## LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600034

M.A.DEGREE EXAMINATION -ECONOMICS

FOURTH SEMESTER - APRIL 2018
16PEC4MC01- PORTFOLIO THEORY AND INVESTMENT ANALYSIS

Date: 18-04-2018
Dept. No. $\square$ Max. : 100 Marks
Time: 01:00-04:00

## PART A

Answer any FIVE of the following questions:-[ 5x4=20 marks]

1. Differentiate between active strategy and passive strategy.
2. State the objectives of SEBI.
3. A Rs. 100/- par value bond bearing a coupon rate of 12 percent will mature after five years. What is the value of the bond, if the discount rate is 15 percent?
4. Calculate the mean return and risk for stock A of the company ABC Ltd using the following information given below:

| Period | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Return of A (\%) | 15 | 12 | 20 | -10 | 14 | 9 |

5. Brief the Sharpes' Index model by highlighting its assumptions.
6. Using suitable diagram, state the concepts of optimal portfolio and the separation theorem.
7. State the Put-call parity theorem. Support your answer using suitable diagram.

## PART B

Answer any FOUR of the following questions:-[4X10=40 marks]
8. Compare and contrast OTCEI and Exchange traded funds.
9. A) Differentiate between CML and SML using suitable diagrams and equation
(3 marks)
B) The following table gives an analyst's expected return on two stocks for particular returns:

| Market return | Stock A | Stock B |
| :---: | :---: | :---: |
| $6 \%$ | $2 \%$ | $8 \%$ |
| $20 \%$ | $30 \%$ | $16 \%$ |

a. What are the betas of the two stocks?
b. What is the expected return on each stock if the market return is equally likely to be $6 \%$ or $20 \%$ ?
c. If the risk-free rate is $7 \%$ and the market return is equally likely to be $6 \%$ or $20 \%$, what is SML?
d. What are the alphas for the two stocks?
10. Evaluate the performance of Indian Money market.
11. The current dividend on an equity share of Pioneer technology is Rs. 3.00. Pioneer is expected to enjoy an above - normal growth rateof 40 percent for 5 years. There after, the growth rate will fall and stabilize at 12 percent. Equity investors require a return of 15 percent from Pioneer's stock. What is the intrinsic value of the equity share of Pioneer?
12. Critically examine the performance of stock markets in India.
13. Critically evaluate the Arbitrage pricing theory.
14. Examine the Free cash flow model of equity evaluation.

## PART C

Answer anyTWO of the following questions:-
[ 2X20=40 marks]
15. "Market efficiency exists because portfolio managers are doing their job well in a competitive setting". Establish the validity of this statement.
16. Examine in detail the various bond evaluation techniques.
17. A) Explain the idea behind the Black-Scholes Option pricing model by highlighting its assumptions.
B) Calculate the value of a 6-month call option using the following information: Stock price is Rs.70/-, Strike price is Rs.72/-, Risk-free interest rate is 12 percent, and the Standard deviation of the stock price is 30 percent.
(13 marks)
18. Elucidate the various investment alternatives accessible to the investors in a financial market.

