Ref No. :Ex/UG/ECO-62/2019

## BACHELOR OF ARTS EXAMINATION, 2019

(3rd Year, 6th Semester)

## **E**CONOMICS

## FINANCIAL ECONOMICS

Time: Two hours Full Marks: 30

## Answer question **No. 1** and any **two** from the rest

1. Justify whether the following statements are true, false or uncertain (any 5)

5 x 2 = 10

- a) The return on equity is always less than return on assets.
- b) The pay-off from a long call is same as the pay-off for a short put.
- c) If two bonds A and B have identical coupon rates per values and yields and the life of bond A< life of bond B, then market price of A must be greater than that of B.
- d) Profit after tax is obtained after deducting interests and tax from gross profits of a firm.
- e) Suppose a company has paid dividend of \$3 per share. The dividend of this company grows at a steady rate of 8% per year. Then the dividend should increase by \$1.41 over the coming five years.
- f) To arrive at the present value of cash flows, discounting is done at the rate which represents opportunity costs of funds.
- 2. A) The following information on interest rate is there,

Bank A: 15% compounded daily

Bank B: 15.5% compounded quarterly Bank C: 16% compounded annually

Which bank would you choose i) to open a savings account and ii) to borrow a loan?

- B) An Aviation Industry bond has a 10% coupon rate and a \$1000 face value. Interest is paid semi-annually and the bond has 20 years to maturity. If investor's require a 12% yield, what is the bond's value? What is the effective annual yield?
- C) Under what conditions does a stock's market capitalization rate equal its earnings price ratio?
- D) Distinguish between American and European options.

4+2+2+2=10

- 3. A) Is a negative cash flow indicative of a poor performance of a firm?
  - B)What is the relation between i) bond price and interest rate and ii) Net present value and Internal rate of return?
  - C) On July1, 2018 a Japanese company enters into a forward contract to buy \$1 million on January 1, 2019. On September 1, 2018, it enters into a forward contract to sell \$1 million on January 1, 2019. Describe the profit or loss the company will make in yen as a function of the forward exchange rates on July 1, 2018 and September 1, 2018.

    3+4+3 = 10
- 4. A) Co. X has made plans for the next year. It is estimated that the company will employ total assets of Rs 8,00,000; 50% of the assets being financed by borrowed capital at an interest cost of 8% per year. The direct costs for the year are estimated at Rs 4,80,000 and all the other operating expenses are estimated at Rs 80,000. The goods will be sold at 150% of the direct costs. Tax rate is assumed to be 50%. Calculate i) net profit margin, ii) return on assets, iii) assets turnover and iv) return on owner's equity.
  - B) What is meant by mark to market?
  - C) What is the return on deep discount bonds?

6+2+2=10