

**MNK203R**

(499719)

May/June 2011

ENTERPRISE RISK MANAGEMENT

70 Marks

Duration 2 Hours

 EXAMINERS
 FIRST
 SECOND

 MRS AT MUTEZO
 MR NJ GODI
 MS CJ DE SWARDT
 MR C NYOKA

 MR J CHISASA
 MR ME KHUMALO
 MS R DU RANDT

Use of a non-programmable pocket calculator is permissible

This paper consists of 18 pages in total plus instructions for completing a mark-reading sheet

This paper comprises two sections, A and B

Section A consists of forty multiple choice questions that each counts 1 mark. The answers to these questions must be indicated on the mark-reading sheet provided. Write your student number and the unique number **4499719** on the mark-reading sheet

Section B comprises **THREE** paragraph/calculation type questions. Each question counts 10 marks. Section B must be answered in the designated areas on pages 12 to 16

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Please note

- 1 This is a fill-in examination paper and there is no need for any examination scripts. Students must hand over the examination paper to the invigilator before leaving the examination hall. Students must answer the questions in Section B in the spaces provided on the examination paper.
- 2 Any silent, non-programmable, battery-operated pocket calculator may be used
- 3 Pages for rough work have been provided (see pages 17 and 18). No rough work will be marked

[TURN OVER]

SECTION A: MULTIPLE-CHOICE QUESTIONS

This section consists of 40 multiple choice questions. Use the mark-reading sheet provided to indicate your answers.

1 Indicate the **correct** statement

- 1 All events have a probability between 0 and 1
- 2 The most widely used measure of central tendency is the variance
- 3 When the probabilities of all the possible outcomes are exactly the same, the mean and the expected value will differ
- 4 If all possible outcomes of an event are known, a probability distribution can be developed

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 Changes in the taxation policy of the government may be considered to be a risk to business organisations
- 1 systematic core business
 - 2 incidental business
 - 3 fundamental downside
 - 4 unsystematic core business
- 4 Political unrests in a country can be classified as
- 1 particular external downside risk
 - 2 incidental business risk
 - 3 fundamental external downside risk
 - 4 operational risk

[TURN OVER]

5 The risk of a negative variation in the value of financial instruments owing to market changes is referred to as

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

6 Which of the following is/are perils associated with a motor fleet?

- a fire
- b worn tyres
- c theft
- d wet road conditions

Choose the correct combination

- 1 all of the above
- 2 a,c
- 3 c only
- 4 a,c,d

7 Assume a person driving under the influence of alcohol causes an accident resulting in injuries and damages Under this scenario

- 1 driving under the influence is considered to be a risk
- 2 the accident is considered to be a peril
- 3 driving under the influence is considered to be a peril
- 4 the accident is considered to be a hazard

8 Core business risk of a retail organisation includes

- a resource risks
- b sales variability
- c market risks
- d currency risks

Choose the correct combination

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

- 9 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

- 10 Characteristics of good corporate governance include
- a transparency
 - b dependence
 - c discipline
 - d environmental responsibility

Choose the correct combination.

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

- 11 The traditional approach to risk management

- 1 made extensive use of insurance and derivatives
- 2 adopted a comprehensive approach to managing risks
- 3 integrated the efforts of operations and risk managers
- 4 viewed risk management as part of everyone's job

- 12 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

13 The implementation of ERM in organisations is hampered by

- a strong existing risk cultures
- b insufficient reporting structures
- c technology
- d improper yarsticks

Choose the correct combination

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

14 Alternative risk transfer techniques (ART)

- a involve the transfer of risk to capital markets
- b give investment banks a new field of activities
- c create opportunities for nonfinancial enterprises to transfer risk at lower cost
- d providing insurance companies with an extension of their capacity base

Choose the correct combination

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

15 Enterprise risk management is characterised by

- 1 narrow focus on hazard risks
- 2 a comprehensive, inclusive and proactive approach to risk management
- 3 a functional approach to risk management responsibilities
- 4 lack of consistency in terms of level of detail and reporting formats

16 is an underlying factor of operational risk

- 1 System risk
- 2 Interest rate increases
- 3 Political risk
- 4 Customer default

17 Risk management objectives can be classified as

- a Operational objectives
- b Reporting objectives
- c Strategic objectives
- d Compliance objectives

Choose the correct combination.

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

18 Enterprise Risk Management

- a focuses exclusively on upside risks
- b focuses on tangible and intangible assets
- c is embedded in the processes and structures of the enterprise
- d is a reactive approach to risk management

Choose the correct combination.

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

19 The standard deviation is

- 1 a measure of central tendency
- 2 a measure of dispersion around the expected value
- 3 obtained by multiplying each outcome by the probability of its occurrence
- 4 the variance expressed as a percentage of the mean

20 Indicate the **correct** statement

- 1 Risk evaluation is the starting point of the risk management process
- 2 Organisational charts serve to identify risks in the external and internal enterprise environment
- 3 The main objective of a physical inspection for the purpose of risk evaluation is to identify vulnerable loss-producing situations
- 4 By studying flow charts, the risk manager will be able to assess the extent to which control is centralised or decentralised

- 21 Which of the following is a scientifically proven risk identification technique?
- Quality assurance
 - Fault tree analysis
 - Statutory record analysis
 - Computer risk survey
- 22 An example of a procedural risk control measure is
- defensive driving training
 - first aid training
 - stand-by equipment
 - stock control
- 23 Mzansi Enterprises suffers a loss every four years the average value of these losses is R1 000 000 The probability that the organisation will suffer a loss of R1 000 000 during the financial year is
- 0,10
 - 0,20
 - 0,25
 - 0,40
- 24 Damage caused by flood or fire is a type two loss of risk characterised by
- high frequency and high severity
 - high frequency and low severity
 - low frequency and high severity
 - low frequency and low severity
- 25 External downside risks include
- systems failure
 - labour actions
 - currency movements
 - changes in consumer demands
- 26 Indicate the **correct** statement
- Risk managers use insurance reviews to counter risk exposure
 - The price of a stock is inversely related to the market rate
 - The long buyer expects the price of the asset to fall
 - A short position entails the buying and keeping of an asset

27 Indicate the **correct** statement

- 1 European options can be exercised at any time the holder wishes, until the expiry date
- 2 European options can be exercised on the expiry date only
- 3 American options can be exercised on the expiry date only
- 4 Both American and European options can be exercised any time the holder wishes until the expiry date

28 A participant in the market obtains an option to buy an asset at a strike price of R110,00. The cost (premium) of the option amounts to R3,50. The market price at the time the option is written is R105,00. Two months after the option is written the market price of the asset increases to R120,00.

With regard to the aforementioned scenario, the participant will

- 1 exercise the option and make a profit of R8,50
- 2 exercise the option and make a profit of R6,50
- 3 walk away from the option and lose the premium of R3,50
- 4 walk away from the option and buy the asset at a lower price on the market

29 Indicate the **correct** statement

- 1 Swaps may be used to increase the effective interest cost of borrowing
- 2 Parties to interest rate swaps exchange the capital sums involved, adjusted for the differences in interest rates
- 3 The result of a swap is the swapping of interest obligations as well as the risk of inherent interest rate changes
- 4 Swaps may be used to decrease the realised yield on an investment

30 Suppose borrower A can obtain R2 million for ten years at a floating rate of prime plus 0,80% but that he has to pay a fixed rate of 20% on a debenture for the same term. Borrower B, can borrow floating funds at the prime rate and fixed rate funds at 16%. Borrower A and B agree to enter into a swap agreement in which Borrower A agrees to pay an additional 3% interest premium to Borrower B.

With regard to the aforementioned scenario, indicate the **correct** statement

- 1 The effective cost of the floating funds of Borrower B is reduced by 2,2%
- 2 The total interest cost of Borrower A will be 16% on the total amount of R2 million
- 3 Both borrowers gain 1% by entering to the swap agreement
- 4 Borrower B gains 3% by entering to the swap agreement

[TURN OVER]

31 Which of the following are key strategic considerations that need to be evaluated when determining the risk appetite for an enterprise?

- a Capital at risk
- b Internal constraints
- c Process
- d Strategy

Choose the correct combination:

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

32 is an attempt to provide a single number which summarises the total risk in a portfolio of financial assets

- 1 Cash flow at risk
- 2 Risk adjusted return
- 3 Earnings at risk
- 4 Value at risk

33 The risk limit framework of an organisation is a combination of its limits

- a notional
- b risk-sensitivity
- c stop-loss/advisory
- d stress/scenario

Choose the correct combination

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

34 The benefits of the monitoring stage in risk management include

- a developing a more accurate portrait of risk
- b improving the risk management process as a whole
- c increasing the costs associated with redundant risk control measures
- d accumulating evidence to support assumptions and results of the analysis

Choose the correct combination

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

35 The continuous improvement philosophy is facilitated by

- a benchmarking of performance to identify best practices
- b effective communication
- c Promoting a supportive work environment
- d reactive decision making

Choose the **correct** combination

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

36 Which of the following is an example of risk transfer?

- 1 Insurance
- 2 Lease agreement
- 3 Buffer stock
- 4 Defensive driving

37 Which of the following guarantees the interest rate on a loan or deposit facility which will be required on a given future date?

- 1 Forward contract
- 2 Future contract
- 3 Interest rate collar
- 4 Forward rate agreement

38 Risk-adjusted return on capital

- 1 measures performance, taking into account the risks inherent in a portfolio
- 2 incorporates the riskiness of business activity into the measurement of the expected return from that activity
- 3 strengthens the links between performance, accountability and established risk thresholds
- 4 screens capital projects when using discounted cash flow techniques

39 Indicate the **correct** statement

- 1 Aggregation methods provide a 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 not known are pooled in order to manage them better
- 4 Aggregation of multiple risks improves reporting and capital allocation

[TURN OVER]

40 Indicate the correct statement

- 1 It is more cost-effective to manage individual risks
- 2 The transaction cost of pooled risk is higher than that of individual risk
- 3 An aggregate index can be used with the hedging of pooled risks
- 4 It is more cost effective to insure individual than pooled risks

[40 X 1 = 40 marks]

[TURN OVER]

SECTION B: PARAGRAPH QUESTIONS AND CALCULATIONS**ANSWER ALL THE QUESTIONS IN THIS SECTION****Question 1 (10 marks)**

Assume the following hypothetical distribution of stock losses due to theft for product A of a small chain of retail stores

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

You are required to determine the following variables for the above set of outcomes **Show all calculations.**

1.1 Expected outcome

1.2 Variance

1.3 Standard deviation

[TURN OVER]

1 4 Coefficient of variation

--

1 5 Assume that the coefficient of variation of stock losses due to theft for Stock B for the same retailer is 43%. Rate the risk of stock A compared to stock B in terms of losses due to theft

(5 x 2 = 10)

Question 2 (10 marks)

2 1 Argue the **value of good corporate governance** to business enterprises (Hint refer to the four business areas corporate governance might impact on) **4**

[TURN OVER]

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

[TURN OVER]

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

PART 1 (GENERAL/ALGEMEEN) DEEL 1

STUDY UNIT e.g. PSY100 X
 STUDIE EENHEID bv. PSY100 X

INITIALS AND SURNAME
 VOORLETTERS EN VAN

DATE OF EXAMINATION
 DATUM VAN EKSAMEN

PAPER NUMBER
 VRAESTELNOMMER

EXAMINATION CENTRE (E.G. PRETORIA)
 EKSAMENSENTRUM (BV. PRETORIA)

STUDENT NUMBER
 STUDENTENOMMER

UNIQUE PAPER NO.
 UNIEKE VRAESTEL NR.

For use by examination invigilator
 Vir gebruik deur eksamenopsiener

- IMPORTANT**
- USE ONLY AN HB PENCIL TO COMPLETE THIS SHEET
 - MARK LIKE THIS
 - CHECK THAT YOUR INITIALS AND SURNAME HAS BEEN FILLED IN CORRECTLY
 - ENTER YOUR STUDENT NUMBER FROM LEFT TO RIGHT
 - CHECK THAT YOUR STUDENT NUMBER HAS BEEN FILLED IN CORRECTLY
 - CHECK THAT THE UNIQUE NUMBER HAS BEEN FILLED IN CORRECTLY
 - CHECK THAT ONLY ONE ANSWER PER QUESTION HAS BEEN MARKED
 - DO NOT FOLD
- BELANGRIK**
- GEBRUIK SLEGS N HB POTLOOD OM HIERDIE BLAD TL VOLTOOI
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 - MOENIE VOU NIE

PART 2 (ANSWERS/ANTWOORDE) DEEL 2

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61	131	141	151
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66	136	146	156
67	137	147	157
68	138	148	158
69	139	149	159
70	140	150	160

MARK READING SHEET INSTRUCTIONS

Your mark reading sheet is marked by computer and should therefore be filled in thoroughly and correctly

USE ONLY AN HB PENCIL TO COMPLETE YOUR MARK READING SHEET

PLEASE DO NOT FOLD OR DAMAGE YOUR MARK READING SHEET

Consult the illustration of a mark reading sheet on the reverse of this page and follow the instructions step by step when working on your sheet

Instruction numbers ❶ to ❿ refer to spaces on your mark reading sheet which you should fill in as follows

- ❶ Write your paper code in these eight squares, for instance

P	S	Y	1	0	0	-	X
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- ❷ The paper number pertains only to first-level courses consisting of two papers

WRITE

0	1
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 for the first paper and

0	2
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 for the second. If only one paper then leave blank

- ❸ Fill in your initials and surname
- ❹ Fill in the date of the examination
- ❺ Fill in the name of the examination centre
- ❻ WRITE the digits of your student number HORIZONTALLY (from left to right). Begin by filling in the first digit of your student number in the first square on the left, then fill in the other digits each one in a separate square
- ❼ In each vertical column mark the digit that corresponds to the digit in your student number as follows [-]
- ❽ WRITE your unique paper number HORIZONTALLY
NB Your unique paper number appears at the top of your examination paper and consists only of digits (e.g. 403326)
- ❾ In each vertical column mark the digit that corresponds to the digit number in your unique paper number as follows [-]
- ❿ Question numbers 1 to 140 indicate corresponding question numbers in your examination paper. The five spaces with digits 1 to 5 next to each question number indicate an alternative answer to each question. The spaces of which the number correspond to the answer you have chosen for each question and should be marked as follows [-]

◆ For official use by the invigilator. Do not fill in any information here