

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

**SUBJECT CODE: EC/ME/FN64**

**B. A. DEGREE EXAMINATION, APRIL 2011**  
**BRANCH IV - ECONOMICS**  
**SIXTH SEMESTER**

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

**SECTION – A**

**ANSWER ALL QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 50 WORDS**  
**( 10 X 3 = 30 )**

1. What is a treasury bill?
2. State the techniques adopted for adjusting time.
3. State the functions of Stock Market.
4. Explain the importance of Ratio Analysis.
5. State if the following statements are true or False :
  - a. Money market operates as a part of capital market
  - b. Securities are issued in the secondary market segment.
  - c. NSE and BSE are the only stock exchanges in India.
6. What is a Derivative?
7. Given the time value of money as 10%, you are required to find out the present value of future cash inflows that will be received over next four years.
8. Calculate the Gross Profit Ratio from the following information :

Sales	Rs.1,00,000
Sales returns	10,000
Opening stock	20,000
Purchases	60,000
Purchases returns	15,000
Closing stock	5,000

9. The current market price of the shares of X Ltd. is Rs.27.50 . A call option is available at a strike price of Rs.25 and a put option is available at a strike price of Rs.30. Find out the intrinsic value of both the options. If the options are available at a premium of Rs.4 and Rs.3 respectively, find out the time value of option.
10. The stock index is currently 350 and the risk free rate is 8%. Find out the future prices for a 4 months contract if the dividend yield is 4%.

### SECTION – B

**ANSWER ANY FIVE QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 300 WORDS** **( 5 X 6 = 30)**

11. State the characteristics of Derivatives.
12. What do you mean by financial market? What are the types of financial market?
13. What are the different ways in which securities can be offered to investors in India ?
14. Explain the Black and Scholes model of valuation of options.
15. Following information is available in respect of a bond :
- |                     |          |
|---------------------|----------|
| Face value          | Rs.1,000 |
| Coupon rate         | 8%       |
| Time to maturity    | 10 years |
| Market price        | Rs.1,140 |
| Callable in 6 years | Rs.1,100 |
- Find out the YTM and YTC of the bond.
16. Events Ltd. has recently paid a dividend of Rs.3.50 per share. The dividends are growing at 10% p.a. and the equity capitalization rate applicable to the company is 12%. Find out the implicit PE ratio if the EPS of the company is Rs.7.

17. The following data have been extracted from the annual accounts of S Ltd.

Sundry creditors	Rs.1,20,000
Bills payable	20,000
Credit purchases	8,00,000
Purchases returns	70,000

Calculate creditors turnover and Average payment period.

### SECTION – C

**ANSWER ANY TWO QUESTIONS. EACH ANSWER SHOULD NOT EXCEED 1200 WORDS**  
( 2 X 20 = 40 )

18. What is a stock market ? Explain the weakness of Indian stock market.
19. Explain the steps involved in the adoption of Markowitz Model.
20. You are presented with the following information concerning the return on the shares of C Ltd. and on the market portfolio, according to the various conditions of the economy :

Conditions of economy	Probability of condition	Return on C Ltd.	Return on the market
1	0.2	15%	10%
2	0.4	14%	16%
3	0.4	26%	24%

The current risk-free interest rate is 9%

Required to :

- Calculate the coefficient of correlation between the returns on C Ltd. and the market portfolio.
- Calculate the total risk ( standard deviation ) of C Ltd. and discuss why this is not the most appropriate measure of risk to be used in making investment decision.
- Calculate the beta factor for C Ltd. and briefly discuss its significance. Is C Ltd. efficiently priced according to the CAPM .

21. Returns on shares of A Ltd. and P Ltd. for the past two years are as follows :

	Year 1	year 2
A Ltd.	11%	17%
P Ltd.	20%	8%

Calculate the following :

- Expected return of portfolio made up of 50% of A Ltd. and 50% of P Ltd.
- Expected return of portfolio made up of 60% of A Ltd. and 40% of P Ltd.
- Standard deviation of each stock
- Covariance and coefficient of correlation between the two
- Portfolio risk if both are invested in the ratio of 2:1
- Overall portfolio risk if the ratio of investment is 1:1

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