

## SECTION A: MULTIPLE-CHOICE QUESTIONS

Indicate the correct answer to each question on the mark-reading sheet.

1. Which one of the following statements is **incorrect**?

- 1 Risk is the deviation of the actual from the expected result.
- 2 Risk implies the presence of uncertainty.
- 3 Uncertainty arises from a person's imperfect knowledge about future events.
- 4 All events have a probability of between 0 and 10.

2. The following share prices of ABC Company over the past five months were taken from the business section of a newspaper.

March	R23.50
April	R24.00
May	R24.20
June	R24.50
July	R25.10

The squared deviation for June is

- 1 0.2400
  - 2 0.0576
  - 3 0.3450
  - 4 0.5700
3. Indicate the **incorrect** statement
- 1 The expected value is a special case of the mean.
  - 2 The area under the curve of a continuous probability distribution is equal to 1.
  - 3 The lower the coefficient of variation, the greater the risk will be.
  - 4 The standard deviation measures the dispersion around the expected value.
4. Which of the following risks are inherent in the organisation's main business and reflected in the mission statement?
- 1 Operational risk
  - 2 Core business risk
  - 3 External downside risk
  - 4 Incidental risk

[TURN OVER]

5. The risk of not being able to repay its depositors on demand or, when the terms of the deposit require it, on expiry of the agreed period of notice or on the due date, is known as ...

- 1 investment risk
- 2 credit risk
- 3 liquidity risk
- 4 interest rate risk

6. Which of the following are limitations of the Companies Act 61 of 1973, in terms of the requirements of good corporate governance?

- a It does not address the accountability and responsibility of the enterprise to its stakeholders.
- b It makes provision for financial reporting only and not for environmental and social matters.
- c It regulates non audit services such as consulting with auditors.
- d It is difficult to monitor the dealings of the board of directors despite the fact that the legislation on corporate governance is quite extensive.

Choose the correct combination

- 1 a,b,c,d
- 2 a,c,d
- 3 b,c,d
- 4 a,b,d

7. Which of the following statements characterise an ERM approach as pointed out by De Loach 2000?

- a A common language is implemented that facilitates internal and external communication.
- b An inconsistent reporting framework for aggregating risk measures and information is provided.
- c Resource allocation is supported through the rigorous prioritisation of risks.
- d Transfer costs are reduced by offsetting or pooling risks.

Choose the correct combination.

- 1 a,b,c,d
- 2 a,c,d
- 3 b,c,d
- 4 a,b,d

[TURN OVER]

8. In assessing risk it is important to consider the following:

- a the top risks currently faced by the enterprise
- b the risks attached to tangible assets crucial to value creation
- c the root causes of the identified risks
- d time horizons for the development of risk maps

Choose the correct combination.

- 1 a,b,c,d
- 2 a,c,d
- 3 b,c,d
- 4 a,b,c

9. The roles of the chief executive officer (CEO) in terms of the generic organisational oversight model include...

- a defining the enterprise's risk priorities
- b arbitrating /resolving conflicts between the different role players in the enterprise
- c aligning the risk management objectives and policies with the enterprise's objectives and policies
- d managing selected risks

Choose the correct combination.

- 1 a,b,c,d
- 2 b,c,d
- 3 a,b,c
- 4 a,c,d

10. Which of the following methods can be used in the evaluation of loss size?

- 1 Pareto rule
- 2 Accumulation
- 3 Incident reporting
- 4 Near misses

11. The loss of fairly inexpensive hand tools through theft can best be handled by ...

- 1 short-term insurance
- 2 captive insurance
- 3 self-funding
- 4 none of the above

12. SWOT analysis ...

- 1 is normally applied with the assistance of insurance intermediaries.
- 2 is a graphic representation of any form of flow within and to the enterprise.
- 3 assess the extent to which risk is centralised or decentralised within the enterprise.
- 4 serves to identify risks in the internal and external enterprise environment.

13. Which one of the following is considered a traditional risk control measure?

- 1 Fault tree analysis
- 2 Quality assurance systems
- 3 Hazard and operational studies
- 4 Failure mode analysis

14. Internal factors that may influence the corporate and risk management objectives include ...

- a the natural environment within which an enterprise operates.
- b the infrastructure of the enterprise.
- c the technology used in the enterprise.
- d the personnel the enterprise has at its disposal.

Choose the correct combination.

- 1 a,b,c,d
- 2 a,b,c
- 3 b,c,d
- 4 b,d

15. Indicate the **incorrect** statement.

- 1 Hedging limits profits.
- 2 Interest collars protect both the lender and the borrower.
- 3 A short position entails the buying and keeping of an asset.
- 4 The buyer of an option commits himself/herself to buy or sell a specified asset at a specified price on (or before) a specified date.

16. Which one of the following is **not** a risk control expenditure?

- 1 Depreciation on security systems
- 2 Risk control training
- 3 Costs attached to the handling of insurance claims
- 4 Management time utilised on insurance meetings

17. A properly designed risk framework for an enterprise serves the following purposes:

- a Prioritising and collecting of information.
- b Categorising risks
- c Formulation of a common risk language
- d Identification and prioritising risk exposures

Choose the correct combination.

- 1 a,b,c,d
- 2 a,b,c
- 3 b,c,d
- 4 a,c,d

18. Assume the following hypothetical distribution of stock losses for a small chain of retail stores.

AMOUNT OF LOSS	PROBABILITY OF OUTCOME
R40 000	0.50
R50 000	0.30
R60 000	0.20

The expected value of losses is ...

- 1 R37 000
- 2 R47 000
- 3 R50 000
- 4 R150 000

19. Institutions generally use swaps for the following purposes.

Indicate the **incorrect** statement.

- 1 To hedge or modify an existing asset or liability.
- 2 To adjust or sculpt an existing cash flow to a desired structure.
- 3 To increase the effective interest cost on borrowing.
- 4 To access markets artificially which are normally neither easily nor efficiently accessible.

20. In an effort to create a supportive work environment, enterprises are expected to do the following.

- a promote learning.
- b learn from experience.
- c improve reporting and capital allocation.
- d demonstrate management leadership.

Choose the correct combination.

- 1 a,b,d
- 2 a,c,d
- 3 b,c,d
- 4 a,b,c,d

21. Indicate the **correct** statement.

- 1 When buying interest rate futures, one will benefit from a fall in interest rates.
- 2 When buying interest rate futures, one will benefit from a rise in interest rate.
- 3 When selling interest rate futures, one will benefit from an upward move in the market.
- 4 When selling interest rate futures, one will benefit from a rise in interest rates.

22. Indicate the **correct** statements.

- a In the case of interest rate collars, the borrower is protected against rates rising above the determined limit, while the lender is protected from rates falling below the limit.
- b In a typical interest rate swap, there are two borrowers, one paying a fixed and the other paying a floating rate.
- c As a result of an interest rate swap, both borrowers pay net interest rates lower than the interest they would have paid before the swap.
- d In an interest rate swap, each of the borrowers pays the other's interest.

Choose the correct combination.

- 1 a,b,c,d
- 2 a,b,c
- 3 b,c,d
- 4 c,d

23. Which of the following are examples of Alternative Risk Transfer (ART) techniques?

- a Futures
- b Swaps
- c Risk securitisation
- d Options

Choose the correct combination.

- 1 a,b
- 2 a,b,d
- 3 b,c,d
- 4 a,b,c,d

24. A fire-practice drill by staff for risk control purposes is an example of ...
- 1 a physical measure
  - 2 a procedural measure
  - 3 education and training
  - 4 a legal measure
25. Which of the following statements characterise the traditional approach to risk management?

- a Management of risks in isolation – the fragmented approach.
- b The functional approach to risk management responsibilities.
- c A narrow focus on discrete risks.
- d The integrating of operational activities with strategic activities.

Choose the **correct** combination.

- 1 a,b,c,d
- 2 a,c,d
- 3 b,c,d
- 4 a,b,c

26. Indicate the **correct** statement.

- 1 Aggregation methods provide qualitative means to transfer, avoid and securitise risk.
- 2 Aggregation is a way to summarise an extremely simple set of rules.
- 3 Risks of which the mutual relationships are unknown are pooled in order to manage them better.
- 4 Aggregation of multiple risks improves reporting and capital allocation.

27. The need for a more integrated and holistic view of risk management is emphasised by ...

- a globalisation
- b technology
- c increased concentration of risk
- d the increased value of tangible assets

Choose the **correct** combination.

- 1 a,b,c,d
- 2 a,b,c
- 3 b,c,d
- 4 a,b,d

28. Which of the following procedures are enablers of the continuous improvement philosophy?

- a Benchmarking of performance to identify best practices.
- b Interactive communications and sharing of knowledge.
- c Integrating the enterprise's risk language and risk management process into its employee learning programme.
- d Tracking changes in the business context and risk environment.

Choose the **correct** combination.

- 1 a,b,c,d
- 2 a,b,d
- 3 b,c,d
- 4 a,b,c

29. The setting of clear goals and objectives is part of which **one** of the elements of the business risk management process?

- 1 Establishment of the process
- 2 Assessment of business risks
- 3 Formulation of risk management strategies
- 4 Design and implementation of risk management strategies

30. The following are barriers to the implementation of ERM:

- a lack of tools
- b clear oversight structure
- c organisational culture
- d improper yardsticks

Choose the **correct** combination.

- 1 a,b,c
- 2 a,c,d
- 3 b,c,d
- 4 a,b,d

[30 X 1 = 30]

SECTION B: PARAGRAPH QUESTIONS AND CALCULATIONS

Question 1

1.1 Discuss the two basic properties of probabilities. 4

Probabilities will always sum to 1  
if probability of an event is a certain number  
0 ≤ P ≤ 1

1.2 Distinguish between fundamental and particular risks. Give examples of each and explain why it is necessary to distinguish between these two types of risk. 6

Fundamental - political, environmental things etc  
Particular - personal, financial, liability  
Diff to distinguish bc some of commercial risk is not  
in general risk cannot be passed to another

(10)

[TURN OVER]

Question 2

2.1 Briefly discuss the three types of risk management objectives that enterprises can set when implementing Enterprise Risk Management (ERM). 6

Operational - organisations operational efficiency  
+ effectiveness  
- more efficient, healthy, market competitive

Reporting - internal + external reporting of financial +  
non-financial info. Help management make decisions  
- monitor performance  
- facilitate financial understanding

Compliance - compliance with laws + regulations  
- examples: Compensation for Displacement  
by Act + Displacement Act 1992, etc  
- legal consequences

2.2 Outline the importance of a common language of risk within enterprises. 4

- 1) facilitates communication
- 2) facilitates learning
- 3) facilitates aggregation of risks in organisation
- 4) fundamental building block of ERM

(10)

[TURN OVER]

**Question 3**

3.1 Discuss the main characteristics of the Enterprise Risk Management approach to risk management. 4

1) ERM is a process that identifies, assesses and manages risk in a systematic and comprehensive manner. It is a process that is integrated with the organization's other processes and is designed to provide a framework for the organization to manage risk in a consistent and effective manner.

2) ERM is a process that is designed to provide a framework for the organization to manage risk in a consistent and effective manner. It is a process that is integrated with the organization's other processes and is designed to provide a framework for the organization to manage risk in a consistent and effective manner.

3) ERM is a process that is designed to provide a framework for the organization to manage risk in a consistent and effective manner. It is a process that is integrated with the organization's other processes and is designed to provide a framework for the organization to manage risk in a consistent and effective manner.

3.2 Outline the environmental factors that accompany the successful implementation of an ERM framework. 6

1) Leadership - involvement + attitude of leaders influence organization's risk management. Top management sets the tone.

2) Communication - ongoing training + seminars related to ERM. New ideas + approaches occur continually. Keep interests of all. Keep channels channels clear + open.

3) Performance + compensation - Link risk taking activities with performance measurement + compensation. Risk conscious performance measurement + compensation considers risk adjusted returns.

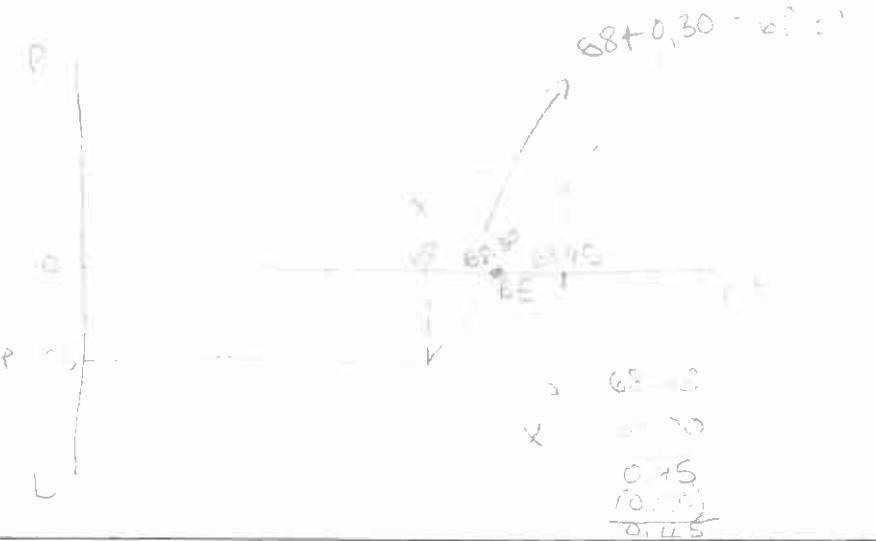
(10)

[TURN OVER]

**Question 4**

A six-month American call option is written on a commodity at a strike price (X) of R68. The option premium is R0.30. The market price (S) at the time the option was written was R58.25. Four months after the option is written the market price of the commodity rises to R68.75.

Explain whether the buyer of the option should exercise the option at the current market price. Draw a graph illustrating the payment profile for the call option buyer. (10)



The buyer should exercise his option because his profit is 45c.

(10)

[4 x 10 = 40]

TOTAL MARKS: 70

[TURN OVER]

DO YOUR ROUGH WORK HERE.  
NO ROUGH WORK WILL BE MARKED.

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NO ROUGH WORK WILL BE MARKED.