UNIVERSITY OF JOHANNESBURG

Department of Commercial Accounting

RISK IN FINANCIAL SERVICES 2B

RFS22B2

Final Assessment Opportunity

November Examination 2017

Time: 2 hours **Marks: 70**

Assessor: Oliver Takawira **Moderator**: Mrs M. Lepheana (Internal)

INSTRUCTIONS:

- This paper consists of 7 pages (including the cover page).
- Start each question on a new page.
- Calculators are allowed

Question	Topic	Marks	Time
1	Multiple choice	30	40 minutes
2	Investment Risk	10	18 minutes
3	Liquidity Risk	10	18 minutes
4	Corporate Governance	8	16 Minutes
5	Model Risk	6	14 Minutes
6	Enterprise Risk Management	6	14 Minutes
		70	**120 minutes**

QUESTION 1 - (30 marks)

1.1 Which of the following distributions is commonly used in financial services?
A. Lognormal
B. Exponential
C. Logarithmic
D. Exponential logarithmic

1.2 Which of the following factors could affect the riskiness of investment in shares?
A. The investor's credit rating
B. Quantification of the investor's operational risk scenarios
C. Platform stability
D. Strategic risk of the issuing institution

1.3 If a fund's beta value increased from 0.55 to 0.85, what does this indicate?
A. Competitiveness has improved
B. Volatility has increased
C. Charges have been increased
D. Performance has moved more in line with the market

1.4 The ratio of the bid/offer spread to an asset`s mid-price can be used to compare different assets. What does it mean if asset A has a higher ratio than asset B?
A. A is more liquid than B
B. B is more liquid than A
C. A is more volatile than B
D. B is more volatile than A

1.5 One of the key weaknesses of using standard deviation as a measure of investment risk is that:
A. it ignores dividend reinvestment
B. it ignores short-term volatility
C. it assumes past experiences will tend to continue
D. it assumes a lack of any form of competitor activity

1.6 If the nominal return under an investment is 11% and inflation is running at 2.5%, then 8.5% is normally described as the investment`s:
A. gross yield
B. net yield
C. real return
D. invisible return

1.7 Which of the following is an attribute of a normal distribution curve?
A. It is symmetrical about its standard deviation
B. It is plotted about its median
C. Its average value is always greater than its standard deviation
D. It is defined by its standard deviation and it's mean

1.8 How does good succession planning help to maintain effective risk governance?

A. It prevents reward for failure
B. It encourages staff authority
C. It offsets the impact of change
D. It ensures the delegation of responsibility

1.9 Enterprise risk is BEST defined as the:

A. aggregation of all the risks faced by a firm
B. appreciation of the credit risk associated with a firm acquiring new business
C. impact of a firm`s risk profile on its available risk capital
D. process of applying the discipline of risk management to a firm`s operations

1.10 Which of the following statistical methods is used when conducting operational risk scenario modelling?

A. Credit migration probabilities
B. Normal distribution
C. Lognormal distribution
D. Confidence level

1.11 Which of the following business functions, participating in an enterprise risk management programme, would be MOST likely to introduce initiatives to directly address the risks from external threats and opportunities?

A. Finance department
B. Market risk department
C. Operational risk team
D. Strategy team

1.12 In relation to VaR, what is the main purpose of back testing?

A. To prove the reliability of historical data
B. To compare predicted values to actual results
C. To establish the liquidity risk
D. To confirm the relevance of the sample trading period

1.13 The risk of loss through being unable to obtain a price on a product when required is which ONE of the following types of market risk?

A. Commodity risk
B. Basis risk
C. Liquidity risk
D. Volatility risk

1.14 Where the individual assets within a fund are negatively correlated, this should normally:

A. increase the degree of investment risk
B. reduce the degree of investment risk
C. increase the degree of liquidity risk
D. reduce the degree of liquidity risk

1.15 Which of the following processes would be considered to provide a firm-wide risk management approach?
A. Operational risk policy
B. Enterprise risk management
C. Value-at-risk models
D. Cost-based provisioning

1.16 The volatility of an investment's value can be quantified mathematically by calculating the investment's:
A. Variance
B. Inter-quartile range
C. Beta
D. Standard deviation

1.17 The risk of loss through being unable to obtain a price on a product when required is which ONE of the following types of market risk?
A. Commodity risk
B. Basis risk
C. Liquidity risk
D. Volatility risk

1.18 Where an asset has a negative beta, the asset can be expected to:
A. have no price correlation with the market
B. offer a risk-free return
C. increase in value as the market falls
D. always fall below benchmark values

1.19 Where the individual assets within a fund are negatively correlated, this should normally:
A. increase the degree of investment risk
B. reduce the degree of investment risk
C. increase the degree of liquidity risk
D. reduce the degree of liquidity risk

1.20 Which of the following factors is MOST likely to cause a bank`s liquidity limits to regularly change during the course of each day?
A. The bank started operations nine months ago
B. The bank operates on a global basis
C. The bank has a relatively short maturity ladder
D. The bank has identified significant market depth

1.21 Which of the following processes would be considered to provide a firm-wide risk management approach?
A. Operational risk policy
B. Enterprise risk management
C. Value-at-risk models
D. Cost-based provisioning

1.22 A bank has a number of risk sub-committees which report into a crucially important central risk committee. In accordance with best practice, each member of this central risk committee:
A. should be insured on a keyperson basis
B. must be the subject of a succession plan
C. should be a member of the board of directors
D. must be professionally qualified in a relevant subject

1.23 Why do boards of directors generally delegate the management and responsibility for maintenance and execution of the firm`s risk management framework to senior management?
A. Because senior management are responsible for ensuring that the level of model risk is within the firm`s model risk appetite
B. Because many boards fail to understand it is their duty to oversee risk model development and implementation
C. Because senior management is best placed to establish risk controls, evaluate results and take prompt remedial action where necessary
D. Because it is the role of senior management to set the tone for the whole organization in relation to the importance of model risk and it's active management

1.24 Industry best practice benchmarking is being carried out in order to assess the main internal drivers of a bank`s business risks. Who is MOST likely to be carrying out this analysis?
A. The participants of a risk assessment workshop
B. Members of the board
C. External consultants
D. A SWOT team from the bank`s compliance department

1.25 As a result of a risk assessment visit to a firm by the regulator, shortcomings were identified. In order to address this problem, the regulator will typically require:
A. implementation of a mitigation programme
B. an increase in the firm`s regulatory fees
C. temporary suspension of business until the shortfalls are eliminated
D. daily reports which track the current status of this issue

1.26 What is the main reason for a bank`s risk management staff to be involved in product development projects from a very early stage?
A. To keep the terms as competitive as possible
B. To enable mitigation measures to be identified
C. To prevent a breach of the compliance rules
D. To help co-ordinate the interests of all relevant stakeholders

1.27 An effective market risk management function will ensure that the VaR measurement process is:
A. Monitored by the company secretary
B. Monitored externally rather than internally
C. Carried out by the compliance department
D. Carried out in conjunction with other methods

1.28 A firm borrows £10 million of stock to take a short position. The lender requires collateral equal to the value of the lent stock. If the `haircut` is 5% and the stock`s standard deviation of annual returns over 5 years is 4%, then how much stock value must be lodged?

A. £10.40m
B. £10.50m
C. £10.90m
D. £10.92m

1.29 Fund A has a return of 6%. This value represents a difference from the mean of 2%. What is the mean return for this fund?

A. 2%
B. 4%
C. 8%
D. 16%

1.30 Which of the following describes the Monte Carlo Simulation approach to Value-at-Risk?

A. It involves assuming that the distribution of possible returns can be plotted, based on a small number of factors and the confidence level can be `read off` the graph
B. It involves looking back at what actually happened in the past and basing the view of the future on that analysis
C. It involves generating a random set of results based on the actual underlying risk factors and `reading off` the graph
D. It involves subjecting a portfolio to `extreme` market event scenarios, in order to bring out particular risks not previously captured

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QUESTION 2 - (10 marks)

2.1 Which portfolio risk can be diversified away, systematic or non-systematic? (1)

2.2 What is the meaning of holding period return? (1)

2.3 Clearly distinguish between optimisation and diversification. (2)

2.4 Explain the four factors associated with property risk in property investment. (4)

2.5 Calculate the real rate of return given that the nominal rate of return is 9% per annum and the annual rate of inflation is 5% per annum. (2)

QUESTION 3 - (10 marks)

3.1 What is the definition of liquidity risk? (1)

3.2 What term is used to describe a period during which markets will not clear at any price? (1)

3.3 Clearly distinguish between asset liquidity risk and funding liquidity risk. (2)

3.4 How does the bid-offer spread work in measuring liquidity risk? (2)

3.5 Discuss and elaborate the process of liquidity gap analysis. (4)

QUESTION 4 - (8 marks)

4.1 What does compliance primarily focuses on? (1)

4.2 Give two typical duties of the board of directors. (2)

4.3 Give three examples of tasks for which the risk committee would be responsible. (3)

4.4 Explain by giving an example on your understanding of Moral Hazard in corporate governance. (2)

QUESTION 5 - (6 marks)

5.1 What distribution is commonly used to model operational risk impacts? (1)

5.2 Models, by their very nature, have specific limitations which must be respected when applying the model's outputs. Highlight these three (3) common limiting assumptions. (3)

5.3 Model risk emanates from operational risk and occurs primarily for two reasons; highlight the two (2) reasons? (2)

QUESTION 6 - (7 marks)

6.1 Which area of industry regulation is driving firms towards ERM? (1)

6.2 List two aspects of Data aggregation challenges. (2)

6.3 Describe three goals of an ERM programme. (3)
