

**MNK203R**

(467546)

May/June 2009

ENTERPRISE RISK MANAGEMENT (BUSINESS MANAGEMENT (RISK) 202)

Duration 2 Hours

70 Marks

EXAMINERS

FIRST

MRS A MUTEZO

MS CJ DE SWARDT

SECOND

PROF J YOUNG

Use of a non-programmable pocket calculator is permissible

This paper consists of 14 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 **467546** 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 10 to 12

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 13 and 14). 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 Which 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 Everglo Holdings 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 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 is

- 1 R37 000
 - 2 R47 000
 - 3 R50 000
 - 4 R150 000
- 4 Which of the following risks is 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 Which one of the following is an example of a hazard?
- 1 Fire in a warehouse
 - 2 Oil drums stored in a warehouse
 - 3 Earthquakes and storms
 - 4 Explosions
- 6 Corporate governance is defined in its broadest sense as
- 1 a formal system of accountability of the board of directors to shareholders
 - 2 a formal system of accountability of the board of directors to stakeholders
 - 3 an informal and formal relationship between the corporate sector and its stakeholders
 - 4 an informal system of accountability of the board of directors to its stakeholders
- 7 The impact of corporate governance on business areas of the enterprise include the following
- a employing assets efficiently
 - b meeting economic obligations
 - c improving overall performance
 - d attracting lower cost-capital

Choose the **correct** combination

- 1 a,b,c,d
 - 2 a,b,d
 - 3 a,c,d
 - 4 b,c,d
- 8 The need for a more integrated and holistic view of risk management is emphasized by
- a change
 - b new business practices
 - c increased value of tangible assets
 - d globalisation

Choose the **correct** combination

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

9 Which of the following is a benefit of enterprise risk management (ERM)?

- 1 Increased value of intangible assets
- 2 Increased organisational effectiveness
- 3 Improved capital allocation
- 4 Simplicity

10 In assessing risk it is important to consider the following

- a top risks currently faced by the enterprise
- b the risks attached to intangible assets crucial to value creation
- c the root causes of the identified risk
- d an oversight structure

Choose the **correct** combination

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

11 Risk management objectives may be classified into three main categories, namely

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

Choose the **correct** combination

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

12 Which of the following fire losses would you regard as the most serious?

- 1 R5 million which occurs every ten years
- 2 R3 million which occurs every seven years
- 3 R1 million which occurs every three years
- 4 R5 million which occurs every seventeen years

13 A driver training programme is an example of risk

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

[TURN OVER]

14 Which of the following statements is **incorrect**?

- 1 Hedging limits profits
- 2 A short position entails the buying and keeping of an asset
- 3 The long buyer expects the price of the asset to rise
- 4 Interest rate collars protect both the lender and the borrower

15 A put option is

- 1 the right to buy an asset at a specified price on a specified date
- 2 the right to buy an asset at a specified price on an unspecified date
- 3 the right to sell an asset at a specified price on a specified date
- 4 the right to sell an asset at a specified price on an unspecified date

16 Which 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 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

18 Which of the following is an infrastructural factor contributing to the successful implementation of an ERM framework?

- 1 Environment
- 2 Strategy
- 3 Risk appetite
- 4 Policies and procedures

- 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 lose the premium of R0.50
- 2 walk away from the option and buy the commodity at a lower price on the market
- 3 exercise the option and make a profit of R1.50
- 4 exercise the option and make a profit of R2.50

- 20 Alternative risk transfer (ART) techniques

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

Choose the **correct** combination

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

- 21 Indicate the **incorrect** statement

- 1 Swaps are used to hedge or modify an existing asset or liability
- 2 A rate cap protects the borrower
- 3 An investor of funds seeking protection from falling rates will sell a forward rate agreement (FRA)
- 4 An investor of funds seeking protection from rising rates will sell a forward rate agreement (FRA)

- 22 Stock taking for risk control purposes is an example of a measure

- 1 physical
- 2 procedural
- 3 education/training
- 4 legal

- 23 Monitoring processes are generally applied to accomplish the following

- a determine changes in an enterprise's risk profile
- b identify emerging risks
- c evaluate risk management performance
- d evaluate the adequacy of specific measures, policies and procedures

[TURN OVER]

Choose the **correct** combination

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

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

25 _____ is a technique that specifically incorporates the riskiness of 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 Which of the following tasks are important in establishing a basis from which to launch an ERM strategy?

- a Evaluating the adequacy of specific measures, policies and procedures
- b Targeting risks and processes
- c Evaluating risk management performance
- d The development of a common language and framework

Choose the **correct** combination

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

27 Capital allocation for operational risk is usually based on

- 1 expected losses
- 2 unexpected losses
- 3 predetermined losses
- 4 loss history

[TURN OVER]

- 28 An underlying factor for operational risk is
- 1 system risk
 - 2 interest rate increases
 - 3 political risk
 - 4 customer default
- 29 Inherent risk is regarded as
- 1 risk exposures before taking into account any control measures
 - 2 risk exposures after considering control measures
 - 3 risk exposures related to the reputation of an organisation
 - 4 a control measure
- 30 Risk-averse is an attitude towards risk that
- 1 requires acceptance of a decrease in return for an increase in risk
 - 2 requires an increase in return for an increase in risk
 - 3 requires no changes in risk/reward in return for an increase in risk
 - 4 requires a reduction in risk with 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 **excludes** the following
- 1 increased awareness of and transparency of risk exposures
 - 2 provision of qualitative and quantitative risk information
 - 3 generating risk information for decision making
 - 4 allocating roles and responsibilities for risk managers
- 33 The following is regarded as a characteristic of a Key Risk Indicator (KRI)
- 1 It must be quantifiable
 - 2 It must be qualitative
 - 3 It must be linked to a loss
 - 4 It refers to future risk exposures
- 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 **cannot** be classified as a driver of operational risk?
- 1 Management drivers
 - 2 Internal drivers
 - 3 External drivers
 - 4 Staff drivers
- 37 Which of the following is **not** a component of a risk management framework?
- 1 Risk management process
 - 2 Risk culture
 - 3 Risk strategy
 - 4 Risk architecture
- 38 A major flood which will destroy a company is regarded as a
- 1 high frequency/low impact risk event
 - 2 high frequency/high impact risk event
 - 3 low frequency/high impact risk event
 - 4 low frequency/low impact risk event
- 39 Optimal risk financing is where
- 1 expected reward is lower than the cost of risk mitigation
 - 2 expected reward is equal to the cost of risk mitigation
 - 3 expected reward is higher than the cost of risk mitigation
 - 4 none of the above
- 40 Monitoring of operational risk management aims to
- 1 ensure the effectiveness of each of the components of the operational risk management process
 - 2 ensure that risk managers are performing according to their job descriptions
 - 3 ensure that line managers accept their responsibilities in respect of risk management
 - 4 ensure that the board of directors approve the organisation's risk appetite

[40 X 1 = 40 marks]

[TURN OVER]

SECTION B: PARAGRAPH QUESTIONS AND CALCULATIONS**Question 1**

1 1 Discuss the two basic properties of probabilities (4 marks)

1 2 Distinguish between **fundamental** and **particular risks**. Give examples of each and motivate why it is necessary to distinguish between these two types of risk (6 marks)

(10 marks)

[TURN OVER]

Question 2

- 2 1 Discuss the components of a typical risk management process, and illustrate the integration of the components by means of a diagram

Diagram

(6 marks)

Components

(4 marks)

(10 marks)

[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.**