

UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF MANAGEMENT AND FINANCE

Bachelor of Business Administration (Level II-Semester VII) Examination - July
2018

FIN-2206 – Fixed Income Securities

Two (02) Hours

Instructions to Candidates

- **Answer all questions**
 - **Use of Calculators is permitted**
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1.

- i. "An investor who purchases a fixed income security is said to be either a Lender/Creditor or an owner".

Do you agree with this statement? Explain.

(05 Marks)

- ii. Why does the participation of retail investors generally low in Bond markets? Explain your answer.

(05 Marks)

- iii. Differentiate between following terms:

- a. Regular call price Vs. Special redemption call price
- b. Call price regardless of the call date Vs. Call price based on a call schedule
- c. Full bond price (dirty price) Vs. Clean bond price
- d. Prefunding provisions Vs. Refunding provisions
- e. Senior securities Vs. Subordinated securities

(15 Marks)

(Total 25 Marks)

2.

i. Identify and explain the following types of bonds based on their coupon structures:

a.

Term- to-Maturity	Coupon Structure
Years 1-3	5.1%
Years 4-9	5.7%
Years 10-20	6.2%

b. Coupon Formula

$$\text{Coupon Rate} = \text{Change in the Colombo Consumer Price Index (CCPI)} + 2.5\%$$

(05 Marks)

ii. A Floater has following coupon formula:

$$6 \text{ months Treasury bill rate} + 50 \text{ basis points with a Cap of } 8\%$$

Coupon rate is reset quarterly and if the relevant 3 months Treasury rate at each reset date is given below, compute the coupon rate for the next three months period.

	6 Months Treasury Rate	Coupon rate
Reset Date (1)	6.5	?
Reset Date (2)	6.8	?
Reset Date (3)	7.3	?
Reset Date (4)	7.8	?
Reset Date (5)	8.3	?

(05 Marks)

iii. Do you agree with the following statements (a) to (c)? Justify your answer.

- a. Callable bonds offer a higher yield relative to otherwise non-callable bonds
- b. Put provision of a puttable bond limits the risk to the bondholder.
- c. "Revenue bonds" and "Income bonds" are more or less similar by their characteristics

(15 Marks)

(Total 25 Marks)

3.

i. Coupon formula for a "Reverse Floater" is given as follows:

$$20 - 2.75 (\text{Three months SLIBOR})$$

If the "floor" and the "cap" for the above floater are 3.5% and 14.5% respectively, find the allowed range for the three months SLIBOR.

(05 Marks)

ii. "Being a hybrid security, a convertible bond gives the bondholder the ability to participate in an equity upside".

Do you agree with the above statement? Justify.

(05Marks)

iii. State whether you agree with the following statements. Explain your reasons.

- a. Put provision of a puttable bond limits the risk to the bond holder
- b. Interest rate risk is inherent to a Callable bond.
- c. Reinvestment risk is greater in amortizing securities

(15 Marks)

(Total 25 Marks)

4.

- i. Explain why a “Cap” is attractive for an issuer whilst a “Floor” is attractive only for an investor, under certain circumstances.

(05 Marks)

- ii. Explain how the accelerated sinking fund provision becomes an embedded option granted to an issuer.

(10 Marks)

- iii. Explain why the price of a callable bond is equal to the price of an option-free bond minus the price of any embedded call option.

(10 Marks)

(Total 25 Marks)
