCP).
5. Internal auditors have identified serious lapses in information security system and procedures. Significant capital investments and other expenditures could also be required to remedy cyber security problems and prevent future breaches, including costs associated with additional security technologies, personnel, experts and credit monitoring services for those whose data has been breached.

6. Earlier, risk management was being supervised by the audit committee of the board (ACB). However, considering the significant risk Company is facing with a growing business a separate risk management committee (RMC) has been created. There are few common members in the RMC and ACB. The RMC has been asked by the board to use 'scenario analysis techniques' in the key risk area to assess the potential risk. In fact one of the board members remarked that "scenario analysis was more about potential response and mitigation than exact probability".

FURTHER DEVELOPMENTS

1. OTL has been banking with PQX Bank for last five years and has become an important client of the bank. The Company has been borrowing heavily in order to finance its growth. The track record of servicing debt is very good. In addition to the interest income, the Company provide a significant amount of fee income. The following financial summary has been presented to the bank :-

	INR
Total sales	140,00,000
Total assets	35,00,000
EBIT	4,00,000
Debt as a percentage of total assets	70%
Capital turnover	10 times
Inventory days	30
Receivable days	1
Payable days	13
Annual sales growth (average, last three years)	120%
Dividend pay-out ratio	20%

2. The management of the Company believes that next year sales will grow by 100%. Currently the company is using its cash credit limit of INR 5,00,000 and expecting an increase in the cash credit limits. Term lending is no longer an option, as the Company has reached the bank's limit of total gearing.
3. The Company has a small treasury and it has made investment in 15 listed equity shares and few mutual funds. The performance of the portfolio is monitored on a

regular basis and the Company has implemented VaR (Value at Risk) techniques in the portfolio management.

4. PQX Bank has refused to support working capital facility for Organic Toys Limited as the performance of the company is not good. The management, however, is still going ahead with expansion by investing own fund mainly using 'over-trading'.

Multiple Choice Questions

- 4.1. If the working of the company is showing indicators such as (i) reliance on long term debts, (ii) offering longer credit period, (iii) higher level of inventory, (iv) rapid decreasing sales and (v) deteriorating current ratio, which of these indicators are reflections of 'overtrading' in the context of working capital management ?
- (A) (i), (iii) and (iv) only.
(B) (ii), (iii) and (v) only.
(C) (i), (ii) and (iii) only.
(D) (ii) and (v) only.
- 4.2. Which one of the following is incorrect with respect to risk mitigation process ?
- (A) Recovery requirements are developed after the risk assessment phase and include data from the business impact analysis.
(B) Recovery options must fit within the constraints of the recovery requirement.
(C) Existing controls and risk mitigation solutions already in place should be reviewed after requirements and options are reviewed.
(D) Determining the cost, capability, effort to implement, quality, control, safety, and security of each option under consideration.

- 4.3. Which one of the following is not correct with respect to DRP/BCP ?
- (A) Performing backups of critical data on servers, in and of itself, is a good start but does not constitute a disaster recovery plan.
 - (B) BCP is subset of DRP.
 - (C) BCP/DRP can provide an opportunity for a company to evaluate and improve its business processes.
 - (D) When developing a BCP/DRP you need to look at the three core components of business: people, process, and technology.
- 4.4. Which one of the following is not correct with respect to VaR ?
- (A) VaR is solely a measure of downside risk.
 - (B) In delta-normal method of VaR calculation assets assumed to be normal.
 - (C) If there is sudden spike in volatility, the historical simulation VaR will overstate actual risk.
 - (D) Simulation VaR handles non-normality.
- 4.5. The CFO of the Company is in the process of evaluating performance of investment in equity. In this context, he wants to understand how R-squared is related with the risk. In your opinion, the ratio of diversifiable risk to total risk of a security should be called as
- (A) R-squared.
 - (B) 1 minus R-squared.
 - (C) Beta.
 - (D) Sharpe Ratio.

Descriptive Questions

- 4.6. How much increase in the cash credit is required in order to fund increased working capital requirements of OTL ? Give reply through stepwise calculation.
- 4.7. It is common to have overlap between ACB and RMC in terms of common members in a company like OTL but the overlap in terms of roles should be avoided. What would be your suggestions about the roles of members of RMC and ACB so that there is no overlap in terms of their roles ?
- 4.8. Would you agree that "scenario analysis is more about potential response and mitigation than exact probability" ? Support your views by giving reasons.
- 4.9. Based on the information given in this case study, what would be your suggestions in a sequential manner to manage operational risks to the expectations of the board ?

Solution to Case Study 4

Synopsis

- **OTL-** Fast growing chain of tea stores.
- **Business Model-** Company operated stores as well as licensed stores.
- **Licensed Stores-** Lower Gross Margin but higher operating Margin. Share of revenues is more than the share of owned stores (after reducing operating cost).
- In licensed model stores operations are efficient as it involves expertise of various business partners.
- OTL Tea entering into Toy business (Organic Toys Limited).
- Huge dependence on IT. Concerned about breach in IT infrastructure.
- Basic DRP in place but no focus on BCP.
- Serious lapses in IT has been identified by Internal Auditors.
- Separate RMC has been created- Common members from Audit Committee.
- Asked to use scenario analysis techniques to assess potential risk.
- Company has been borrowing heavily to finance its growth.
- Term lending cannot be given to OTL as it has already reached the limit of total gearing.
- Management is going ahead with the expansion by investing own funds as bank has refused to provide credit facility.

Case Study 4 Reference Table

Question No.	Marks	Chapter No.	Reference From	Page No.	Description
4.1	2	NA	NA	NA	This question was not asked from a particular chapter. The answer should be given with the existing knowledge about the working capital management.
4.2	2	2	ICAI Study Material	2.1	Sources and Evaluation of Risk - This was not a direct question from the study mat and it should be answered by analysing the options and reading the question carefully. However a reference can be taken from the risk mitigation write up given at pg 2.1
4.3	2	4	ICAI Study Material	4.19, 4.20	Write up on DRP and BCP can be referred - Pg 4.19 , 4.20
4.4	2	5	ICAI Study Material	5.5	Write up on historical Simulation
4.5	2	6	ICAI Study Material	6.28	Explanation on R square
4.6	3	6	ICAI Study Material	6.32, 6.33	Refer Working Capital Analysis for formulas on pg 6.32 ,6.33
4.7	3	9, 7, 2	ICAI Study Material	9.7, 7.3, 7.4, 2.3	Write up on Audit Committee and Risk Management Committee Pg 7.3 , 7.4
4.8	3	2,5	ICAI Study Material	2.11, 5.11,5.12	In both chapter 2 and 5 write up for scenario analysis and its drawbacks should be referred
4.9	6	2, 9, 4	ICAI Study Material & SSEI RM Book 2	2.22, 9.9, 9.12, 9.27, 4.19, 345(Book 2)	Operational Risk Management- Link considerations on cyber risk with the case study. Page 9.27

- 4.1. If the working of the company is showing indicators such as (i) reliance on long term debts, (ii) offering longer credit period, (iii) higher level of inventory, (iv) rapid decreasing sales and (v) deteriorating current ratio, which of these indicators are reflections of 'overtrading' in the context of working capital management ?
- (A) (i), (iii) and (iv) only.
(B) (ii), (iii) and (v) only.
(C) (i), (ii) and (iii) only.
(D) (ii) and (v) only.

Answer:

D is correct.

Explanation:

(ii) and (v) only

Overtrading arises when a business expands beyond the level of funds available. Overtrade means an attempt to finance a certain volume of production and sales with inadequate working capital. If the company does not have enough funds of its own to finance stock and debtors, if it wishes to expand then it is forced to borrow from creditors and from bank in the form of overdraft.

Sooner or later such expansion, financed completely by the funds of others, will lead to a chronic imbalance in the working capital ratio. A firm should always maintain adequate working capital to support its sales activity. Overtrading is a situation where a firm attempts to increase its sales level without having a support of adequate working capital.

Hence, answer should be indicator (v) only. But there is no such Option available - it's ICAI. So, we find (v) is there in Options B and D. Indicator (iii) says higher

inventory which doesn't happen in overtrading/under-capitalization. So, we are forced to choose Option D. This means indicator (ii) has to be taken as correct. Indicator (ii) says "offering longer credit periods" - this means higher debtors - once again, doesn't happen in overtrading. But we have to salvage ICAI.....so, let's interpret indicator (ii) to mean "Longer Credit Periods towards our **Creditors**: this means we are not able to pay them on time - a typical feature of over trading.

Sanjay Sir's Comment:

ICAI jai ho!!

Alternative Answer:

B is correct.

Explanation:

(ii), (iii) and (v) only.

Over trading in the context of working capital means that company does not have the adequate realised working capital to fund its day to day operations therefore the company moves towards borrowing short term finance to pay of its current liabilities like creditors, etc.

Therefore the options which reflect "over trading" of working capital is :

(ii) Offer Longer credit period: It means that the company is not able to realise its debtors in the regular operating cycle because they are offering longer credit period to their debtors which will result in blocked funds for more than normal credit period.

(iii) Higher level of Inventory: It means that company is not able to sell its inventory which have blocked funds in realising cost of production and hence payments to creditors will suffer.

(v) **Deteriorating current ratio:** If current ratio falls, that is the another signal that the companies working capital is blocked and are not sufficient to pay off its current liabilities.

Sanjay Sir's Comment:

Looking at the question it was sure that we are not going to find it in the study mat it should be answered by the existing knowledge of the working capital management.

- 4.2. Which one of the following is incorrect with respect to risk mitigation process ?
- (A) Recovery requirements are developed after the risk assessment phase and include data from the business impact analysis.
 - (B) Recovery options must fit within the constraints of the recovery requirement.
 - (C) Existing controls and risk mitigation solutions already in place should be reviewed after requirements and options are reviewed.
 - (D) Determining the cost, capability, effort to implement, quality, control, safety, and security of each option under consideration.

Answer:

C is correct.

Explanation:

Existing controls and risk mitigation solutions already in place should be reviewed after requirements and options are reviewed.

Existing systems must be analyzed before reviewing requirements and options to see if certain options already in place/improvement design.

The order is just reversed. Existing requirements and Options have to be reviewed in the first place. Only then, we review existing systems and controls.

Alternative Explanation:

Existing controls and risk mitigation solutions already in place should be reviewed after requirements and options are reviewed

Considering all the 4 options 'c' seems to be incorrect as if the company has already a risk mitigation strategy in place for particular event then why

would the company will go through the whole process of BIA and risk mitigation. Company can review it given the circumstances are changed that's a different issue. But this question is talking about the "**Risk Mitigation Process**" it means that that company believes that there is a threat to the company resulting from a particular external events that the company has analysed through BIA which means that the particular event that the company has predicted is "**being analysed for the first time and no existing risk mitigation process are in place for this new event that might happen**"

Sanjay Sir's Comment:

The answer to this question is not there in ICAI mat it has to be analysed and then to be answered accordingly. My best bet is option "c"

- 4.3. Which one of the following is not correct with respect to DRP/BCP ?
- (A) Performing backups of critical data on servers, in and of itself, is a good start but does not constitute a disaster recovery plan.
 - (B) BCP is subset of DRP.
 - (C) BCP/DRP can provide an opportunity for a company to evaluate and improve its business processes.
 - (D) When developing a BCP/DRP you need to look at the three core components of business: people, process, and technology.

Answer:

B is correct.

Explanation:

BCP is subset of DRP.

DRP is a subset of BCP, Business Continuity Planning is a set of guidelines to counter one or more disasters, which is agreed by the Senior Management and key stakeholders in the organization. Disaster Recovery is the actual process to be used when disaster strikes, so as to recover data, hardware, software and your people.

Option A is incorrect because it is true that performing backup of critical data on servers, in and of itself, is a good start but does not constitute a disaster recovery plans, DRP involves many other steps.

Option C is incorrect because its true that BCP/DRP can provide an opportunity for a company to evaluate and improve its business processes.

Option D is incorrect, because when developing a BCP/DRP you need to look at the three core components of business i.e., people, processes and technology.

Alternative Explanation:

Explanation:

BCP is a subset of DRP

Business Continuity plan includes tasks like establishing continuity strategies, planning for continuity of critical operations, continuity of management, etc.

Refer:

ICAI Study Material Chapter- 4 Page 4.20

The basic objective of a Disaster Recovery Plan is to document a set of procedures that can be used to protect a business **IT infrastructure** if any disaster takes place.

Refer:

ICAI Study Material Chapter- 4 Page 4.19

Analysing the above two definitions it can be said that DRP is more focused on the disruption caused by failure of IT infrastructure whereas BCP is the more broader approach that deals with restabilising business as a whole therefore **"DRP is a part of BCP"**.

Sanjay Sir's Comment:

There is a statement mentioned in ICAI study material page 4.20 which says "These plans (i.e. BCP) are executed in parallel with the disaster recovery plans depending upon the impact of disaster" this also suggest that BCP cannot be the subset of DRP.

- 4.4. Which one of the following is not correct with respect to VaR ?
- (A) VaR is solely a measure of downside risk.
 - (B) In delta-normal method of VaR calculation assets assumed to be normal.
 - (C) If there is sudden spike in volatility, the historical simulation VaR will overstate actual risk.
 - (D) Simulation VaR handles non-normality.

Answer:

C is correct.

Explanation:

If there is sudden spike in volatility, the historical simulation VaR will overstate actual risk.

Historical VaR is based on historical data. Thus, if there is a spike in volatility, it will lead to a higher risk which will not be captured by post data. So, VaR could understate the actual risk.

Option A is correct VAR solely measures downside risk. It only captures losses i.e. left tail events.

Option B is correct because in Delta normal approach, assets are assumed to be normally distributed.

Option D is correct because in simulation method we may assume any type of distribution for the inputs - it can handle non-normality.

- 4.5. The CFO of the Company is in the process of evaluating performance of investment in equity. In this context, he wants to understand how R-squared is related with the risk. In your opinion, the ratio of diversifiable risk to total risk of a security should be called as
- (A) R-squared.
 - (B) 1 minus R-squared.
 - (C) Beta.
 - (D) Sharpe Ratio.

Answer:

B is correct.

Explanation:

1 minus R-squared.

R-squared is the ratio of explained variation (systematic, non-diversifiable risk) to total risk. Therefore (1- R-squared) shall be

$$\frac{USR}{TR} = \frac{\text{Unsystematic(diversifiable) risk}}{\text{Total risk}}$$

Option A is incorrect because R square is equal to undiversifiable risk to total risk.

Option C is incorrect because Beta measures sensitivity of stock return with market return.

Option D is incorrect because Sharpe ratio measure extra return earned over R_f for per unit of Risk.

Refer:

Page 6.28 of ICAI Study Material R squared is explained with reference to a benchmark index.

Sanjay Sir's Comment:

This can be easily answered by the existing knowledge of SFM-Portfolio management

4.6. How much increase in the cash credit is required in order to fund increased working capital requirements of OTL ? Give reply through stepwise calculation.

Answer:

To forecast additional CC requirement, we have to forecast Working Capital based on the information that sales growth would be 100%. There are two main methods of forecasting Working Capital -

1. **Percentage of Sales:** Here, Working Capital is assumed to be a certain percentage of Sales. However, Working capital as a percentage of sales is not given. So, this method is ruled out.
2. **Current Assets Holding Period Approach**

Working Capital = Inventory + Debtors + Cash Balance - Creditors and other accruals.

Calculation of Inventory

Inventory period = 30 days (1 month, assuming 360 days in a year)

This means inventory = 1 months COGS

Given total assets = 35 lakhs

Debt = 70% of 35
= 24.5 lakhs

So, equity = 10.5 lakhs

Capital turnover ratio = COGS/equity
= 10 times given

Therefore, COGS = 10 times equity
= 10 × 10.5
= 105 lakhs

$$\begin{aligned} \text{Hence, inventory} &= 105 \times 1/12^{\text{th}} \\ &= 8.75 \text{ lakhs} \end{aligned}$$

Since sales is expected to grow by 100%, assuming margins will remain the same, COGS will also grow 100%. Further assuming inventory period will remain the same, inventory will also grow 100%.

$$\text{So, projected inventory} = 8.75 \times 2 = 17.5 \text{ lakh}$$

Calculation of debtors

Surprisingly, debtors period is given 1 day...I have never seen this in my life. Anyways, who am I to comment on the great ICAI.

$$\begin{aligned} \text{So, debtors} &= \text{credit sales} \times 1/360 \text{ (we assume all sales to be on credit basis)} \\ &= 1,40,00,000 \times 1/360 \\ &= 38,889 \end{aligned}$$

Once again given 100% growth and assuming debtors period will remain the same, debtors will also double.

$$\begin{aligned} \text{Projected debtors} &= 38,889 \times 2 \\ &= 77,778 \end{aligned}$$

Cash balance-assume nil in the absence of information

Calculation of creditors

$$\text{Payables period} = 13 \text{ days}$$

$$\text{This means creditors} = \text{credit purchases} \times 13/360$$

We have to assume purchases = COGS and all purchases are on credit

$$\begin{aligned} \text{Hence, creditors} &= 105 \times 13/360 \\ &= 3,79,167 \end{aligned}$$

Since sales is expected to grow by 100%, assuming margins will remain the same, COGS will also grow 100%. Further assuming payables period will remain the same, creditors will also grow 100%.

$$\begin{aligned} \text{So, projected creditors} &= 3,79,167 \times 2 \\ &= 7,58,334 \end{aligned}$$

S.NO.	PARTICULARS	EXISTING	PROJECTED
A	Inventory	8,75,000	17,50,000
B	Debtors	38,889	77,778
C	Cash	0	0
D	Creditors	3,79,167	7,58,334
E	Working capital(A+B+C-D)	5,34,772	10,69,444
F	Cash credit	5,00,000	10,69,444-34,772=10,34,672
G	Long term funds	34,772	34,772(cannot be increased as stated in the write up)

$$\begin{aligned} \text{Hence, increase in cash credit limit required} &= 10,34,672 - 5,00,000 \\ &= 5,34,672 \end{aligned}$$

Note: Sharing with you an alternate solution which is very simple but wrongly defines capital turnover ratio as sales/working capital. You never know ICAI. Frankly speaking. My hunch is that they will come out with some third solution. It is beyond my capacity to forecast that.

Alternate wrong Answer

$$\begin{aligned} \text{Current cash credit facility available} &= ₹ 5,00,000 \\ \text{Working capital turnover ratio} &= \text{Sales/Working capital} = 10x \\ \therefore \text{Average working capital requirement} &= 1,40,00,000/10 \\ &= ₹14,00,000 \end{aligned}$$

$$\begin{aligned} \therefore \text{Current working capital funded through sources other than cash credit} &= 14,00,000 - 5,00,000 \\ &= ₹9,00,000. \\ \therefore \text{Increased sales} &= 1,40,00,000 \times 2 = 2,80,00,000 \\ \therefore \text{Enhanced working capital} &= 2,80,00,000/10 = ₹28,00,000 \\ &\text{(Assumed capital turnover ratio remains constant)} \\ \therefore \text{Cash credit requirement} &= 28,00,000 - 9,00,000 \\ &= ₹ 19,00,000 \\ \therefore \text{Increase in cash credit required} &= 19,00,000 - 5,00,000 \\ &= ₹14,00,000 \end{aligned}$$

- 4.7. It is common to have overlap between ACB and RMC in terms of common members in a company like OTL but the overlap in terms of roles should be avoided. What would be your suggestions about the roles of members of RMC and ACB so that there is no overlap in terms of their roles ?

Answer:

As per Basel II norm the audit committee and risk management committee form an integral part of the organisation. The risk management committee oversees the operational risk management committee where as the audit committee oversees the Internal audit department which is the third line of defence.

Refer:

ICAI Study Material Chapter - 9 page 9.7

Further, as per the Sound Risk Governance practices recommended by financial stability Board recommend that the ACB should be an independent and stand alone committee, and dual hatting should be prevented by the chair with any other committees.

The roles of members in a ACB would be:

- Reviews the audit of internal controls over the risk governance framework;
- Review third party opinion of the design and effectiveness of the overall risk governance framework;
- Review the effectiveness of internal financial controls.

Refer:

ICAI Study Material Chapter - 7 page 7.4

The role of risk management committee would be:

- To assess the companies risk profile (risk appetite and key risk);
- To assess and recommend to the board, acceptable levels of risk;
- To review managements response to company's auditors recommendations.

Refer:

ICAI Study Material Chapter - 2 page 2.3

Thus the above roles can be adopted by the members of the ACB and RMC so that there is no overlap in terms of roles.

Alternative Answer:

Audit Committee (ACB) and Risk Management Committee are two independent committee having independent members from the board . The members in both the committees can be same **so far as they are independent** but the roles and responsibilities of the members should not overlap as the function of both the committees are different from each other. Therefore common members in both the committees should keep in mind that in which capacity they are taking decisions having regard to the matter under consideration before them.

The roles of members of Audit Committee inter alia includes:

1. Review of the audits of internal controls over the risk governance framework established by the management to confirm that they operate as intended.
2. Review of the third party opinion of the design and effectiveness of the overall risk governance framework on annual basis.

The roles of members of Risk Management Committee inter alia includes:

1. Discussion on all risk strategies on both an aggregated basis and by type of risk.

2. Review and approval of the firm's risk policies at least annually.
3. Oversee that management has in place processes to ensure that the firm's adherence to the approved risk policies.

When both the members of the audit committee and risk management committee are common it is advised that the members should have experience with regard to risk management issues and practices along with audit practices and financial literacy at a financial institution.

Sanjay Sir's Comment:

This answer has been drafted by the roles of Audit committee and Risk Management Committee given in ICAI Study material at page 7.3 and 7.4 Chapter 7- Risk Associated with Corporate Governance

4.8. Would you agree that "scenario analysis is more about potential response and mitigation than exact probability" ? Support your views by giving reasons.

Answer:

Scenario analysis helps firms look at business portfolios due to any downside event or stress scenario. It helps firms analyse its preparedness for situations which may or may not have happened in the past.

A major drawback of Scenario analysis is that it assumes that all scenarios are equally probably. And it further ignores correlation between risk factors. In scenario analysis entity's focus is not on determining possibility of every event occurring, but it just wants to focus at portfolio downside movement which can either be because of a stress event or downturn scenario.

Scenarios can be based on:

- **Normal Stress Scenarios:** Which happen once or twice in 10 years. These types of events lead to increased loan losses or reduced earnings, but not a threat to survival of an entity.
- **Severe Stress Scenarios:** Which are expected only once or twice in a professional lifetime. These types of events represents severe stress scenarios for many institutions.
- **Near default scenarios:** Close to default conditions such as the 2008 financial crisis. These types of stress scenarios form the basis of development of detailed recovery plan.
- **Stress to default scenarios:** Events which could contribute to institutional failure. It involves extremely unlikely events which can force companies to think about firm's most serious vulnerabilities and design stress scenarios accordingly,

Refer:

ICAI Study Material Chapter - 5 page 5.11

Thus by analysing the above scenarios the company can understand their portfolio vulnerability and the sensitivity to specified events.

Thus, I would agree that scenario analysis is more about potential response and mitigation than exact probability.

Alternative Answer:

Yes, "scenario analysis is more about potential response and mitigation than exact probability."

Scenario Analysis is a process to analyse future events by considering alternative outcomes or alternative worlds. Scenario making involves preparing a brief narrative or description of a hypothetical situation of how a future event or events might turn out or look like. For each scenario, the management reflects and analyses the potential consequences and potential causes when analysing risk. Scenario analysis can be used effectively to identify opportunities for fraud, forecasting managing financial risks etc.

Refer:

ICAI Study Material Chapter - 2 Sources and Evaluation of Risks page 2.11

With a small number of risk factors, the number of alternative scenarios is manageable. As the number of risk factors increases, the number of alternative scenarios could easily become unmanageable.

Another drawback of scenario analysis is that it assumes that the scenarios are equally probable. **This ignores that correlations between the risk factors. It is highly subjective in deciding how serious the risks are due to which implausible losses might be considered and plausible losses might not be discovered.**

Refer:

ICAI Study Material Chapter - 5 Risk Model page 5.12 Drawbacks of Scenario Analysis

Sanjay Sir's Comment:

This is an easy copy paste answer from ICAI Study Material.

- 4.9. Based on the information given in this case study, what would be your suggestions in a sequential manner to manage operational risks to the expectations of the board ?

Answer:

Way to manage operational risk in OTL

- The company has been able to reduce operating costs primarily due to good relations and heavy reliance on supply chain management. The company can consider implementing and entering into service level agreement with suppliers to determine any standards and quality controls required.

Refer:

ICAI Study Material Chapter - 2 page 2.22

- The company can prepare process notes/Standard operating procedures for its key outputs. These process notes should be very articulated and defined granularly to leave no scope and ambiguity.

Refer:

ICAI Study Material Chapter - 9 page 9.9

- The company facing competition from QSR restaurants which is a form of external risk as the organisation has no control. The company can try to improve product quality to reduce the risk of the same.

Refer:

ICAI Study Material Chapter - 9 page 9.12

- The company also has critical information stored in clouds or proprietary servers and is facing a risk of breach of IT systems which is a form of cyber risk.

Company can manage cyber risk by:

- Adequately restricting access to systems by password protection etc;
- Create and adequate firewall to protect from outside hacking;
- Regular vulnerability testing and upgrading of systems;
- Adequate documentation.

Refer:

ICAI Study Material Chapter - 9 page 9.27

Further company can protect data stored on clouds by:

- Defining proper risk appetite statements and communication pathways;
- Encompassing the risk universe of the cloud service providers to understand the complete risk universe.

Refer:

SSEI Risk Management Book 2, page 345

- OTL currently has a basic disaster recovery plan. The same can be bolstered by adding proper control such as:
 - **Preventive:** data backup, surge protectors

Refer:

ICAI Study Material Chapter - 4 page 4.19

- **Detective:** Installing alarms, employee training
- **Corrective:** system restoration plans post recovery etc.

CASE STUDY – 5

INTRODUCTION

Ms. Jamuna is having 10000 sq. feet of vacant land, situated in the heart of Chennai city. She inherited the above vacant land. She also holds fixed deposits of ₹4 crores in a nationalised bank.

THE PROJECT

She wanted to construct twelve apartments in the vacant land, keeping one apartment as her own residence. She is mulling over two options; to let out on rent the eleven apartments for offices or let out the apartments as "service apartments". There is a famous marriage hall nearby the vacant land. She expects that there will be demand for the service apartments during marriage seasons and other functions held in the marriage hall and also, she feels that there will not be many hassles in the same in (i) collecting rent and (ii) constant attention to the maintenance of the apartments.

PROJECT FUNDING

She needs a total amount of ₹4.70 crores to construct the apartments. She can utilise the bank fixed deposits towards construction. For the balance of the amount, she requested her cousin Mr. Deepak, who is residing in USA, to send a loan which would be repaid to him after 5 years. She agreed to pay an interest of ₹5 lakhs per annum and the same would be paid to his bank account maintained in India. Mr. Deepak agreed to send her the amount in US dollars, once she completes the spending from the closure of fixed deposits.

A month after giving his acceptance, Mr. Deepak told her that as he is tied up urgently with a financial commitment, he would be requesting his friend Mr. Tony who is a resident of Nigeria to send Ms. Jamuna 1 lakh US dollars through banking channel. She has to pay an interest amount every year @ 6% and the repayment of the loan to Mr. De Martin, Mumbai at the end of five years.

As an alternate to obtaining loan from Mr. Tony, Ms. Jamuna considers the possibility of obtaining a bank loan. The bank would charge her 9% and she proposes to request the bank to reduce it to 8%.

REVENUE ESTIMATES

The probability is estimated at 70% occupancy, if let out as apartments and 60% occupancy, if let out as service apartments. It was expected by Ms. Jamuna that in a worst-case scenario, she may incur a loss of ₹12 lakhs and ₹10 lakhs in case of letting out as individual apartments and service apartments respectively.

CONSTRUCTION RELATED ISSUES

For the construction, she approached a qualified engineer-cum-builder and requested him to provide detailed plans, procedures for getting necessary approval from the concerned Governmental departments, estimates, stages of project, quality and specification of materials to be used throughout the construction, details of the supervisors and breakdown of payments to be made by her at various stages. She wanted to have a comprehensive construction agreement embedding all the details, especially the escalation clause (refers to the provision in the contract to increase the agreed rates, if the inputs for construction increased beyond a certain level).

She requested the engineer to periodically appraise her of the situation by holding meetings at the end of each major activity of the project. She also insisted that the supervisors employed by the engineer have to report to her about the risky situations and hazards in the construction site regularly so that precautionary steps could be taken to ensure the safety of the workers. However, she is sceptical about the skill sets of the workers, as finding and employing skilled workers has become a tough job.

MAINTENANCE OF RECORDS

Ms. Jamuna is very keen in maintaining meticulous records of the construction. She would also like to maintain a dairy of events (akin to a risk register), noting down all the events, problems faced and their corresponding solutions. But she is not fully aware of the risks and vulnerabilities that she would face during the construction.

She has read somewhere that control risks are often associated with project management. In these circumstances, it is known that the events will occur, but the precise consequences of those events are difficult to predict and control. Therefore, the approach would have to be based on minimizing the potential consequences of these events. Hence, she wanted to have a list of specific risks to the project, sorted on their relative importance, and consequences.

Multiple Choice Questions

- 5.1. A risk may still occur that the apartments may lie vacant or there would be no occupancy of service apartments, even when there is no significant change in the economy of the country. This risk may be classified as
- (A) Static Risks
 - (B) Country Risks
 - (C) General Risks
 - (D) Opportunity Risks
- 5.2. Which of the following risk identification techniques that the supervisors would most likely use for reporting to Ms. Jamuna on the risky situations and hazards in the construction site ?
- (A) Surveys
 - (B) Direct Observations
 - (C) Incident Analysis
 - (D) Scenario Analysis

- 5.3. If in the near future, the nearby marriage hall is converted to a shopping mall, Ms. Jamuna most likely would face which of the following risks in case she has decided to let the building as service apartments ?
- (A) Credit Risk
 - (B) Economic Risk
 - (C) Controllable Risk
 - (D) Market Risk
- 5.4. Which of the following techniques for measurement of interest rate risk, the bank would not consider, if Ms. Jamuna submits a proposal for a bank loan asking the bankers to determine the rate of interest ?
- (A) Value at Risk
 - (B) Simulation,
 - (C) Monotonicity
 - (D) Maturity Gap Analysis
- 5.5. Which of the following would least likely be included in the diary of events maintained by Ms. Jamuna ?
- (A) Identify the Risk
 - (B) Analyse the Risk
 - (C) Evaluate or Rank the Risk
 - (D) Treat the Risk

Descriptive Questions

- 5.6. Discuss the factors that would create vulnerabilities and associated risks in the construction of the apartments by Ms. Jamuna, by drawing references from the case study.
- 5.7. Discuss the risk and uncertainty in letting out the building by Ms. Jamuna either as individual apartments or service apartments.
- 5.8. Explain how Ms. Jamuna's bank would view the receipt of money from Mr. Tony and what measures that the bank would employ to check the veracity of the transaction and compliance with applicable laws for foreign loans ?

Solution to Case Study 5

Synopsis

- Ms Jamuna is having 10,000 sq. feet land, situated in heart of Chennai city. She wanted to construct 12 apartments on vacant land out as offices or let out as service apartments.
- **Project Funding:** Total Cost for construction is 4.7 crore, out of which she has an FD of 4 crore, and
 - rest she will borrow from her cousin Deepak, who is residing in USA, terms for the same are:
 - a. Repayment in 5 year
 - b. Interest is ₹5 lacs pa
 - c. Repayment into his bank account maintained in India.
 - d. Will lent after she has incurred whole amount of FD.
 - A month after his acceptance, Mr Deepak told her that due to some commitments, he will not be able to lend the amount to her, but he will ask his friend Mr Tony to lend the amount.

Detail of loan from Mr Tony, residing in Nigeria (if she takes)

- a. Loan of 1,00,000 USD
 - b. Interest-6% pa
 - c. Repayment to third party i.e., Mr. De Martin, Mumbai. At the end of 5 years.
- Alternate from taking loan from Mr. Tony, she is thinking to take a loan from bank @8%.

- **Revenue estimates:** Occupancy rate 70% and 60% for office and service apartments respectively.

She estimates that she will incur a loss of ₹12lacs or ₹10 lacs in worst case scenario for office and service apartments respectively.
- **Construction Related Issues:**
 - a. Ms. Jamuna approached a qualified engineer cum builder and requested him to provide all the necessary details regarding constructions.
 - b. She wanted to have a comprehensive construction agreement embedding all details, especially escalation clause.
 - c. She insisted that supervisor have to report to her about all risky situations and hazard at the construction site.
- **Maintenance of Records:**
 - Ms. Jamuna likes to maintain a diary of events, noting down all events, problems and solution thereto. She wants to identify all risks and vulnerabilities in construction.

Case Study 5 Reference Table

Question No.	Marks	Chapter No.	Reference From	Page No.	Description
5.1	2	1	ICAI Study Material	1.17	Dynamic and Static risks
5.2	2	2	ICAI Study Material	2.10	Risk identification techniques
5.3	2	1	ICAI Study Material	1.7, 1.18	Types of risk
5.4	2	5	ICAI Study Material	5.6	VaR
5.5	2	8	ICAI Study Material	8.4	Risk Register
5.6	6	1	ICAI Study Material	1.21	Safety Risk
5.7	5	General Question	NA	NA	Risk and Uncertainty
5.8	4	General Question	NA	NA	Question related to Auditing

5.1. A risk may still occur that the apartments may lie vacant or there would be no occupancy of service apartments, even when there is no significant change in the economy of the country. This risk may be classified as

- (A) Static Risks
- (B) Country Risks
- (C) General Risks
- (D) Opportunity Risks

Answer:

A is correct.

Explanation:

Static Risks

Risk which occurs with no change in the economy are classified as Static risk. Here in the question, it is asking what the risk of the apartment will be being vacant, even when there is no significant change in economy, so in general the risk which are not directly/indirectly caused by the economy are known as **Static risks**.

Country risk helps to address the issues of identifying, measuring, monitoring and controlling country exposure risks. Procedures are in place for ensuring that necessary steps are taken as per RBI guidelines.

General risk: Obviously it is too general.

Opportunity risks may not be visible or physically apparent, and they are often financial in nature. Although opportunity risks are taken with the intention of having a positive outcome, this is not guaranteed. Opportunity risks for small businesses include moving a business to a new location, acquiring new property, expanding a business and diversifying into new products.

Sanjay Sir's Comment:

Seeing the question you should directly jump to Chapter-1, and directly visit page. 1.17 types of risks topic.

5.2. Which of the following risk identification techniques that the supervisors would most likely use for reporting to Ms. Jamuna on the risky situations and hazards in the construction site ?

- (A) Surveys
- (B) Direct Observations
- (C) Incident Analysis
- (D) Scenario Analysis

Answer:

B is correct.

Explanation:

Direct Observations

Since Mrs. Jamuna has insisted that the supervisors employed by the engineer must report to her about risks and hazards in the construction site. So, supervisors on the construction site generally identify Risky situations by direct observation.

Surveys is similar to structured interviews but involves a larger number of people. It can be used to collect a broad set of ideas, thoughts and opinions across a range of areas covering risks and control effectiveness. One of the best ways for risk managers to use surveys is to assess the organisation's risk culture. Internal auditors use surveys to assess the internal control environment. Some organisations use annual staff surveys to gauge staff understanding of key risk and governance policies and procedures.

Incidents Analysis related to risks that have recently occurred. Recording incidents in a register, conducting root cause analysis and periodically running some trend analysis reports to analyse incidents, can potentially

enable new risks to be identified. In addition, a high frequency of like incidents can be a lead risk indicator to a potentially larger problem.

Scenario Analysis is a process to analyze future events by considering alternative outcomes or alternative worlds. Scenario making involves preparing a brief narrative or description of a hypothetical situation of how a future event or events might turn out or look like. For each scenario, the management reflects and analyses the potential consequences and potential causes when analysing risk. Scenario analysis can be used effectively to identify opportunities for fraud, forecasting, managing financial risks, etc. Reserve Bank of India prescribes scenario analysis based testing for Liquidity position of banks in India.

Sanjay Sir's Comment:

This was not a direct question, after going through the case study, you have to visit risk identification techniques mentioned in Chapter-2, and read all the four options, and pick the most apt option, or you could have applied common sense - since info regarding it is mentioned in the book, it is not advisable.

- 5.3. If in the near future, the nearby marriage hall is converted to a shopping mall, Ms. Jamuna most likely would face which of the following risks in case she has decided to let the building as service apartments ?
- (A) Credit Risk
 - (B) Economic Risk
 - (C) Controllable Risk
 - (D) Market Risk

Answer:

B is correct.

Explanation:

Economic Risks

If nearby marriage hall is converted to a shopping mall, it will lead to wrong projection of cash flows, mainly over estimation of revenues. And Economic Risks can be manifested in lower income or higher expenditures than expected.

Credit risk: The risk of loss arising from outright default due to the inability or unwillingness of the customer or counterparty to meet their commitments. Credit risk is the probability of loss from a credit transaction. It is also called as default risk.

Controllable risks arise from the events taking place within the business enterprise. Such risks arise during the ordinary course of business. These risks can be forecasted and the probability of their occurrence can be determined. Hence, they can be controlled by management to an appreciable extent (e.g., risks of fire, storms, etc.). Controllable risks need not necessarily be prevented, but the financial loss can be minimised (e.g., insurance cover can be purchased to recover the financial loss due to fire).

Market risk: The risk of losses caused by adverse changes in the market variables such as interest rate, Foreign Exchange rate, equity price and commodity price. RBI has defined the Market Risk as the possibility of loss to a bank caused by the changes in market rates / prices. Market risk is the possibility for an investor to experience losses due to factors that affect the overall performance of the financial markets in which he has invested money. Market risk, also called "systematic risk," cannot be eliminated through diversification, though it can be hedged against. Sources of market risk include recessions, political turmoil, and changes in interest rates, natural disasters and terrorist attacks.

Sanjay Sir's Comment:

Attempt this question after reading the case study. Again a question on types of risk of Chapter-1, you will find the definition of economic risks on Page. 1.7 and other types of risk on Page. 1.18 and just by reading the definition of economic risks you will understand that answer should be economic risks.

- 5.4. Which of the following techniques for measurement of interest rate risk, the bank would not consider, if Ms. Jamuna submits a proposal for a bank loan asking the bankers to determine the rate of interest?
- (A) Value at Risk
 - (B) Simulation,
 - (C) Monotonicity
 - (D) Maturity Gap Analysis

Answer:

C is correct.

Explanation:

Monotonicity

Monotonicity is one of the properties of the coherent risk measures, which VAR satisfies. Portfolio with greater future returns will likely have less risk.

$$\rho(X) \geq \rho(Y), X \leq Y$$

Monotonicity suggests that if one risk always has greater losses than the other risk, the capital requirements should be greater.

A is incorrect because after submitting the proposal for bank loan, bank will calculate the VAR of the Loan at a certain confidence level.

B is incorrect because bank may carry out simulations to check the range of possibilities.

D is incorrect Maturity gap analysis is carried out to check interest rate sensitivity of a bank.

Sanjay Sir's Comment:

This was a question from Chapter-5, It was a direct question. So after reading the options, you will see monotonicity, which is just one of the property to be coherent risk measures.

- 5.5. Which of the following would least likely be included in the diary of events maintained by Ms. Jamuna ?
- (A) Identify the Risk
 - (B) Analyse the Risk
 - (C) Evaluate or Rank the Risk
 - (D) Treat the Risk

Answer:

A or D is correct

"Do do answers kyu?? Ye to Multiple choice hay! - Hume to OMR sheet milegi? To kya sir hum do oval ko dark kar ke aayenge? - Sir kya mazak kar rahe hay??

Mazaak me nahi kar raha huu! ICAI kar raha hay!

Knowledge wise and chapter 8 wise, answer should be A.

Explanation:

Identify the risk or Treat the Risk

Risk Register or Diary is a record of risk, risks assessments; risk mitigation and action plans prepared by the responsible parties that will help to support overall ERM. So Risk Register includes analyses of risk, its causes and effects, risk score or evaluation and how the organisation has treated or planning to treat the risk.

Sanjay Sir's Comment:

This is a direct question, that can be easily answered after referring to the Risk register portion of the book in Chapter-8. Organisation after identification of risks, will enter details of such risks in the risk register. Which includes Analysis, evaluation and treatment of such risks.

However, the same question was asked November 2020, Case Study 1, Question 1.1 and there the answer was Risk Treatment". And hence, Option D.

(5)

KJC Marks

Children mini theme park project:

- In the main store, adjacent to the building, CRPL is maintaining a garden having an area of 5,000 sqft., which is company-owned. It was observed that an average of 1,000 customers visited the store per day and out of them 150 families visited with children.
- To tap the potential, Mr. Deepak, the Managing Director (MD), suggested a proposal to build a children mini theme park in that area. Only children with age group of 3 to 12 would be admitted from whom entrance fee would be collected. This project is expected to have a life of 5 years and the initial project cost is estimated at ₹ 2.50 crores.

On the basis of above, you are required to answer the following questions:

Multiple Choice Questions

Choose the most appropriate answer from the given options. 2x5
=10

(1.1) In which of the following processes of Risk Management, the Risk Register would least likely be considered?

(A) Risk Analysis
(B) Risk Identification
(C) Risk Ranking
(D) Risk Treatment

(1.2) Which of the following is not a characteristic of Risk Appetite ?

(A) In the normal course, evaluating the Risk Appetite is out of audit scope.
(B) Risk Appetite is understanding control and other response activities.
(C) Risk Appetite provides a standard against which a risk can be compared.
(D) Internal auditors can do a consulting activity of assisting the Board in fixing the Risk Appetite.

(1.3) The advice of Mr. Kannan could be better termed as:

(A) Risk Culture
(B) Risk Focus
(C) Risk Framework
(D) Corporate Governance

KJC P.T.O.

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6 FINAL (NEW) EXAMINATION: NOVEMBER, 2020

(1.7) The proposed theme park project, as suggested by Mr. Deepak is estimated to have (i) an annual cash inflow of ₹ 75 lakhs and (ii) cost of capital is 10%. Identify which of the three factors, viz., initial project cost, annual cash inflow and project life in years, the project is most sensitive if the variable is adversely affected by 10%? (Use annuity factors: for 10% = 3.7908 and 11% = 3.8958) (3 Marks)

(1.8) Write the risk actions and risk responses for the risks faced by CRPL as extracted from its Risk and Control Matrix. (4 Marks)

Answer

Multiple Choice Questions

1.1 (D)
1.2 (B)
1.3 (A)
1.4 (C)
1.5 (C)

Descriptive Questions

1.6 **Specific controls suggested for the issues observed by CRPL:**

There are several different, but closely related or similar categorisations used in different kinds of control framework, organisations, but mostly they would fall under these categories

(i) **Verification:** Refers to a control where a control step necessitates the transaction is verified by a different individual before it is completed.
Cash shortage of ₹ 5 lakhs could have been avoided if two different persons count the cash and place it in the safety locker, after signing the cash register. Cash in the safety locker to be held as a joint custody of a senior officer of the store and the cashier.

(ii) **Reconciliations:** Refers to a control where an output of a process step is reconciled against other known, established sources of information.
One store has sent 100 quantities and the other store has received only 80 quantities. Proper acknowledgement of receipt / delivery of goods transfer must be in place. This helps in reconciliation of stock transfer within stores.

(iii) **Segregation of duties:** Refers to a control where part of the transaction is executed across two segregated departments / functions / verticals thereby eliminating the risk of the originating department to carry out the entire transaction on its own.

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- 5.6. Discuss the factors that would create vulnerabilities and associated risks in the construction of the apartments by Ms. Jamuna, by drawing references from the case study.

Answer:

Risk Management is all about value protection, maximizing gains from risk outcomes and seizing the opportunities by formulating management action plans. Businesses face different types and extent of risks, few of which can even lead to bankruptcy of the organisation. So every type of organisation (big or small) or even individuals face risks in their day to day operations. Therefore, it is advisable to identify such risks in advance.

Few risks faced by Mrs Jamuna regarding this project involving construction of apartments are:

1. **Safety Risks:** These are the most common and will be present in most workplaces at one time or another. They include unsafe conditions that can cause injury, illness and death.
 - a. Spills on floors or tripping hazards
 - b. Working from heights, including ladders, scaffolds, roofs etc
 - c. Unguarded machinery and moving machinery parts;
 - d. Electrical hazards
 - e. Confined spaces

Since Mrs Jamuna is building apartments, safety risks are the most important risks at construction sites. If any illness or death occurs due to safety risks it can lead to reputational damage, financial damage and also cause some legal troubles.

2. **Regulatory Risks:** Regulatory risks arises due to changes made in policies and procedures by the regulators. Examples would include withdrawal of

license, building a particular type of building etc. How can we forget the herculean effect that RERA had on the Real Estate Industry?

So regulatory risks are one the risks faced by the Mrs. Jamuna.

- Suppose there is change in regulation that no new commercial properties are allowed to be built in a particular locality or
 - New rules prescribe that only 6 apartments can be made instead of 12 in 10,000 sq feet of vacant Land.
3. **Compliance Risks:** It includes material financial loss or loss reputation which may occur as a result of its failure to comply with laws, includes regulation codes etc. So Mrs. Jamuna will have to comply with all the respective laws or regulations of local body, govt and other parties, failure to do so will result into a financial & reputational loss for her, and it can even lead to closure of construction of apartments.
 4. **Liquidity Risks:** The potential inability to meet commitments as they fall due. It arises whenever an organisation is unable to generate cash or have cash reserves to meet out its liability payment obligations. Here in this case Mrs Jamuna has estimated cost of construction to be ₹4.7 Crores and she has an FD of ₹4 crore. She will face liquidity risks in two cases first if she fails to borrow the rest of the amount or second case that cost are hiked as per escalation clause but she does not have funds to meet such costs. So liquidity cost can lead to closure of construction property.
 5. **Staffing Risks:** Risk of not employing the right person for the right job. Poorly drafted job descriptions, inadequate background verifications and inexperienced personnel contribute to staffing risks. So there is always a risk what if we employ an unqualified engineer, which can lead to poor construction or unqualified supervisor, who is not able to properly able to oversee the project and he is not able to properly report the risks etc.
 6. **Execution or operational Risks:** This risk is associated with the operations at construction site. This sought of risks arises due to failure of people and

processes. So if there is a failure due to any faulty process which can lead to delay in completion of construction. Which will in turn cost two harms for Mrs. Jamuna first the more delay the projects gets the more cost she has to incur and second the opportunity cost of project completing on time she would start generating revenues.

Sanjay Sir's Comment:

You can answer this question by referring to the types of risk part of Chapter-1. This is a very easy question as we just have to see what are the potential risk that an organisation is facing. You just have to add little bit of case study stuff in each relevant type of risks.

- 5.7. Discuss the risk and uncertainty in letting out the building by Ms. Jamuna either as individual apartments or service apartments.

Answer:

Uncertainty means lack of complete certainty, that is, the existence of more than one possibility, whereas risk means a state of uncertainty where some of the possibilities involve a loss, catastrophe, or other undesirable outcome. So risks are there in any organisation due to uncertainty present in the future. So any good risk organisation or risk mature organisation try identifying all the possible uncertainties in advance, so that they can create an action plan to tackle negative uncertainties and grab the opportunities from good uncertainties. So Mrs. Jamuna will face the following risk and uncertainties in letting out apartments or service apartments:

1. **Collection of Rent:** Mrs Jamuna would face hassles in collection of monthly rent if she let out her apartment for offices. Because now she is indirectly exposed to dynamic risk, because the business of the tenant are exposed to business cycle or economy in general. Which can in turn lead to uneven cash flows.
2. **Maintenance of the apartments:** Mrs. Jamuna has to constantly do the maintenance of these apartments or office. If in case of offices it's a gross lease agreement, then all the maintenance expense will be borne by her. & in case of service apartments she has to continuously maintain the apartments so that she attract new customer easily.
3. **Appointment of staff:** If Mrs. Jamuna is thinking to let out as service apartments, so she has to hire new people so that they can provide the services. Since new hiring would lead to staffing risk and also increase in fixed cost for her. So this increase in fixed cost will be a burden on her.
4. **Occupancy:** Mrs. Jamuna is expecting that the occupancy is expected at 70% for let out apartments and 60% for service apartments, if there is some flaw in her assumption of this can lead to losses for her in future.

5. **Compliance:** If she wants to let out as service apartments, she has to fulfil all the requirements of Local bodies and Government and obtain necessary environment. She will also require to keep necessary records and documents.
6. **Cash Flow Mismatch:** Mrs. Jamuna would be exposed to cash flow mismatch, if she is not able to generate required revenues to cover cost and interest payments.
7. **Advertisements and 3rd party involvement:** Mrs Jamuna would have to incur lot of advertisement expenditure for increasing occupancy at service apartments and also she has to pay 3rd commission to third party platforms, so that she can attract more and more customers to her property.

Sanjay Sir's Comment:

This question we generally have to find various vulnerabilities of both options letting out as apartments and service apartments. The case study has hinted some points and some additional points you can find by putting yourself in shoes of Mrs. Jamuna. In these types of question you have to show your presence of mind, because it was very general question.

5.8. Explain how Ms. Jamuna's bank would view the receipt of money from Mr. Tony and what measures that the bank would employ to check the veracity of the transaction and compliance with applicable laws for foreign loans?

Answer:

Foreign exchange borrowing are usually susceptible to higher level of scrutiny, because banks wants to check whether foreign exchange transactions are performed for the purpose of money laundering or even funding of terrorism. So bank take the following measures to check the veracity of the transactions and compliance with all the applicable relevant law:

- a. The loan taken by an individual resident from an individual outside India is in compliance with FEMA. So bank will check whether the transaction which have occurred between Mrs Jamuna and Mr. Tony is not in violation of FEMA.
- b. Bank would ask for the agreement of the loan between the two parties and other relevant documents. And examine the documents properly and it would raise questions like why the repayment of loan is done to a third party, how the two parties are in contact with each other(because it is very rare scenario where an individual resident borrowing money from a non-relative individual outside India).
- c. Bank will check whether both parties has submitted relevant document for KYC. It will help bank to mitigate the chances of money laundering and funding for terrorism like issues.
- d. Once foreign remittance is received, a disposal instruction is required to be executed by the beneficiary for credit to the account. The disposal instruction captures the rate of conversion, purpose code and details of FIRC (Foreign Inward Remittance Certificate).