MNK203R   (489183)   October/November 2010

ENTERPRISE RISK MANAGEMENT (BUSINESS MANAGEMENT (RISK) 202)

Duration   2 Hours   70 Marks

EXAMINERS
FIRST   MRS AT MUTEZO   MS CJ DE SWARDT
SECOND   MR C NYOKA

Use of a non-programmable pocket calculator is permissible

This paper consists of 17 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 489183 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 15.

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Please note:

1   This is a partial fill-in examination paper and there is no need for any examination scripts. Students must hand over the examination paper and mark-reading sheet 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 16 and 17). No rough work will be marked

[BLAAI OM]

SECTION A: MULTIPLE-CHOICE QUESTIONS

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

1   If we do not define risk when we speak about it, people will

1   understand what risk is and what it involves
2   not have any understanding of risk whatsoever
3   tend to avoid talking about risk
4   have different perceptions of risk

2   Indicate the **correct** statement

1   The area under a curve of a continuous process is equal to 10%
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 and associated probabilities are known, a continuous probability distribution can be developed

3   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   a measure of dispersion useful in comparing the risk of probability distributions with different expected returns

4   If a person requires greater return when risk increases, that person is said to be

1   risk-seeking
2   risk-indifferent
3   risk-averse
4   risk-aware

5   Interest rate volatility is an example of a   risk to financial institutions

1   systematic core business
2   operational
3   incidental business
4   downside

6   Indicate the **incorrect** statement

   1   Operational risk is the exposure of an enterprise to losses resulting from
       external failures or shortcomings of people, processes and system
   2   An example of people risk is fraud and theft
   3   Poor data integrity is an example of systems risk
   4   Process risk is the risk of a business process being inadequate and causing
       unexpected losses

7   Corporate governance is defined in its broadest sense as

   1   an informal system of accountability of the board of directors to shareholders
   2   an informal and formal relationship between the corporate sector and its
       stakeholders
   3   a formal system of accountability of the board of directors to stakeholders
   4   a formal system of accountability of the board of directors to shareholders

8   Which of the following aspects is **not** governed in terms of the Companies Act 61 of
    1973?

   1   Allocation of share capital to directors
   2   Shareholding of directors
   3   Liability of directors in case a company acts unlawfully or in bad faith
   4   Responsibility of company towards stakeholders

9   risk management approach effectively integrates the efforts of operating managers
    with activities of risk managers

   1   Traditional
   2   Business
   3   Enterprise
   4   Operational

10 The emergence of new risk management tools and processes includes increasingly
    effective

   a   processes for risk identification
   b   measurement tools
   c   information tools
   d   scenario analysis and planning

    Choose the **correct** combination

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

[TURN OVER]

11 Alternative risk transfer techniques (ART)

    1   developed from a need for a less sophisticated approach to risk financing
    2   do not apply to large catastrophic risks
    3   involve the transfer of risk to capital markets
    4   exclude derivative instruments

12 The following factors contribute to the successful implementation of Enterprise risk management (ERM)

    a   Treating ERM as a stand-alone process
    b   Strong and visible support from senior managers
    c   Proceeding incrementally and leveraging early wins
    d   Learning from experience

Choose the **correct** combination

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

13 In assessing risk it is important to consider

    a   the top risks faced by the enterprise
    b   the risks attached to intangible 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
    2   b,c,d
    3   a,c,d
    4   a,b,c,d

14 According to the Process Champion oversight structure

    1   the Chief Risk Officer (CRO) works in a consultative capacity
    2   the CRO personally manages particular risks
    3   the CRO oversees management of market- and credit risks only
    4   certain identified functional groups report directly to the Chief Risk Officer

15 External downside risks include amongst others

    1   process risks
    2   labour action risks
    3   interest rate changes
    4   changes in consumer demands

[TURN OVER]

16 ... is characterised by identified outcomes and unknown probabilities

    1   Certainty
    2   Objective uncertainty
    3   Subjective uncertainty
    4   Uncertainty

17 Probability distributions

    a   can be developed for risky events by using simulations
    b   involve underlying concepts such as central tendency and variation
    c   can be depicted as bar charts
    d   is a model that relates probabilities to the associated outcomes

Choose the **correct** combination

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

18 A properly designed risk framework for formulating a common language for an enterprise serves the following purposes

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

Choose the **correct** combination

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

19 Core business risk of a retail organisation include

    a   resource risks
    b   sales variability
    c   interest rate risks
    d   operational risks

Choose the **correct** combination

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

[TURN OVER]

20 A security guard on duty falls asleep during his shift During this time period the business is robbed of R100 000

In the light of the aforementioned, indicate the **correct** statement

1   The robbery is regarded as a peril
2   The sleeping security guard is regarded as a peril
3   The sleeping security guard is regarded as the risk
4   The robbery is regarded as the hazard

21 Which of the following methods can be used to determine the frequency of possible losses?

a   "Pareto" rule
b   Accumulation
c   "As if" analysis
d   Incident reporting

Choose the **correct** combination

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

22 Frequent losses of low priced stationery items can ideally be funded through

1   insurance
2   reserve funds
3   cash flow
4   captives

23 Where there is little information available on a risk exposure the following measure can be used to evaluate the frequency of potential losses

1   Maximum possible loss
2   National trends
3   "As-if" analysis
4   "Pareto" rule

24 By studying organisational charts, the risk manager will be able to assess

a   the extent to which control is centralised or decentralised
b   the interdependencies of different processes in the organisation
c   key personnel
d   bottlenecks in the production process

[TURN OVER]

Choose the **correct** combination

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

25   Indicate the **correct** statement

1   Insured gross profit in terms of business interruption refers to net profit plus standing charges
2   Rent is normally not covered under business interruption events
3   Increased costs to regain sales after a loss event are not covered in terms of business interruption insurance
4   Leasing charges are classified as variable costs in terms of business interruption events

26   Indicate the **correct** statement

1   A consumer of a commodity can hedge against a rise in the price of the commodity by buying a put option on the commodity
2   A call option is an option to sell an asset at a specific price at a specific date
3   American options can be exercised on their expiry date only
4   In the case of a put option, the premium aid must be deducted from the amount received for the asset in order to determine the profit position of the holder of the option

27   A person buys an option for R50,00 to sell an asset for R10,000 Four months after the option was written the market price of the asset increased to R11,000

With regard to the aforementioned scenario, the investor will

1   exercise the option and make a profit of R1 000,00
2   exercise the option and make a profit of R950,00
3   exercise the option and therefore do not have to pay the premium
4   benefit by not exercising the option

USE THE FOLLOWING INFORMATION TO ANSWER QUESTIONS 28 TO 30

An organisation uses short-term finance by issuing bankers' acceptances The treasurer expects short-term interest rates to rise and wants to hedge the next BA-rollover by buying a FRA at 15,85% Assume the following applies

Nominal amount	R1 000 000
Rollover date	15 August
Settlement date	15 April
Spot rate on 15 August	18,5%
FRA spot (bid/offer)	15,0/15,5%
Number of days in the year	365

[TURN OVER]

28. The cost of the issuing of the banker's acceptances will be

1   R60 821,92
2   R38 219,18
3   R50 958,91
4   R45 616,44

29   In order to lock in a discount rate of 15,5%

1   the company will have to receive an amount of R7 397,26 from the other party to the transaction
2   the company will have to pay over an amount of R7 397,26 to the other party of the transaction
3   the business will have to receive an amount of R9 863,01 from the other party to the transaction
4   the company will have to pay over an amount of R9 863,01 to the other party of the transaction

30   The cost of the roll-over to the company (holder of the FRA) amounts to

1   R45 616,44
2   R50 958,91
3   R41 095,90
4   R53 013,70

31   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

32   Speculative risk control strategies rely inter alia on proactive functional management strategies focussing on

a   marketing
b   hedging
c   procurement
d   finance

[TURN OVER]

Choose the **correct** combination

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

33 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

34 Forward contracts

1   are highly liquid instruments
2   are over- the- counter instruments
3   carry lower credit risk
4   are traded on a formal exchange

35 Indicate the **correct** statement

1   Interest rate collars specify both a rate cap and rate floor around a contracted loan rate
2   An investor of funds seeking protection from falling interest rates will typically buy a Forward Rate Agreement (FRA)
3   Interest rate caps protect both the lender and borrower against interest rate fluctuations.
4   An investor of funds seeking protection from rising interest rates will typically sell a FRA

36 Reporting on the risk profile, business performance and risk implications usually forms part of the   risk report

1   daily
2   monthly
3   quarterly
4   annual

[TURN OVER]

37 Value-at-risk limits

1 aim at containing the sensitivity of positions to changes in specific factors at portfolio, business unit or any other organisational level
2 are usually set in the context of acceptable cumulative losses within a defined period in relation to some specified level of capital
3 determine the total possible value exposed to risk, given a certain confidence level
4 are used to monitor portfolio risk levels under extreme market conditions

38 Risk monitoring processes are generally applied to

a determine changes in the risk profile of an organisation
b identify emerging risks
c evaluate risk management performance
d measure the adequacy of risk control measures

Choose the **correct** combination

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

39 The following performance standards are generally applied by organisations to measure risk management performance

a budgets
b schedules
c hurdle rates
d "At risk" frameworks

Choose the **correct** combination

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

40 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

[40 X 1 = 40 marks]

[TURN OVER]

SECTION B: PARAGRAPH QUESTIONS AND CALCULATIONS

Question 1 (10 marks)

Champion Breweries must choose between two asset purchases The annual rate of return and related probabilities given below summarise the firm's analysis

Asset A		Asset B	
Rate of return %	Probability %	Rate of return%	Probability %
10	30	5	40
15	40	15	20
20	30	25	40

1.1   For each asset, calculate the following:

NOTE: PLEASE SHOW ALL CALCULATIONS

1.1.1 expected rate of return

4

1 1.2 standard deviation of the expected return

2

1 1 3 the **coefficient of variation** of the return   2

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1 2   Recommend which asset Champion should select? Give reasons for your
       choice   2

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Question 2 (10 marks)

2 1   Distinguish between the **different bases** that can be used to indicate the real value of
an asset during the risk evaluation process   4

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2 2   Identify the **four main types of risks** as classified in terms of frequency and severity
Briefly explain how the various types of risks dictate the **risk control approach** taken
by an organisation   6

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Question 3 (10 marks)

Identify and briefly explain **five principles** for enterprise risk management formulated by the Institute of Risk Management South Africa (IRMSA) in the light of the recommendations of the King II report

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

[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.

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EXAMINATION MARK READING SHEET

EKSAMEN-MERKLEESBLAD

PART 1 (GENERAL/ALGEMEEN) DEEL 1

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

❶ -

PAPER NUMBER
VRAESTELNOMMER ❷

INITIALS AND SURNAME ❸
VOORLETTERS EN VAN

DATE OF EXAMINATION ❹
DATUM VAN EKSAMEN

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

STUDENT NUMBER
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7 CHECK THAT ONLY ONE ANSWER PER QUESTION HAS BEEN MARKED
8 DO NOT FOLD

BELANGRIK

1 GEBRUIK SLEGS N HB-POTLOOD OM HIERDIE BLAD TE VOLTOOI
2 MERK AS VOLG ▬
3 KONTROLEER DAT U VOORLETTERS EN VAN REG INGEVUL IS
4 VUL U STUDENTENOMMER VAN LINKS NA REGS IN
5 KONTROLEER DAT U DIE KORREKTE STUDENTENOMMER VERSTREK HET
6 KONTROLEER DAT DIE UNIEKE NOMMER REG INGEVUL IS
7 MAAK SEKER DAT NET EEN ALTERNATIEF PER VRAAG GEMERK IS
8 MOENIE VOU NIE

PART 2 (ANSWERS/ANTWOORDE) DEEL 2

1	c1o c2o c3o c4o c5o	36	c1o c2o c3o c4o c5o	71	c1o c2o c3o c4o c5o	106	c1o c2o c3o c4o c5o
2	c1o c2o c3o c4o c5o	37	c1o c2o c3o c4o c5o	72	c1o c2o c3o c4o c5o	107	c1o c2o c3o c4o c5o
3	c1o c2o c3o c4o c5o	38	c1o c2o c3o c4o c5o	73	c1o c2o c3o c4o c5o	108	c1o c2o c3o c4o c5o
4	c1o c2o c3o c4o c5o	39	c1o c2o c3o c4o c5o	74	c1o c2o c3o c4o c5o	109	c1o c2o c3o c4o c5o
5	c1o c2o c3o c4o c5o	40	c1o c2o c3o c4o c5o	75	c1o c2o c3o c4o c5o	110	c1o c2o c3o c4o c5o
6	c1o c2o c3o c4o c5o	41	c1o c2o c3o c4o c5o	76	c1o c2o c3o c4o c5o	111	c1o c2o c3o c4o c5o
7	c1o c2o c3o c4o c5o	42	c1o c2o c3o c4o c5o	77	c1o c2o c3o c4o c5o	112	c1o c2o c3o c4o c5o
8	c1o c2o c3o c4o c5o	43	c1o c2o c3o c4o c5o	78	c1o c2o c3o c4o c5o	113	c1o c2o c3o c4o c5o
9	c1o c2o c3o c4o c5o	44	c1o c2o c3o c4o c5o	79	c1o c2o c3o c4o c5o	114	c1o c2o c3o c4o c5o
10	c1o c2o c3o c4o c5o	45	c1o c2o c3o c4o c5o	80	c1o c2o c3o c4o c5o	115	c1o c2o c3o c4o c5o
11	c1o c2o c3o c4o c5o	46	c1o c2o c3o c4o c5o	81	c1o c2o c3o c4o c5o	116	c1o c2o c3o c4o c5o
12	c1o c2o c3o c4o c5o	47	c1o c2o c3o c4o c5o	82	c1o c2o c3o c4o c5o	117	c1o c2o c3o c4o c5o
13	c1o c2o c3o c4o c5o	48	c1o c2o c3o c4o c5o	83	c1o c2o c3o c4o c5o		c1o c2o c3o c4o c5o
14	c1o c2o c3o c4o c5o	49	c1o c2o c3o c4o c5o	84	c1o c2o c3o c4o c5o		c1o c2o c3o c4o c5o
15	c1o c2o c3o c4o c5o	50	c1o c2o c3o c4o c5o	85	c1o c2o c3o c4o c5o		c1o c2o c3o c4o c5o
16	c1o c2o c3o c4o c5o	51	c1o c2o c3o c4o c5o		c2o c4o c5o	121	c1o c2o c3o c4o c5o
17	c1o c2o c3o c4o c5o	52	c1o c2o c3o c4o c5o		c2o c3o c4o c5o	122	c1o c2o c3o c4o c5o
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19	c1o c2o c3o c4o c5o	54	c1o c2o c3o c4o c5o	89	c1o c2o c3o c4o c5o	124	c1o c2o c3o c4o c5o
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21	c1o c2o c3o c4o c5o	56	c1o c2o c3o c4o c5o	91	c1o c2o c3o c4o c5o	126	c1o c2o c3o c4o c5o
22	c1o c2o c3o	57	c1o c2o c3o c4o c5o	92	c1o c2o c3o c4o c5o	127	c1o c2o c3o c4o c5o
23	c1o c2o c3o c4o	58	c1o c2o c3o c4o c5o	93	c1o c2o c3o c4o c5o	128	c1o c2o c3o c4o c5o
24	c1o c2o c3o c4o c5o	59	c1o c2o c3o c4o c5o	94	c1o c2o c3o c4o c5o	129	c1o c2o c3o c4o c5o
25	c1o c2o c3o c4o c5o	60	c1o c2o c3o c4o c5o	95	c1o c2o c3o c4o c5o	130	c1o c2o c3o c4o c5o
26	c1o c2o c3o c4o c5o	61	c1o c2o c3o c4o c5o	96	c1o c2o c3o c4o c5o	131	c1o c2o c3o c4o c5o
27	c1o c2o c3o c4o c5o	62	c1o c2o c3o c4o c5o	97	c1o c2o c3o c4o c5o	132	c1o c2o c3o c4o c5o
28	c1o c2o c3o c4o c5o	63	c1o c2o c3o c4o c5o	98	c1o c2o c3o c4o c5o	133	c1o c2o c3o c4o c5o
29	c1o c2o c3o c4o c5o	64	c1o c2o c3o c4o c5o	99	c1o c2o c3o c4o c5o	134	c1o c2o c3o c4o c5o
30	c1o c2o c3o c4o c5o	65	c1o c2o c3o c4o c5o	100	c1o c2o c3o c4o c5o	135	c1o c2o c3o c4o c5o
31	c1o c2o c3o c4o c5o	66	c1o c2o c3o c4o c5o	101	c1o c2o c3o c4o c5o	136	c1o c2o c3o c4o c5o
32	c1o c2o c3o c4o c5o	67	c1o c2o c3o c4o c5o	102	c1o c2o c3o c4o c5o	137	c1o c2o c3o c4o c5o
33	c1o c2o c3o c4o c5o	68	c1o c2o c3o c4o c5o	103	c1o c2o c3o c4o c5o	138	c1o c2o c3o c4o c5o
34	c1o c2o c3o c4o c5o	69	c1o c2o c3o c4o c5o	104	c1o c2o c3o c4o c5o	139	c1o c2o c3o c4o c5o
35	c1o c2o c3o c4o c5o	70	c1o c2o c3o c4o c5o	105	c1o c2o c3o c4o c5o	140	c1o c2o c3o c4o c5o

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Specimen only