# UNIVERSITY OF SWAZILAND <br> <br> DEPARTMENT OF ACCOUNTING <br> <br> DEPARTMENT OF ACCOUNTING <br> <br> MAIN EXAMINATION PAPER 2015 

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| COURSE TITLE | $:$ | FINANCIAL INSTITUTIONS AND MARKETS |
| :--- | :--- | :--- |
| COURSE CODE | $:$ | AC 310/IDE AC 310 |
| DEGREE/DIPLOMA | $:$ | DEGREE |
| TIME ALLOWED | $:$ | THREE (3) HOURS |
| INSTRUCTIONS | $:$ | $1 . \quad$TOTAL NUMBER OF QUESTIONS ON <br> THE PAPER: FOUR (4) |

2. ATTEMPT ALL FOUR (4) QUESTIONS
3. THE MARKS AWARDED FOR A QUESTION ARE INDICATED AT THE END OF EACH QUESTION
4. WHERE APPLICABLE, ALL WORKINGS ARE TO BE SHOWN
5. CALCULATIONS ARE TO BE MADE TO TWO DECIMAL PLACES OF ACCURACY, UNLESS OTHERWISE INSTRUCTED.

SPECIAL REQUIREMENTS : PV TABLES

NOTE : YOU ARE REMINDED THAT IN ASSESSING YOUR WORK, ACCOUNT WILL BE TAKEN OF THE ACCURACY OF LANGUAGE, THE GENERAL QUALITY OF EPRESSION, TOGETHER WITH THE LAYOUT AND PRESENTATION OF YOUR FINAL ANSWER.

THIS QUESTION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

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## QUESTION 1

a) Melusi Ltd is a company domiciled and operating in the UK and has recently been successful in tendering for a contract in the USA. The tender price is US $\$ 1,000,000$ and the contract stipulates that payment in US Dollars is to be received by Melusi Ltd three months after the date of delivery, on an accepted bill of exchange. Delivery of the goods has just taken place.

The board of directors of Melusi Ltd is considering two problems:
$>$ How to minimize the company's exposure to foreign exchange risk, and
$>$ How to finance the transaction.
The methods currently being considered are:
1 Borrow US $\$ 1,000,000$, and immediately convert to sterling. The loan would be repaid out of the proceeds of the bill of exchange.

2 Negotiate a sterling bank loan, which will be repaid out of the proceeds of the bill of exchange. The exchange risk will be covered by taking out a fixed threemonth forward contract.

3 Negotiate a sterling bank loan. The amount based on the current spot rate will again be repaid out of the proceeds of the bill of exchange. In this case, the US Dollars received will be converted into sterling at the spot rate in three months' time.

Melusi Ltd can borrow US dollars at $1 / 2 \%$ above the US dollar three-month LIBOR rate of $7 \%$ p.a. Interest on US dollar borrowings is to be calculated at today's middle exchange rate. The company can borrow sterling at $91 / 2 \%$ p.a.

An extract from this morning's Financial Times shows:
Pound spot - forward against the pound

|  | Day's spread | Close | One month | \%pa | Three months | \%pa |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US\$ | $1.5955-1.6050$ | $1.5955-1.6060$ | $0.34-0.31 \mathrm{C}$ premium | 2.44 | $0.96-0.91 \mathrm{c}$ premium | 2.34 |

The directors of Melusi Ltd consider that the sterling/dollar spot rate will be in the range $£ 1=$ US $\$ 1.55$ to $£ 1=$ US $\$ 1.65$ in three months' time.

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## Required:

a) Calculate the amounts, net of interest, that would be received under each of the three methods, and advise Melusi Ltd on the best method to adopt.
(15 MARKS)
b) Discuss the functions performed by the Central Bank of Swaziland
(10 MARKS)

TOTAL (25 MARKS)

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## QUESTION 2

a) The Credit worthiness of a publicly traded debt instrument is often judged by investors in terms of the credit rating assigned to it by investment agencies. Discuss the bond rating process, citing the various credit rating agencies used.
(10 MARKS)
b) Assume a E100 000 10\% coupon bond. Calculate the bond prices at the following different market yields and maturities by completing the following table:

| Time to Maturity | Market yields |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 6\% | 8\% | 10\% | 12\% |

5
10
15
25
30
(10 MARKS)
c) Differentiate between zero coupon bond and junk bond
(5 MARKS)

## QUESTION 3

(i) Aggressive Incorporated wishes to make a tender offer for the Passive Company. Passive has 100,000 shares of common stock outstanding and earns E5.50 per share. If it were combined with Aggressive, total economies of E1.5 million could be realized. Presently the market price per share of Passive is E55. Aggressive makes a two-tier tender offer: (1) E65 per share for the first 50,001 shares tendered and (2) E50 per share for the remaining shares.
a) If successful, what will Aggressive end up paying for Passive? How much incrementally will stockholders of Passive receive for the economies?
(4 MARKS)
b) Acting independently, what will each stockholder do to maximize his or her wealth? What might they do if they could respond collectively as a cartel?
(4 MARKS)
c) How can a company increase the probability of individual stockholders resisting too low a tender offer?
(4 MARKS)
d) What might happen if Aggressive offered E65 in the first tier and only E40 in the second tier?
(4 MARKS)
(ii) Explain the difference between NASD and Nasdaq
(4 MARKS)
(iii) What is the Dow Jones industrial average? How does it differ from the S \& P 500 composite index?
(5 MARKS)
TOTAL (25 MARKS)

## QUESTION 4

Write explanatory notes on the following:
a) Hedging and speculating
b) Long position and short position within the context of futures contracts
(5 MARKS)
c) Futures options
(5 MARKS)
d) Explain the factors used in the black-scholes option valuation model. What is the relationship between each factor and the value of the option?
(10 MARKS)
(25 MARKS)

