

# College of Applied Business (CAB)

## Sent-up Examination, February 2015

BBA / Seventh Semester / BFN 201: Financial Institutions and Market - I

*Candidates are required to give their answers in their own words as far as practicable.*

### Section 'A'

**Time: 20 minutes**

Brief answer questions:

[10 × 1=10]

*Indicate whether the following statements are true or false. Support your answer with reasons.*

1. Individual investor can have more benefits if funds are transacted through direct transfer.
2. Information intermediation is concerned with converting small amount of funds to meet larger amount of funds demanded by the ultimate users.
3. The monetary aggregate L is most liquid definition of money.
4. Discount yield and coupon equivalent yield become same if both of them use a year of 360 days.
5. Syndicated lending refers the loans by a bank to groups of borrowers.
6. Bondholders convert convertible bond into common stock only if market price of the common stock is higher than the market value of convertible.
7. NEPSE is based on price weighted index.
8. Realized yield to maturity assumes that coupons are reinvested at the market interest rate.
9. Duration is the measurement of sensitivity of bond's price to change in interest rate.
10. Stop limit order defines the minimum price to sell the shares and maximum price to buy the share.

### Section 'B'

**Time: 30 minutes**

Short answer questions: (Attempt ANY TWO)

[2×5 = 10]

11. On October 5, 2007, you purchases a Rs 10,000 T-note that matures on August 15, 2018 (settlement occurs two days after purchase, you receive actual ownership of the bond on October 7, 2007). The coupon rate on the T-note is 4.375 percent and the current price quoted on the bond is 105:08(or 105:25 % of the face value of the T-note). The last coupon payment occurred on May 15, 2007 (145 days before settlement), and the next coupon payment will be paid on November 15, 2007 (39 days from settlement).
  - a. Calculate the accrued interest due to the seller from the buyer at settlement. [3]
  - b. Calculate the dirty price of the transaction. [2]
12. Suppose you own 1,000 shares of common stock in a firm with 1 million total shares outstanding. The firm announces a plan to sell an additional 500,000 shares through a right offering. The market value of the stock is Rs 40 before the right offering and the new shares are being offered to existing shareholders at a 10 percent discount, or Rs 36 per share.
  - a. If you exercise your preemptive rights, how many of new shares can you purchase? [1]
  - b. What is your total investment in the firm after the rights offerings? [2]
  - c. If you decide not to exercise your preemptive rights, what is your wealth in the firm after the rights offering? How is this split between old shares and rights?[2]

13. Suppose the monetary aggregate of an economy are given as follows.

- i. Currency in circulation of Rs 1072 billion.
- ii. Government Saving Bond OF Rs 7064 billion.
- iii. Non- interest bearing demand deposit of Rs 2056 billion
- iv. Large denomination time deposit of Rs 1600 billion.
- v. Overnight Repurchase agreement of Rs 500 billion.
- vi. Negotiable Order of Withdrawal of Rs 400 billion.
- vii. Commercial paper of Rs.1050 billion.
- viii. Term Eurodollars of Rs.350 billion

**Required:** Prepare Monetary Aggregate or money outstanding from the above information. [5]

14. What do you mean by financial market? Explain the economic functions performed by financial institutions. [2+3]

**Section 'C' Time: 80 minutes**

**Comprehensive answer questions:**

**[2×10 = 20]**

14. a. What is IPO? Describe the functions of investment banks. [2+3]

b. You plan to purchase a Rs 100,000 house using a 30-year mortgage obtained from your credit union. The mortgage rate offered to you is 8.25 percent. You will make a down payment of 20 percent of the purchase price.

- i. Calculate your monthly payment on this mortgage. [1]
- ii. Calculate amount of interest and, separately, principal paid in the 25<sup>th</sup> payment. [1.5]
- iii. Calculate the amount of interest and, separately, principal paid in 225<sup>th</sup> payment. [1.5]
- iv. Calculate the amount of interest paid over the life of its mortgage. [1]

15.

a. What is the duration of bond with face value of Rs. 1000, 10% annual coupon, 5 years to maturity and yield to maturity of 12% per annum? [4]

b. Suppose a bank issued a commercial paper note with Rs 1 million par values and maturing in 60 days has an expected discount return (DR) at maturity of 6 percent. What was its purchase price? What is this note's expected coupon-equivalent (investment return) yield (IR)? [3]

c. Following are the Treasury note and bond quote on November 9, 2004

Rate	Maturity Mo/Yr	Bid	Asked	Chg	Ask Yield
11.250	Feb 15	157:23	157:24	-1	4.25

- i. What is asked price and bid price on the 11.250 percent February 2015 T-bond if the face value of the bond is Rs 10,000? [1.5]
- ii. Verify the asked yield of the note which has its asked price 157:24 and note matures on November 30, 2012. [1.5]