

**MNK203R**

( 472272)

May/June 2010

**ENTERPRISE RISK MANAGEMENT (BUSINESS MANAGEMENT (RISK) 202)**

Duration 2 Hours

70 Marks

EXAMINERS .

FIRST

SECOND

MRS AT MUTEZO

MR C NYOKA

MS CJ DE SWARDT

Use of a non-programmable pocket calculator is permissible

This paper consists of 15 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 **472272** 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 11 to 13.

**THIS PAPER REMAINS THE PROPERTY OF THE UNIVERSITY OF SOUTH AFRICA AND MAY NOT BE REMOVED FROM THE EXAMINATION ROOM.**

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 14 and 15). No rough work will be marked.

**[TURN OVER]**

**SECTION A: MULTIPLE-CHOICE QUESTIONS**

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

1. A petrol attendant smoking while on duty causes a fire at the petrol station. In terms of this scenario
  - 1 smoking represents a hazard to the business
  - 2 the petrol attendant is a human peril to the business
  - 3 the fire represents a hazard to the business
  - 4 smoking is a peril to the business
  
2. Indicate the **correct** statement
  - 1 The degree of risk is calculated as the frequency with which an event occurs
  - 2 Risk is present in situations of certainty
  - 3 The area under the curve of a continuous probability distribution is equal to 1.
  - 4 All events have a probability between 0 and 10
  
- 3 For a given firm, 50 of the 90 employees are union members. Of those who are union members, 35 belong to union A and 15 belong to union B. The probability that any member selected at random belongs to a union is .
  - 1 0,56
  - 2 0,66
  - 3 1,66
  - 4 2,56
  
- 4 The .. is a measure of relative dispersion used in comparing the risk of assets with differing expected returns
  - 1 coefficient of variation
  - 2 variance
  - 3 standard deviation
  - 4 average
  
- 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 due date known as .
  - 1 investment risk
  - 2 credit risk
  - 3 liquidity risk
  - 4 interest rate risk

[TURN OVER]

6. Indicate the **correct** statement

- 1 Speculative risk deals only with those risks that have a loss or no-loss outcome
- 2 Core business risks include activities, decisions and events that have an indirect impact on the operating profit of the organisation
- 3 The major subcategory of incidental risks is financial risk
- 4 Unsystematic risks arise from events that affect the economy as a whole

## 7 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

## 8 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

## 9 The need for an more integrated and holistic view of risk management is emphasized by .

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

**Choose the correct combination**

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

- 10 A properly designed risk framework for formulating a common language for an enterprise serves the following purposes.
- Prioritizing and collecting of information
  - Categorising risks
  - Formulation of a common language
  - Identification and prioritising risk exposures

**Choose the correct combination**

- a,b,c,d
  - a,b,c
  - a,c,d
  - b,c,d
- 11 Which one of the following is considered a traditional risk control measure?
- Fault tree analysis
  - Quality assurance systems
  - Hazard and operational studies
  - Failure mode analysis
- 12 Which one of the following fire losses would you regard as the most serious?
- R5 million which occurs every ten years.
  - R3 million which occurs every seven years
  - R1 million which occurs every three years
  - R5 million which occurs every seventeen years
- 13 Enterprise risk management is characterised by ...
- narrow focus on hazard risks
  - a comprehensive, inclusive and proactive approach to risk management
  - a functional approach to risk management responsibilities
  - lack of consistency in terms of level of detail and reporting formats
- 14 Which one of the following statements is **incorrect**?
- Hedging limits profits
  - A short position entails the buying and keeping of an asset.
  - A long buyer expects the price of the asset to rise.
  - Interest rate collars protect both the lender and the borrower against interest rate risk
- 15 Hazards associated with a construction plant include ...
- accidents
  - negligence of workers
  - injuries to workers
  - collapsing of scaffolding

**Choose the correct combination.**

- 1 a,c.
- 2 b,c,d
- 3 b,d.
- 4 All of the above

16 Which one of the following statements is **correct**?

- 1 Forward contracts are backed by a formal exchange
- 2 Futures contracts are more liquid than forward contracts
- 3 Futures contracts tend to be more expensive than forward contracts
- 4 The credit risk attached to forward contracts is lower than that of futures contracts

17. Which one of the following is an example of objective uncertainty?

- 1 Physical laws
- 2 Games of chance
- 3 Investments
- 4 Space exploration

18 Alternative risk transfer techniques (ART) ...

- a involve the transfer of risk to capital markets
- b provide investment banks a new field of activities
- c empower the trend towards global operations
- d provide insurance companies with an extension of their capacity base

**Choose the correct combination.**

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

19 A six-month **call option** is written on a commodity at a strike price of R85. The premium of the option is R0 50. The market price of the commodity at the time the option was written was R84. Three months after the option was written, the market price of the commodity had dropped to R83.

Based on the above information, the buyer of the option will ...

- 1 walk away from the option and sustain an effective loss of R1,50
- 2 walk away from the option and buy the commodity at a lower price in the market
- 3 exercise the option and make a profit of R1,50
- 4 exercise the option and make a profit of R2,50

[TURN OVER]

- 20 Institutions generally use swaps to ..
- a hedge or modify an existing asset or liability
  - b adjust an existing cash flow to a desired structure
  - c increase the effective interest cost on borrowing
  - d access markets artificially which are normally not easily accessible

**Choose the correct combination.**

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

21. 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 assesses the extent to which risk is centralised or decentralised within the enterprise
- 4 serves to identify risks in the internal and external enterprise environment

22. The leasing of computer equipment is an example of risk ...

- 1 transfer
- 2 reduction
- 3 avoidance
- 4 elimination

23. Which one of the following losses can be classified as a Type 3 for risk financing decision-making purposes?

- 1 Infrequent small losses
- 2 Intermediate small losses
- 3 Frequent average losses
- 4 Infrequent large losses

24. Indicate the **correct** statement

- 1 Maximum possible loss is the maximum loss that could result from a single event under unfavourable conditions
- 2 Normal loss expectancy describes the extent to which various risks could accumulate into a large loss as a result of the operation of a single event
- 3 "As if" analysis takes full cognisance of the real value of an asset
- 4 Business interruption entails a specific analysis of the past history of an organisation.

**[TURN OVER]**

25 ..... is a technique that specifically incorporates the riskiness of a business activity into the measurement of the expected return from that activity.

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

26. The aggregation of multiple risk activities endeavours to

- a determine the cumulative effect of risk
- b increase efficiency and better decision-making
- c improve reporting and capital allocation
- d ensure simplicity

**Choose the correct combination.**

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

27 The following tasks create a basis from which to launch an enterprise-wide risk management strategy.

- a Establishing an oversight structure
- b Defining a common language and framework
- c Summarising an extremely complex set of relationships
- d Assessing risk management capabilities

**Choose the correct combination.**

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

28. . . is an underlying factor of operational risk.

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

29. Inherent risk is regarded as risk exposures ....

- 1 before taking into account any control measures
- 2 after considering control measures
- 3 related to the reputation of the enterprise
- 4 related to the external environment of the enterprise

**[TURN OVER]**

- 30 Risk-averse is an attitude towards risk that requires .
- 1 acceptance of a decrease in return for an increase in risk
  - 2 an increase in return for an increase in risk
  - 3 no changes in risk/reward in return for an increase in risk
  - 4 a reduction in risk within a stable risk environment
- 31 The aim of risk financing is to
- 1 identify high frequency/low impact risk events
  - 2 identify the best insurance underwriter for a specific risk
  - 3 ensure that the cost of risk does not exceed the potential benefits
  - 4 ensure a total commitment to managing risks
32. The main objectives of risk reporting include
- a An increased awareness of and transparency of risk exposures
  - b Provision of qualitative and quantitative risk information
  - c Generating risk information for decision making
  - d Allocating roles and responsibilities for risk managers

**Choose the correct combinations.**

- 1 a,b,c
  - 2 a,c,d
  - 3 b,c,d
  - 4 a,b,c,d
33. Key Risk Indicators (KRI)
- 1 must be quantifiable
  - 2 must be qualitative
  - 3 must be linked to a loss
  - 4 are indicated by means of probability distributions
34. Which formula can be used to express residual risk?
- 1 Loss history minus current losses
  - 2 Inherent risk minus controls
  - 3 Inherent risk plus controls
  - 4 Loss history plus controls
- 35 Which one of the following statements is **correct**?
- 1 Segregation of duties is an important key risk indicator.
  - 2 Risk reporting is a pillar of risk control
  - 3 Risk evaluation is not a component of a risk management process
  - 4 Risk identification is the second step of a risk management process.



36. Which one of the following is **not** considered a main driver of operational risk?

- 1 Management drivers
- 2 Internal drivers
- 3 External drivers
- 4 Environmental drivers

37 Assume the following hypothetical distribution of possible losses due to fire at a premise of an organisation

OUTCOME	AMOUNT OF LOSS	PROBABILITY OF OUTCOME		
A	R20 000	0,6		
B	R30 000	0,4		

The standard deviation for the above set of outcomes is

- 1 R 5 099,02
- 2 19,61%
- 3 8,94%
- 4 R 2 236,07

38. 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

39 The benefits of including a monitoring stage in the risk management process include:

- a Accumulating evidence to support assumptions and results of the analysis.
- b Increasing the cost associated with improper or redundant risk control
- c Identifying new or changing risks.
- d Improving the risk management process as a whole.

**Choose the correct combination**

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

40. Which of the following are barriers to the successful implementation of Enterprise Risk Management (ERM)?
- a Lack of tools
  - b Clear oversight structure
  - c Organisational culture
  - d Improper yardsticks

**Choose the correct combination:**

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

**[40 X 1 = 40 marks]**

**[TURN OVER]**





**Question 3**

**(10)**

3.1 Evaluate the **merits** of hedging as a risk control technique. Briefly explain and **graphically illustrate** the concept of a **perfect hedge**. 6

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3.2 Explain how organisational charts may be used by a risk manager to identify risks. 4

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**[3 x 10 = 30 marks]**  
**TOTAL MARKS: 70**

**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**

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For use by examination invigilator  
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**IMPORTANT**

- 1 USE ONLY AN HB PENCIL TO COMPLETE THIS SHEET
- 2 MARK LIKE THIS
- 3 CHECK THAT YOUR INITIALS AND SURNAME HAS BEEN FILLED IN CORRECTLY
- 4 ENTER YOUR STUDENT NUMBER FROM LEFT TO RIGHT
- 5 CHECK THAT YOUR STUDENT NUMBER HAS BEEN FILLED IN CORRECTLY
- 6 CHECK THAT THE UNIQUE NUMBER HAS BEEN FILLED IN CORRECTLY
- 7 CHECK THAT ONLY ONE ANSWER PER QUESTION HAS BEEN MARKED
- 8 DO NOT FOLD

**BELANGRIK**

- 1 GEBUIK SLEGS N HB POTLOOD OM HIERDIE BLAD TE VOLTOOI
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**PART 2 (ANSWERS/ANTWOORDE) DEEL 2**

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Specimen only



## 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 ① to ⑩ refer to spaces on your mark reading sheet which you should fill in as follows

- ① Write your paper code in these eight squares, for instance

P	S	Y	1	0	0	-	X
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- ② The paper number pertains only to first-level courses consisting of two papers

WRITE 

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 for the second. If only one paper, then leave blank

- ③ Fill in your initials and surname
- ④ Fill in the date of the examination
- ⑤ Fill in the name of the examination centre
- ⑥ 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
- ⑦ In each vertical column mark the digit that corresponds to the digit in your student number as follows [-]
- ⑧ 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)
- ⑨ In each vertical column mark the digit that corresponds to the digit number in your unique paper number as follows [-]
- ⑩ 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