Roll No. .... **Final New Syllabus** NOV 2018

Paper - 6 A

Risk Management

Total No. of Case Study Questions – 3 Total No. of Printed Pages – 16

Time Allowed – 4 Hours Maximum Marks – 100

KATZ

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate who has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

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.

Marks

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 IndAS19 in respect of its employee benefits which include gratuity. **30**

IndAS19 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 IndAS19.

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

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gratuity benefit is determined using a formula, which is [15/26] × monthly salary (which is relevant for gratuity calculation) × 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 IndAS19 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 ?

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Choose the accurate or near accurate answer in the following Multiple Choice Questions. 10×2 =20

(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

Marks

(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

Marks

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

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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 and 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 Crore) and Working capital loan (₹ 4 Crore)	10.00

Production can be commenced in Sep. 2019

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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 discussions 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 ?

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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**

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

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

(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

(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

Choose the accurate or near accurate answer in the following Multiple Choice Questions. 10×2 =20

(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

Marks

(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

Marks

(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

Marks

(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

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 : **30**

(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.

Marks

Choose the accurate or near accurate answer in the following Multiple Choice Questions. 10×2 =20

(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.

Marks

(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-1) 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

Marks

(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%
