

# CERA New Syllabus 2014

Objectives	Target Bloom
<b>Section 1: Enterprise Risk Management Concept and Framework</b>	
a Describe the concept of ERM, the drivers behind it and the resulting value to organisations.	2-3
b Explain the principal terms in ERM.	2-3
c Recommend an appropriate framework for an organisation's enterprise risk management and an acceptable governance structure.	4-5
d Evaluate an organisation's risk management culture including: risk consciousness, accountabilities, discipline, collaboration, incentive compensation, and communication.	4-5
e Demonstrate an understanding of governance issues including market conduct, audit, and legal risk.	3-4
f Demonstrate an understanding of risk frameworks in regulatory and other environments (e.g. Basel Accord , Solvency II,ORSA, Swiss Solvency Test, Sarbanes-Oxley, COSO, Aus/NZ 4360, ISO 31000) and their underlying principles.	3-4
g Demonstrate an understanding of the perspectives of regulators, rating agencies, stock analysts, auditors and company stakeholders and how they evaluate the risks and the risk management of an organisation.	3-4
<b>Section 2: ERM Process (Structure of the ERM Function and Best Practices)</b>	
h Demonstrate how to articulate an organisation's risk appetite, desired risk profile, quantified risk tolerances, risk philosophy and risk objectives.	3-4
i Assess the overall corporate risk exposure arising from financial and non-financial risks.	6
j Compare the relevance of risk measurement and management to various stakeholders including customers, regulators, government, company directors, professional advisors, shareholders and the general public.	4
k Explain contagion and how it affects different stakeholders	3
l Evaluate the elements of a successful risk management function and a structure for an organisation's risk management function.	4-5
m Determine how financial and other risks and opportunities influence the selection of strategy and how ERM can be appropriately embedded in an entity's strategic planning.	4-5
n Demonstrate the application of a risk control process such as the Risk Management Control Cycle, including the relevance of external influences and emerging risks	3
o Propose ERM solutions or strategies to address real (case study) and hypothetical situations for financial and non-financial entities	5-6
p Propose an ERM process that creates value for an organisation	5
<b>Section 3: Risk Categories and Identification</b>	
q Describe different definitions and concepts of risk.	2
r Discuss risk taxonomy.	2-3

s Identify and analyse financial and non-financial risks faced by an entity, including but not limited to: currency risk, credit risk, counterparty risk, spread risk, liquidity risk, interest rate risk, equity risk, hazard/insurance risk, pricing risk, reserving risk, other product risk, operational risk, project risk, legal risk and strategic risk. 3-4

#### Section 4: Risk Modelling and Aggregation of Risks

t Demonstrate how each of the financial and non-financial risks faced by an entity can be amenable to quantitative analysis. 3-4

u Demonstrate enterprise-wide risk aggregation techniques incorporating the use of correlation. 3-4

v Evaluate and select appropriate copulas as part of the process of modelling multivariate risks. 4-5

w Demonstrate the use of scenario analysis and stress testing in the risk measurement process. 3-4

x Demonstrate the use of extreme value theory to help model risks. 3-4

y Demonstrate the importance of the tails of distributions, tail correlations, and low frequency / high severity events. 3-4

z Demonstrate an understanding of model and parameter risk. 3-4

aa Evaluate and select appropriate models to handle diverse risks, including the stochastic approach. 4-5

#### Section 5: Risk Measures

bb Apply risk metrics to quantify major types of risk exposure and tolerances in the context of an integrated risk management process. 3-4

cc Demonstrate the properties of risk measures (e.g. VaR and TVaR) and their limitations. 3-4

dd Analyse quantitative financial market and insurance data (including asset prices, credit spreads and defaults, interest rates, incidents, causes and losses) using appropriate statistical methods. 4-5

ee Analyse risks that are not easily quantifiable, such as operational and liquidity risks 4-5

#### Section 6: Risk Management Tools and Techniques

ff Demonstrate risk optimisation and the impact on an organisation's value of an ERM strategy. Analyse the risk and return trade-offs that result from changes in the organisation's risk profile 3-4

gg Demonstrate means for transferring risk to a third party, and estimate the costs and benefits of doing so. 3

hh Demonstrate means for reducing risk without transferring it. 3-4

ii Demonstrate how derivatives, synthetic securities, and financial contracting may be used to reduce risk or to assign it to the party most able to bear it. 3-4

jj Determine an appropriate choice of hedging strategy for a given situation (e.g., reinsurance, derivatives, financial contracting), which balances benefits with inherent costs, including exposure to credit risk, basis risk, moral hazard, and other risks. 4-5

kk Demonstrate an understanding of the practicalities of market risk hedging, including dynamic hedging. 3-4

ll Demonstrate the use of tools and techniques for identifying and managing credit and counterparty risk 3-4

mm Analyse application of ALM and other risk management principles to the establishment of investment policy and strategy including asset allocation. 4-5

nn Demonstrate possible risk management strategies for other key risks (for example, operational, strategic, legal, and insurance risks) . 3-4

oo Apply best practices in risk measurement, modelling, and management of various financial and non-financial risks faced by an entity. 4-5

**Section 7: Capital Management**

pp	Demonstrate an understanding of the concept of economic measures of value and capital requirements (for example, EVA, embedded value, economic capital, regulatory measures, and accounting measures) and their uses in corporate decision-making processes.	3-4
qq	Apply risk measures and demonstrate how to use them in capital assessment.	3-4
rr	Propose techniques of allocating/appropriating the “cost” of risk/capital/hedge strategy to business units in order to gauge performance (e.g. returns on marginal capital)	5-6
ss	Demonstrate the ability to develop a capital model for a representative firm.	4-5