

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 86
(For candidates admitted during the academic year 2008 – 2009 & thereafter)

SUBJECT CODE: EC/ME/FN64

B. A. DEGREE EXAMINATION, APRIL 2013
BRANCH IV - ECONOMICS
SIXTH SEMESTER

COURSE : MAJOR ELECTIVE
PAPER : FINANCIAL ECONOMICS
TIME : 3 HOURS. MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS.

(10 x 3 = 30)

1. State the need to assess the financial performance of a firm.
2. What is a certificate of Deposit?
3. What is covariance?
4. State the salient features of repo transactions in India.
5. Explain the features of a forward contract.
6. Rakesh needs to borrow Rs.10,80,000 to buy a flat. A housing finance company charges interest at 12.5%. He can pay Rs.1,80,000 per year towards loan amortization. What should be the maturity period of the loan.
7. A Rs.100 par value bond bearing a coupon rate of 12% will mature after 5 years. What is the value of the bond, if the discount rate is 15% ?
8. Consider two stocks, P and Q

	Expected Return	Standard deviation
Stock P	16%	25%
Stock Q	18%	30%
9. The beta co-efficient of X Ltd. is 1.4. The company has been maintaining 8% rate of growth in dividends and earnings. The last dividend paid was Rs. Per share. Return on government securities is 10% Return on market portfolio is 15%. The current market price of one share is Rs.36. What will be the equilibrium price per share and would you advise purchasing the share.
10. Consider the following data :
S = 60, u = 1.4, d = 0.8
E = 50, r = 0.12, R = 1.12
What is the value of the call option?

SECTION B

ANSWER ANY FIVE QUESTIONS:

(5 x 6 = 30)

11. What is a financial market? Explain its functions.
12. Explain the importance of Commercial Paper in the growth of Indian Market.
13. Explain the single index model proposed by William Sharpe.
14. State the features of a forward contract.
15. Concorde Corporation Ltd. Which has a 50% tax rate and a 10% after tax cost of capital, is evaluating a project which will cost Rs.1,00,000 and will require an increase in the level of inventories and receivables of Rs.50,00 over its life. The project will generate additional sales of Rs.1,00,000 and will require cash expenses of Rs.30,000 in each year of its five year life. It will be depreciated on a straight line basis. What are the Net Present Value and Internal Rate of Return for the project?
16. The following information is available
- | | | |
|----------------------------|---------|---------|
| | Stock A | Stock B |
| Expected return | 16% | 12% |
| Standard deviation | 15% | 8% |
| Coefficient of correlation | 0.60 | |
- a. What is the covariance between stocks A and B
- b. What is the expected return and risk of a portfolio in which A and B have weights of 0.6 and 0.4.
17. The following information is available regarding Excel Ltd. :
- a. It is an all equity company and has no debt.
- b. Expected EBIT = Rs.24 lakhs. EBIT is not expected to increase oversight as it is in no growth situation.
- c. there are no taxes , so $T = 0\%$
- d. It pays out all its income as dividend
- e. The company begins to use debt, it can borrow at the rate $k_d = 8\%$. This borrowing rate is constant and it is independent of the amount of debt used. Any money raised by selling debt would be used to retire common stock, hence assets would remain constant.
- f. The risk of its assets and thus its EBIT , is such that is shareholders require a rate of return $K_e = 12\%$, if no debt is used. Using MM Model without corporate taxes and assuming a debt of Rs.1 crore, you are required to
- a. Determine the firm's total market value
- b. Determine the firm's value of equity
- c. Determine the firm's leverage cost of equity.

SECTION C**ANSWER ANY TWO QUESTIONS :****(2 x 20 = 40)**

18. Discuss the procedure for calculating the value of a call option as per the Black and Scholes model.
19. Why do firms follow a policy of stable dividend.
20. Given below are the financial statements and information of Royal Company:

Balance Sheet as on 31-12-2005

Liabilities		Rs.	Assets		Rs.
Share capital:			Gross fixed assets	4,68,000	
Preference 7%	26,000		Less: Depreciation	1,30,000	3,38,000
Ordinary	1,30,000	1,56,000			
Reserves and surplus		1,04,000	Cash		13,000
Long-term loans		1,82,000	Investments (short-term)		39,000
Creditors		41,600	Debtors		52,000
Other current liabilities		2,600	Inventories		78,000
Provision for taxes		33,800			
		<u>5,20,000</u>			<u>5,20,000</u>

Profit and Loss A/c for the Year Ending 31-12-2005

Particulars	Rs.
Net Sales	3,90,000
Less: Cost of goods sold	3,35,400
Gross profit	54,600
Less: Administration and selling expenses	22,750
Operating profit	31,850
Less: Interest	5,850
Profit before tax	26,000
Less: Tax	10,400
	15,600

Dividends declared and paid as follows:

- (i) On preference shares regular dividend was paid. (ii) On ordinary shares cash dividend of Rs. 1.30 per share was paid. The market price of equity share was Rs. 52 per share during the last week of December.
- Calculate a) Current ratio b) Proprietary ratio c) Debt-equity ratio d) Operating profit ratio e) Net profit ratio f) Return on equity capital g) Earnings per share h) Price-earning ratio.

21. ABC Ltd. has the following capital structure

	(Rs. lakhs)
Ordinary shares: 10 lakh Nos. @ Rs. 10 each	100
Reserves and surplus	40
10% debentures each of face value Rs. 100	60

	200

The company needs Rs.50 lakhs to execute a new project which will raise its operating profit (EBIT) from the current level of Rs.40 lakhs to Rs.55 lakhs. It is considering the following options:

- (i) Issue equity shares at a premium of Rs.15 each for the entire amount.
- (ii) Issue 12% debentures for Rs. 50 lakhs required additionally.
- (iii) Issue equity shares for Rs. 25 lakhs at a premium of Rs.20 per share and issue 12% debentures for the balance amount.

The company's tax rate is 40%. Evaluate the three options and advise the company.
