# Bachelor of Arts Examination, 2018 

( 3rd Year, 5th Semester, Old Syllabus)

## Economics

Financial Economics
Time : Two hours
Full Marks : 30
Answer question number 1 and any two questions from the rest.

## 1. Answer any five of the following questions.

 $5 \times 2$(a) If the debt equity ratio is 2.5 , what will be the value of debt to total assets ratio?
(b)If the present value of an annuity due and an ordinary annuity are equal, the deposits in each period and discount rates are also the same, which of the two will have a higher maturity period?
(c) What will be the effective annual interest rate if the interest rate is $12 \%$ p.a. compounded weekly?
(d) How does the call money market differ from the capital market?
(e) Company A has an average collection period of 30 days and company $B$ has an average collection period 45 days. Which of the two companies have a better debtor's turnover ratio? Briefly explain your answer.
(f)Explain the concept of yield to maturity.
2. a) For the company $X Y Z$ the dividend is going to be high for the next three years but dividend will grow at an unequal rate. For the next three years dividends are going to be Rs. 30, Rs. 60 and Rs. 90 respectively. Starting from the 4th year the dividends are expected to grow at a rate of $5 \%$ p.a. for the next two years. Then the growth rate will slow down to $2 \%$ p.a. and the dividends are expected to grow at that rate forever. What will be the price of the equity company XYZ if the required rate of return is $10 \%$ ?
b) A bond has 8 years remaining to maturity. Its face value is Rs. 1000 , yield to maturity is $10.23 \%$ and current market price is Rs. 880. Calculate the coupon rate on the bond. What will be the coupon rate if the market price is Rs. 1000?
c) Let company XYZ's net profit margin be $\alpha$, total asset turnover ratio be $\beta$ times, debt to total asset ratio be $\gamma_{\lambda}$. What is the Company's return on equity?
3. a) Which financial ratio(s) will you use to judge the performance on following specific aspects of a firm's performance and how will you interpret the ratio:
i. Profitability of the company from its main operation
ii. How accurately the market values the company
iii. Liquidity position of the company
iv. Efficiency in managing accounts receivable
v. Efficiency in managing debt
(b) State whether the following statements are right or wrong \& briefly explain your answer
i. An increase in dividend and interest income improves a firm's operating profit
ii. An increase in investment in mutual funds reduces a company's cash flow from financing
iii. If a company issues new shares, it will always result in increasing the company's share premium reserve
iv. Profit before interest and taxes is always higher than Operating profit.
v. If last year's surplus is positive, funds available for appropriation will be higher than profit after tax.
4. Explain how the repo market functions. How can repo rates be used in controlling money supply?

