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Further, in the Elective Papers which are Case Study based, the solutions have been worked out on the basis of certain assumptions/views derived from the facts given in the question or language used in the question. It may be possible to work out the solution to the case studies in a different manner based on the assumptions made or views taken.

PAPER-6A – RISK MANAGEMENT

The Question paper comprises three case study questions. The candidates are required to answer any two case study questions out of three.

Answers in respect of Multiple Choice Questions are to be indicated in capital letters, i.e. A or B or C or D as the case may be.

Candidates may use calculator

CASE STUDY: 1

1.1 ABC Co. Ltd. is a manufacturing company and is listed. It has 10000 workers and 1200 employees. The Company is subject to Ind AS 19 in respect of its employee benefits which include gratuity.

Ind AS 19 is an Accounting Standard applicable to companies which are required to measure and disclose the amount of accrued liability (Present Value of Benefit Obligation) in respect of employee benefits in statements of accounts.

As per the Accounting Standard, the accrued liability in respect of, employee benefits can be determined using actuarial principles. Accordingly, the Company engaged an actuary for the purposes of the Ind AS 19.

The Company is, liable to make payment of gratuity benefit to its employees as per Payment of Gratuity Act, 1972. As per the Act, the gratuity benefit is determined using a formula, which is [15/26] x monthly salary (which is relevant for gratuity calculation) x number of completed years of service at the date of cessation of service of the employee. There are terms and conditions mentioned in the Act for payment of gratuity benefit, which the company is required to comply with the same.

The Company engaged Mr. X, a consultant actuary, to get the actuarial reports certified by Mr. X as per Ind AS 19 for the last two years.

After submission of the actuarial report by Mr. X, in the third year, Auditors (who were recently appointed by the Board) observed that Mr. X does not hold any certificate of fellowship issued by the Indian Actuarial professional body. They pointed out and qualified the Accounts in their Auditors' Report. They also observed that the Mr. X's reports were accepted during last two years.

Since the Management is worried over GRC (Governance, Risk and Compliance), the CRO (Chief Risk Officer) was asked to address the issue pointed out by the Auditors and submit a report to the Company giving details of the risks and how they can be mitigated.

Now, you are recently appointed as the CRO and you are asked to draft the Report to be submitted to the Board, and the Report should include:

(a) What is the type of risk the Company is subjected to?

(b) What is the impact of the risk on the Company's performance?

(c) What are the recommendations to mitigate the risks?

(d) What preventive measures could be taken while engaging various professionals in future, such as engineers, surveyors, valuers etc., who will be required to certify as per the statutory requirements? ***(30 Marks)***

Choose the accurate or near accurate answer in the following Multiple-Choice Questions.

(10 x 2 Marks = 20 Marks)

(1.2) Cyber Risk broadly refers to the risks an organization is exposed to, due to a situation where its data or network systems or its transactions are disrupted, compromised by an intrusive access from a/an

(A) Bug in computer

(B) Virus

(C) External entity

(D) None of the above

(1.3) Automated controls are dependent on a:

(A) Manual check

B) Predefined system check

(C) Predetermined check

(D) None of the above

(1.4) Financial loss of ₹ 6 lacs is given risk grading/rating, which is:

(A) High

(B) Low

(C) Medium

(D) Border

(1.5) The following is the Section of the Companies Act, 2013 that instructs that the Audit Committee shall review the risk management procedures implemented by the Management:

(A) 177

(B) 134

(C) 315

(D) None of the above

(1.6) The following aspect does not indicate the risk maturity of an organization:

(A) Business objectives are defined and communicated across the organization.

(B) Risk appetite is defined and communicated across the organization.

(C) Control environment is strong including tone from the top.

(D) None of the above

(1.7) Risk management in an organization minimizes the impact of risk on the business with the help of the following person but does not give guarantee that organization become risk free:

(A) A company secretary

(B) An internal auditor

(C) An actuary

(D) A chief risk officer

(1.8) Brexit impact scenario has the following associated principal risk:

(A) Brand, Reputation and Trust

(B) Data Security and Data Privacy

(C) Political, Regulatory and Compliance.

(D) None of the above

(1.9) A FICO score of 750 means:

(A) 1% of chance of default

(B) 2% of chance of default

(C) 8% of chance of default

(D) 61% of chance of default

(1.10) In Quantitative Techniques of Credit Risk Management, Beta is a measure of:

(A) the volatility

(B) an investment's excess return

(C) the active return on an investment

(D) None of the above

(1.11) Credit insurance is an insurance policy offered for sale to persons in the market and is a type of :

(A) life insurance

(B) property and casualty insurance

(C) health insurance

(D) reinsurance

Answer to Case Study 1

1.1 To: The Board of Directors, ABC Co. Ltd.

From: Chief Risk Officer

Date: 13 November 2018

Subject: Analytical Report on Risks Involved

Executive Summary

Company is subject to Ind AS 19 in respect of employees benefits which include Gratuity. In order to meet disclosure requirements of Accounting Standard it required to measure and disclose the amount of accrued liability (Present Value of Benefit Obligation) in respect of employee benefit.

Accordingly, around three year back company engaged Mr. X to submit the Actuarial Report. Although for the last two years the reports submitted by Mr. X was accepted by the Auditors of the Company without any objection, but this year Auditor observed that Mr. X does not hold any certificate of fellowship issued by Indian Actuarial professional body and he qualified Auditor's Report.

Report of Key concerns raised

This analytical report covers the reply on the various concerns raised by the Board of Directors.

(a) What is the type of the risk the Company is subject to?

The risk arising from this lapse is 'Legal Risk' or 'Compliance Risk' as it is resulting from the failure to comply with statutory or legal requirements.

(b) Impact on Company's Performance

The various types of impacts on the company's performance are as follows:

(i) Bringing bad name and reputation for the Company.

(ii) Over or Under Statement of Profit Loss in Income Statement of Company leading wrong decisions by the Company itself and external parties.

(iii) Wrong financial position of the Company in the Balance Sheet.

(iv) Due to wrong calculation of profit company may have paid wrong dividend in previous years.

(v) Wrong computation of Cash Flows of the previous years and consequently leading to wrong budgeting figures.

(vi) Wrong decision based on wrong budgeted figures.

(c) Recommendations to Mitigate such Risks

The recommendations to mitigate such risks are as follows:

1. A dedicated team of experts in the Compliance Department should be employed.
2. A comprehensive management framework can be employed which is designed to:
   - Be aware and interpret the changes in the Regulatory Standards and Compliances and assess their impact on decision making in a time bound manner.
   - To ensure continued Operational efficiency and effectiveness of business processes, risks, compliance process and control mechanism should be converged.
   - Assigning of single point of accountability for compliances of various regulatory requirements in the organization.

(d) Preventive Measures to be taken before engaging various professional in future:

1. Through verification of documents submitted in support of Qualification and Experience.
2. Checking the required Qualification as prescribed by applicable Regulation or Standard.
3. Seeking Letter of Recommendation from any previous employer.
4. Rotation in the appointment of professionals.

Signed

Chief Risk Officer

1.2 (C)

1.3 (B)

1.4 (B) or (C)

1.5 (A)

1.6 (D)

1.7 (D)

1.8 (C)

1.9 (B)

1.10 (A)

1.11 (B)

CASE STUDY: 2

(2.1) Quality Paper Mills Limited is an unlisted company formed in the year' 2003 having the head office and factory situated at Visakhapatnam. It was manufacturing and selling papers. The manufacturing of paper was based on bamboo and soft wood.

Some key Profitability Ratios for the FY 2011-12 were:

Percentage of profit after tax to:

Sales	*1.84*
Fixed Assets	*0.83*
Capital Employed	*1.09*
Net-worth	*2.01*
Equity Capital	*3.27*

Due to various issues such as, insufficient availability of raw materials, labour unrest, power problems, environmental pollution etc., the Company stopped production in the month of March, 2012.

The Company owned a total land of 38 acres as on 31st March, 2012 in which the factory and office were situated. It sold 5 acres of vacant land for ₹ 3 crores and settled the Bank dues, outstanding wages and statutory liabilities during September 2012.

Extract from Balance Sheet as on 31st March, 2018 ₹ (in crores)

Investments (in the form of shares, debentures, units in mutual funds)	*2.00*
Land (at cost)	*3.00*
Other fixed assets	*1.50*
Liabilities	*Nil*
Equity capital	*1.00*

In April, 2018, the Managing Director of the Company, Mr. Ajit, got the approval of the Board to revive the Company. He appointed a project consultant to conduct a feasibility study and also to come out with alternate proposals.

The consultant, after a 3-month study, came out with the following proposals.

Proposal 1 :

To demolish all the buildings and construct residential villas, apartments and independent houses ans sell them to the public.

Projections of Proposal 1

Project time	*3 years*
Total sales price	*₹ 30 crores*
Cost of construction	*₹ 20 crores*
Other expenses (including interest)	*₹ 6 crores*
3-year Term Loan from Bank	*₹ 10 crores*
Profit	*₹ 4 crores*

Suitable modifications to be done in Memorandum and Articles of Association of the Company. Necessary approvals to be obtained from the Town Planning authorities of the State government.

Proposal 2 :

To commence paper manufacturing using sugarcane bagasse, which is used as a substitute for bamboo and soft wood for the production of paper pulp. It is estimated that 30% wet bagasse could be obtained from crushing sugarcane. There are a lot of sugar mills that are around the place and it may not be a problem to obtain such raw material. After removing pith (waste fiber) and leftover sugar from the wet bagasse, it could be converted to pulp. Since sugarcane production is seasonal, suitable preservative arrangements for the bagasse are to be undertaken.

Since the Company was already producing paper using bamboo and soft wood, it was suggested to have 20% of total production by using the existing machinery after sufficient reconditioning. The consultant also suggested to manufacture (i) boards and (ii) newsprint paper besides production of papers, as there is a growing market both in India and foreign countries.

Key factors of Proposal 2 ***₹ (in crores)***

Cost of new machineries	*10.00*
Infrastructure development expenditure etc., (laying of roads and conversion of meter-gauge rails to broad-gauge rails in the factory)	*3.00*
Cost towards revamping old machineries	*1.25*
Initial cost towards purchase of raw materials	*1.00*
Renovation expenses of staff quarters, office and factory buildings	*2.30*
Other expenditure	*2.45*
TOTAL COST	***20.00***

This was proposed to be met as under:

Fresh share capital from existing shareholders	*2.00*

Sale of 8 acres of unused land	*6.00*
Sale of Investments	*2.00*
Bank Term Loan (₹ 6 crores) and Working capital loan (₹ 4 Crore)	*10.00*
Production can be commenced in Sep. 2019	

Projections made:

Financial Year	*2019-20*	*2020-21*	*2021-22*	*2022-23*	*2023-24*
	₹ (in crores)				
Sales	*5*	*15*	*25*	*36*	*47*
Income after interest, tax and depreciation	*-1.00*	*0.90*	*1.50*	*2.40*	*3.00*

The vision of Mr. Ajit is to look forward to the things that the Company could do and not look back at things that could not be undone.

Hence, he gave his consent to Proposal 2, but he was not prepared to sell the investments. The project consultant and Mr. Ajit had initial discussion with the Bank. The bankers principally agreed to the proposal but wanted to know (i) the basis of various calculations and ratios and the underlying statistical methods employed in order to ascertain the credit risks, (ii) whether the risk management objectives chosen by the Company to frame the risk management approach has been done after performing a thorough analysis of process of risk management cycle by systematically conducting risk identification, risk assessment and risk mitigation.

Mr. Ajit had the following concerns:

Whether proper risk assessment is done and all types of risks are properly assessed by the consultant to ensure that the risks are within the tolerable limits (as he inherently felt that he is taking a lot of risk in reviving the Company)?

While making exports, whether issues are properly addressed in settlement of export bills in foreign currencies as there is a greater volatility in foreign exchange markets?

Proper risk management exercise to be done to find and communicate key business weaknesses, threats and opportunities to all levels of management by making them aware of enterprise-wide risks.

National and international standards are studied and the best of them applied in risk management techniques.

The auditors would look into the internal controls in various strategic and operational areas including the controls over financial reporting.

Contingencies and unfavourable conditions are foreseen to the extent possible and measures are in place which could be invoked at such times.

Proper Corporate Governance framework is developed keeping in mind the macroeconomic changes, market situation and legislative requirements, besides promoting adequate disclosures and transparency.

The managing director has approached you, a risk management specialist, to answer the following questions:

(a) As the Managing Director is concerned whether national and international standards are studied and could be applied in risk management techniques of the Company, explain the principles as recommended by OECD for effective implementation of risk management. ***(6 Marks)***

(b) Write the formulae and calculate (i) variance and (ii) standard deviation for the series of numbers, 2, 3,6,9, 10. ***(4 Marks)***

(c) The Managing Director is interested to know the functions of Risk Management. Explain the same. ***(6 Marks)***

(d) Define (i) Business Risk, (ii) Internal Control, (iii) Significant Risk according to SA 315 and (iv) Internal Financial Controls as per Companies Act, 2013. ***(4 Marks)***

(e) The Company has presented the loan proposal to the bank. What are the basic principles on which the credit risks of the Company would be assessed by the bank? ***(6 Marks)***

(f) The Management wants to act early and take right decisions by following a holistic risk management framework. List the benefits of the same. ***(4 Marks)***

Choose the accurate or near accurate answer in the following Multiple Choice Questions.

(10 x 2 Marks = 20 Marks)

(2.2) Which one of the following would LEAST likely be included as a source of market risk?

(A) Natural disasters

(B) Technological changes

(C) Recessions

(D) Political turmoil

(2.3) The Bank in the process of the approval of the loan proposal conducts stress tests for securitised assets as per Basel Committee on Banking Supervision. Which of the following would NOT be, considered in such an exercise?

(A) The risk control structure of the company

(B) Relevant contractual arrangements and embedded triggers

(C) Exposure to systematic market factors of such assets

(D) The underlying assets

(2.4) Strategic risks are associated with (as per ICAI's Standard of Internal Audit) the following purpose, objectives and direction of business:

(A) Short-term purpose

(B) Medium term purpose

(C) Long-term purpose

(D) None of the above

(2.5) The managing director wanted to know the difference between Risk Capacity and Risk Appetite. It can be BEST described as

(A) Risk Appetite is the overall ability and financial boundary above which the Board can play their business bets; whereas Risk Capacity is the hard stop limit above which the Board would like to restrict its business actions.

(B) Risk Capacity is the overall ability and financial boundary within which the Board can play their business bets; whereas Risk Appetite is the hard stop limit within which the Board would like to restrict its business actions.

(C) Risk Appetite is the overall ability and financial boundary within which the Board can play their business bets; whereas Risk Capacity is the hard stop limit within which the Board would like to restrict its business actions.

(D) Risk Capacity is the overall ability and financial boundary above which the Board can play their business bets; whereas Risk Appetite is the hard stop limit above which the Board would like to restrict its business actions.

(2.6) A company's decision to move into immature or emerging markets or to launch products outside its core competencies is BEST known as

(A) Uncertainty

(B) Ambiguity

(C) Complexity

(D) Volatility

(2.7) The global risk indicators, according to the World Economic Forum, that are currently in trend do not include:

(A) Increasing disparity between the rich and poor.

(B) Global warming and climate changes.

(C) Terrorism leading to intensified nationalism and regional conflicts.

(D) None of the above

(2.8) In an organisation having high risk-maturity, the internal auditor would need to:

(A) consult by promoting and advising on identification of and response to risks.

(B) evaluate all types of risks impacting all categories of stakeholders and find solutions to pre-empt the threats before the risk occurs.

(C) concentrate more on carrying out process audits of the risk management processes.

(D) update their risk management processes as they become aware of new or developing practices.

(2.9) Which one of the following economic variables would be CHIEFLY used to identify sovereign risk in advance?

(A) Ratio of Import to its Export

(B) Expropriation Risk

(C) Inefficient Legal System

(D) Exchange Control Risk

(2.10) In case of Impact of Business Risk, the Impact area of 'customer' has the following nature of impact:

(A) Morale

(B) Loyalty

(C) Loss of confidence

(D) Defaults

(2.11) According to ISO 31000 on keys to ERM implementation, which one of the following keys would provide an opportunity to change and further tailor ERM processes?

(A) Leverage existing resources

(B) Winning support and sponsorship from the top management is a precursor

(C) Building ERM using small but solid steps

(D) Focus on a simple risk model with small number of Top Risks

Answer to Case Study 2

2.1 (a) While discharging the roles and responsibilities associated with the risk function, the Risk Managers and Risk Committees should refer to the principles recommended by OECD. The principles are re-produced hereunder: -

1. It should be fully understood by regulators and other standard setters that effective risk management is not about eliminating risk taking, which is a fundamental driving force in business and entrepreneurship. The aim is to ensure that risks are understood, managed and, when appropriate, communicated.
2. Effective implementation of risk management requires an enterprise-wide approach rather than treating each business unit individually. It should be

considered good practice to involve the board in both establishing and overseeing the risk management structure.

3. The board should also review and provide guidance about the alignment of corporate strategy with risk-appetite and the internal risk management structure.
4. To assist the board in its work, it should also be considered good practice that risk management and control functions be independent of profit centers and the "chief risk officer" or equivalent should report directly to the board of directors along the lines already advocated in the OECD Principles for internal control functions reporting to the audit committee or equivalent.
5. The process of risk management and the results of risk assessments should be appropriately disclosed. Without revealing any trade secrets, the board should make sure that the firm communicates to the market material risk factors in a transparent and clear fashion. Disclosure of risk factors should be focused on those identified as more relevant and/or should rank material risk factors in order of importance on the basis of a qualitative selection whose criteria should also be disclosed.
6. With few exceptions, risk management is typically not covered, or is insufficiently covered, by existing corporate governance standards or codes. Corporate governance standard setters should be encouraged to include or improve references to risk management in order to raise awareness and improve implementation.

(b) Variance is the second moment of the distribution, most common measures of dispersion. It is basically the deviation from the mean.

$$\text{Var(X)} = \frac{\Sigma[X - \mu]^2}{n}$$

The square root of Variance is the Standard Deviation. It is denoted by σ (sigma).

$$\sigma = \sqrt{\frac{\Sigma[X\text{-}\mu]^2}{n}}$$

Standard Deviation of Series

X	(X - μ)	$(X - \mu)^2$
2	-4	16
3	-3	9
6	0	0
9	3	9

10 Total = 30 Mean (µ) = 6	4	16 50

$$\text{Var(X)} = \frac{50}{5} = 10$$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{50}{5}} = 3.16$$

(c) Functions of Risk Management

(i) It is independent of business lines (i.e. it is not involved in revenue generation) and reports to the CRO;

(ii) It has authority to influence decisions that affect the firm's risk exposures;

(iii) It is responsible for establishing and periodically reviewing the enterprise risk governance framework which incorporates the Risk Appetite Framework (RAF), Risk Appetite Statement (RAS) and risk limits.

(I) The RAF incorporates an RAS that is forward-looking as well as information on the types of risks that the firm is willing or not willing to undertake and under what circumstances. It contains an outline of the roles and responsibilities of the parties involved, the risk limits established to ensure that the framework is adhered to, and the escalation process where breaches occur.

(II) The RAS is linked to the firm's strategic, capital, and financial plans and includes both qualitative and quantitative measures that can be aggregated and disaggregated such as measures of loss or negative events (e.g., earnings, capital, and liquidity) that the board and senior management are willing to accept in normal and stressed scenarios.

(III) Risk limits are linked to the firm's RAS and allocated by risk types, business units, business lines or product level. Risk limits are used by management to control the risk profile and linked to compensation programmes and assessment.

(iv) It has access to relevant affiliates, subsidiaries, and concise and complete risk information on a consolidated basis; risk-bearing affiliates and subsidiaries are captured by the firm wide risk management system and are a part of the overall risk governance framework;

(v) It provides risk information to the board and senior management that is accurate and reliable and periodically reviewed by a third party (internal audit) to ensure completeness and integrity;

(vi) It conducts stress tests (including reverse stress tests) periodically and by demand. Stress test programs and results (group-wide stress tests, risk categories and stress test metrics) are adequately reviewed and updated to the board or risk committee. Where stress limits are breached or unexpected losses are incurred, proposed management actions are discussed at the board or risk committee. Results of stress tests are incorporated in the review of budgets, RAF and ICAAP processes, and in the establishment of contingency plans against stressed conditions.

(d) **(i)** *Business Risk according to SA 315:* A risk resulting from significant conditions, events, circumstances, actions or inactions that could adversely affect an entity's ability to achieve its objectives and execute its strategies, or from the setting of inappropriate objectives and strategies.

(ii) *Internal Control according to SA 315:* The process designed, implemented and maintained by those charged with governance, management and other personnel to provide reasonable assurance about the achievement of an entity's objectives with regard to reliability of financial reporting, effectiveness and efficiency of operations, safeguarding of assets, and compliance with applicable laws and regulations.

(iii) *Significant Risk according to SA 315:* An identified and assessed risk of material misstatement that, in the auditor's judgment, requires special audit consideration.

(iv) *Internal Financial Control according to Companies Act 2013:* The policies and procedures adopted by the company for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information.

(e) Basic Principles on which the bank would assess the loan proposal of the Company as follows:

(i) *Understand the reality:* As a lender you need to ensure that you made your customer aware of all the charges and fees associated with the credit which you are planning to extend to the customer. This is critical as customer might be at negotiation stance to have maximum benefit from your line of credit. Longer time he takes to negotiate, there is high possibility that pay off will be late. So communicate the implicit and non-implicit costs that associated with it. Even administrative aspects are also important as they sometime drive the business decision to have line of credit or not.

(ii) *Check the credibility:* It may be possible that customer externally looks reliable to the organization, but that does not mean that the customer has full ability to

pay off appropriately and regularly. You need to understand the credibility that the customer possesses. And for that purpose, lender organization should rely on the reports which are available. Or they can consider going through the credit scoring agencies to ensure the customer has the paying ability. Even asking for the basic information will provide you a rough idea about the credit history of the customer. It always better to take the help of professionals during this step. Engage the professional and rely on their expertise. During this stage, credit evaluation is very critical.

(iii) *Ask and Check the references:* It's absolutely ok to ask customer for the references, list of creditable clients are much more reliable source than anything else. It's important to ask for the lender organization to understand who all have been giving trade credit in the past and how old are the relationship with such counterparty. This will establish a pattern to understand if the customer has a tendency to maintain the business relation or it's just a pure business. Also, asking reference from the third party proves to be independent source to verify the commitment made by the customers.

(iv) *Due Diligence:* When a lender is convinced to provide a line of credit to the customer, it is his duty to have proper due diligence in place to ensure the line of credit is being placed in safe pair of hands. Irrespective of the professionals' involvement in due diligence process, lender still has the moral responsibility to perform the due diligence on its own. This can be achieved by simply visiting the website, assessing the market creditability etc. Basically, publicly sourced information is pretty useful in such cases.

(v) *Recovery:* Lender organization or its employee must understand that every single rupee invested in the customer has cost involved in it. An effort should be made to ensure that this minimal cost of capital should be recovered from the customer. This can be achieved by simply asking your prospect for a deposit or the collateral.

(vi) *Nature of business:* Once should not hesitate to ask for the nature of business in which borrower is dealing with. This will give a fair bit item on risk exposure and also provide adequate comfort to the lender.

(f) A holistic risk management framework would empower Board to act early and take the right decision by:

- Identify top threats to entity and asset protection measures.
- Link risks to more efficient capital allocations and business strategy.
- Develop a common language in the organization for problem solving.
- Effectively respond to an evolving business environment.

2.2 (B)

2.3 (A)

2.4 (C)

2.5 (B)

2.6 (B)

2.7 (D)

2.8 (C)

2.9 (A)

2.10 (B)

2.11 (C)

CASE STUDY: 3

(3.1) Ms. X is new to operational risk management. While analysing the risks of an established airline based on the Risk Grading /Rating model, she identified the following risks:

(1) Stagnant business growth resulting from competition from other airlines.

(2) Aggressive fleet expansion, which may lead to over-capacities. There are about 170 aircrafts under order, which could also result in massive financial commitments. A comprehensive feasibility study has been shared by the Company, justifying the expansion strategy.

(3) Safety standards resulting in crash/disastrous hijacking.

(4) Volatile oil prices. There is a risk of failure to address adequately the challenges of fluctuating oil prices. Whilst it is usually rising oil prices that hurt airlines, during 2008, several airlines suffered significant hedging losses as the hedging strategies went awry, when oil prices plummeted from $147 p/b in July 2008 to $35-40 p/b level.

Please, help Ms. X to classify the above risks, by giving a report to her. ***(30 Marks)***

Choose the accurate or near accurate answer in the following Multiple Choice Questions.

(10 x 2 Marks = 20 Marks)

(3.2) One of the principles of Basel Committee on Banking Supervision Principles for sound stress testing practices and supervision is:

(A) Stress testing should form an integral part of the overall governance and risk management culture of the bank.

(B) Stress testing should be done in case of mergers or take overs only.

(C) Stress testing should be done at the direction of Reserve Bank of India only.

(D) None of the above

(3.3) Gini coefficient is an index to measure a country's:

(A) level of corruption.

(B) inequality in income distribution.

(C) level of crimes, violence, military expenditure.

(D) None of the above

(3.4) Repudiation of Contracts is one of the types of Political risks which is faced by a Multinational National Corporation (MNC), and this risk arises on account of:

(A) restrictions on repatriation of currency to its home country.

(B) takeover of its business without or with inadequate compensation.

(C) revocation of earlier awarded turnkey projects by the Government of host country without adequate consideration and damages.

(D) high level of red tapism.

(3.5) The following one is a financial risk:

(A) The cash flow of an issuer will not be adequate to meet its financial obligation.

(B) A fisherman starting a sea voyage on fishing expedition.

(C) An infant climbing on a window pane.

(D) A student writing the examination.

(3.6) The following one is not a technique of Risk Management Techniques:

(A) Tolerate

(B) Transfer

(C) Terminate

(D) None of the above

(3.7) The probability of rolling double-sixes is, assuming the two die are independent:

(A) 1/6

(B) 1/36

(C) 1/216

(D) 1/12

(3.8) If a long term instrument is rated as "B", this means that instrument carries:

(A) Highest Safety

(B) High Risk

(C) Very High Risk

(D) None of the above

(3.9) As per the RBI's framework, SMA (Special Mention Account) with sub category 1 (SMA-I) denotes:

(A) Principal or interest payment overdue between 31-60 days.

(B) Principal or interest payment overdue between 61-180 days.

(C) Principal or interest payment not overdue for more than 30 days.

(D) None of the above

(3.10) Mutual Fund A gives 12% return over the past year and had a standard deviation of 10%. The risk free return over the time period was 3%. The Sharpe Ratio for Mutual Fund A is:

(A) 0.9

(B) 0.1

(C) 0.5

(D) 0.07

(3.11) Project A had total revenue of ₹ 1,00,000, and total expenses of ₹ 50,000. The total risk-weighted assets involved in the project are ₹ 4,00,000. RORAC (Return on Risk Adjusted Capital) for the Project A is:

(A) 11.1%

(B) 12.5%

(C) 25%

(D) 5%

Answer to Case Study 3

(3.1) Report to Ms. X

To: Ms. X

From: Chief Risk Officer

Date: 12 May 2018

Subject: Grading/ Bucketing of Various Risks

Introduction

This report covers grading/ bucketing of various identified risks by the client.

Grading of various Risks

(1) *Stagnant business growth resulting from competition from other airlines.*

Although this risk has a high impact but has low probability as investment involved in the Airline business is very huge. Accordingly, this risk often skips the management's decision as these type events cannot be foreseen. Hence, this risk is bucked in the category of '**High Impact – Low Probability**'.

(2) *Aggressive fleet expansion leading to over-capacities.*

Since Airline has already ordered 170 aircrafts there is high probability that it will involve financial commitments and impact will also be high. Hence, this risk is bucked in the category of '**High Impact – High Probability**' and it needs immediate and sufficient attention of management.

(3) *Safety Standards resulting in Crash/ disastrous hijacking*

Any crash or dangerous hijacking incidents will create negative publicity, poor image resulting in a decline in revenue and similar consequences.

Whilst the probability is low, the strong impact ought to force the seeking of appropriate mitigants. Hence, the impact is high and can be classified as '**Low Probability – High Impact**'. It is suggested to ensure the adequacy of safety systems, to establish the average age of the aircraft and if necessary, to seek the help of an external expert.

(4) *Volatile Oil Prices*

Oil price fluctuation is a business risk that has serious implications for the profitability of the airline business. However, since this affects almost all competitors, the impact can be considered as low and can be categorized as '**Low Probability – Low Impact'**.

Signed

Chief Risk Officer

3.2 (A)

3.3 (B)

3.4 (C)

3.5 (A)

3.6 (D)

3.7 (B)

3.8 (B)

3.9 (A)

3.10 (A)

3.11 (B)