

# BAN3702

MAY/JUNE 2017

## BANKING: TREASURY MANAGEMENT

STUDENT NUMBER									

IDENTITY NUMBER											

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**BANKING TREASURY MANAGEMENT**

Subject

Number of paper

Date of examination

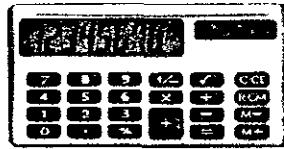
Examination centre

Question No	Marks					
	Examiners					
	1	2	3			
1						
2						
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4						
<b>Total</b>						

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## BAN3702

May/June 2017

### BANKING : TREASURY MANAGEMENT

Duration 2 Hours

70 Marks

**EXAMINERS**  
FIRST  
SECOND  
EXTERNAL

MS R DU RANDT  
PROF J CHISASA  
MISS MD MABALANE

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Use of a non-programmable pocket calculator is permissible

Closed book examination

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- **This paper consists of 7 pages in total.**
- **Answer all four questions on the examination paper.**
- **NO script has been provided.**
- **Show all calculations. The marks awarded per question should give you an indication of the length of your answer**

**Question 1****[20]**

- a) Atlas Bank reports that its assets have a duration of 7 years and its liabilities average 1.75 years in duration. To hedge this duration gap, management plans to employ Treasury bond futures, which are currently quoted at 112-170 and have a duration of 10.36 years. Atlas's latest financial report shows that total assets amount to R100 million and liabilities R88 million. Approximately how many futures contracts will the bank need to cover its overall exposure? (7)


- b) An investor buys a Treasury Bill. The nominal value is R1 million, the current discount rate is 10% and the remaining tenor is 50 days. Determine the initial consideration needed to invest in the bill! (3)


**Turn over**

- c) Pretoria Bank records R6 billion in interest revenues from its loans and R2.6 billion in interest expenses paid out to attract borrowed funds. If Pretoria Bank holds R60 billion in earning assets, what is its net interest margin (NIM)? Suppose the bank's revenues and interest costs double, while its earning assets increase by 10%, what will happen to its NIM? (5)


- d) In 2015, ASA Bank reported that its net income for the year was R51 million, its assets totaled R1 144 million, and its liabilities amounted to R926 million. Calculate its return on equity capital in 2015?

In order to determine whether the ROE you have calculated is good or bad, what information do you need? (5)


**Question 2****[25]**

- a) Explain why there is an inverse relationship between the price of a bond and its yield (9)


- b) Name and describe the various types of bonds issued by the South African government (12)


**Turn over**


c) Discuss what short and long hedges, in financial futures, entail as strategies? (4)


**Question 3** **[15]**

You have to prepare a TB tender on behalf of your bank's treasury department. You are given the following information:

Yield required: 91 day bills 7.5%, 182 day bills 7.8%, 273 day bills 7.9%

Amount to tender respectively: R10 million, R15 million, and R20 million

- a) Calculate the discount rate and tender price for each maturity
- b) Assume that all three of your bank's bids are accepted. Calculate the consideration for each maturity



**Question 4**

**[10]**

- a) Why do managers of financial firms often pay close attention to the net interest margin and noninterest margin? Furthermore, discuss why the earning spread is important to treasurers? (6)


- b) Define securitisation and briefly explain how securitisation led to the sub-prime mortgage crisis in the US in 2007/2008 (4)


**TOTAL MARKS [70]**