#### FINAL EXAMINATION

December 2014



## Capital Market Analysis & Corporate Laws

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

Working notes should form part of the answer.

Wherever appropriate, suitable assumption(s) should be made and indicated in answer by the candidate.

Please: (i) Answer all bits of a question at one place.

- (ii) Open a new page for answer to a new question.
- (iii) Attempt the required number of questions only.

## Section A (60 Marks)

## (Capital Market Analysis)

Answer Question No. 1 (carrying 20 marks) which is compulsory and answer any two (carrying 20 marks each) from the remaining three questions in this section.

- 1. (a) In each of the cases given below, one out of four is correct. Indicate the correct answer (= 1 mark) and give workings/reasons briefly in support of your answer (= 1 mark): 2×7=14
  - (i) MS. SUKANYA, a prospective investor has collected the following information pertaining to two securities A and B:

Particulars	Security A	Security B
Expected Return %	15	18
Standard deviation of Returns %	18	22
Beta	0.90	1.40

Variance of Returns on the market Index is 225 (%)². The correlation coefficient between the returns on securities A and B is 0.75. The Systematic Risk of a portfolio consisting of these two securities in equal proportions is

- (A) 24.63 (%)<sup>2</sup>
- (B) 125.78 (%)<sup>2</sup>
- (C)  $297.56 (\%)^2$
- (D) None of (A), (B) and (C)
- (ii) A deep discount Bond issued at ₹ 2,500 will be redeemed at ₹ 1,00,000 after 25 years. What will be the Post-tax yield for the investor, if Capital gain is taxed at 20% and indexation benefits of 6% annually is available?
  - (A) 12.90%
  - (B) 14.30%
  - (C) 15.13%
  - (D) Insufficient Information

- (iii) The current market price of an equity share of THOMAS LTD. is ₹ 500. Within a period of 3 months, the maximum and minimum price of it is expected to be ₹ 600 and ₹ 300 respectively. What should be the value of a 3 months call option under "Risk Neutral" method at the strike rate of ₹ 550, if the risk free rate of interest be 8% p.a.? [Given e<sup>-0.02</sup> = 1.0202]
  - (A) ₹23.34
  - (B) ₹34.31
  - (C) ₹43.21
  - (D) None of the above
- (iv) MS. CHAITALI buys 10,000 shares of RUDSON LTD. at ₹ 50 and obtains a complete hedge of shorting 400 Nifties, at ₹ 2,200 each. She closes out her position at the closing price of the next day at which point the share of Rudson Ltd. has dropped 2% and the Nifty future has dropped 1.5%. What is the overall Profit/(Loss) of this set of transactions?
  - (A) Profit ₹ 3,200
  - (B) Profit ₹ 2,200
  - (C) Loss ₹ 3,200
  - (D) Loss ₹ 2,000
- (v) MR. AVISHEK purchased 300 units of a MUTUAL FUND at a price of ₹25 per unit at the beginning of the year. He paid a front-end load of 5%. The expense ratio of the fund is 2%. The growth rate in fund's security is 15% during the year. What is the rate of Return of the fund if security sold at the end of the year?
  - (A) 10.38%
  - (B) 12.38%
  - (C) 14.32%
  - (D) None of (A), (B) and (C)
- (vi) The stock of ANSHIKA LTD. (FV ₹ 10) quotes ₹ 500 on NSE and the 3 months Future price quotes at ₹ 510. The borrowing rate is given as 15% p.a. What would be the theoritical price of 3 months Anshika Ltd. Future if the expected annual dividend yield is 25% p.a. payable before expiry?
  - (A) ₹540.50
  - (B) ₹516.25
  - (C) ₹510.50
  - (D) Insufficient data
- (vii) The Portfolio composition of MR. GOPAL is given below:

(Amount in ₹ lakh)

Equity	120	
Cash/Cash equivalent	40	
Total	160	

The beta of Equity portion of the Portfolio is 0.85 and the Current Nifty futures is at 4261.5. The multiple attached to Nifty future is 100. If Mr. Gopal purchases 23 future contracts, his portfolio Beta will be

- (A) 1.05
- (B) 1.12
- (C) 1.20
- (D) 1.25
- (b) Choose the most appropriate one from the stated options and write it down (only indicate A or B or C or D as you think correct): 1×6=6
  - (i) A place where banks, Fls and NBFCs purvey short, medium and long term loans to corporate and individuals is known as
    - (A) Money Market
    - (B) Capital Market
    - (C) Forex Market
    - (D) Credit Market
  - (ii) A negotiable money market instrument issued in dematerialised form or as a usuance promissory note for funds deposited at a bank or other eligible financial institutions for a specified time period is known as
    - (A) Commercial Paper
    - (B) Certificate of Deposit
    - (C) Treasury Bills
    - (D) Term Money
  - (iii) Which of the following type of order is used to limit the amount of losses or to protect the amount of capital gain useful to both investors and speculators?
    - (A) Limit Order
    - (B) Discretionary Order
    - (C) Stop-loss Order
    - (D) Market Order
  - (iv) A portfolio with two stocks which are perfectly negatively correlated ensures
    - (A) High risk and High returns
    - (B) Low risk and High returns
    - (C) Zero risk without sacrificing returns
    - (D) Zero risk with reduced returns
  - (v) The insurer of an importer of electrical goods receives claims in respect of faulty television. The insurer pays the claim and takeover the insured's right to claim from the manufacturer. To which insurance principle, this example is related
    - (A) Cause proximate
    - (B) Subrogation
    - (C) Indemnity
    - (D) Uberrima Fidae

- (vi) If the director of COMTECH LTD, who has access to inside information is unable to use this information to make Supernormal Profits, it is a sign of
  - (A) Weak form of Efficient Market hypothesis.
  - (B) Semi-strong form of Efficient Market hypothesis.
  - (C) Strong Form of Efficient Market hypothesis.
  - (D) Incompetence of the Director.
- (a) What is a Futures Contract? Explain the important features of futures contract.

1+4=5

(b) MS. KHUSHBOO an analyst of VKC SECURITIES LTD. is evaluating the prospects of investing in two companies SONTEX LTD. and DENTEX LTD. The distribution of Conditional Returns and explicit probability distribution of stocks of SONTEX LTD. and DENTEX LTD. are as follows:

	Conditional Returns (in %)			
Probability	Sontex Ltd.	Dentex Ltd.		
0.10	60	5		
0.20	50	15		
0.40	40	25		
0.20	30	35		
0.10	20	50		

#### You are **required to**:

- (i) Calculate the Expected returns, Standard deviations of returns for both the stocks and correlation co-efficient between these two stocks.
- (ii) Compare the risks and returns of these two stocks with a portfolio of these stocks in equal proportions.
- (iii) Determine the expected rate of Return of a ZERO-RISK portfolio consisting of the above two stocks.

6+4+5=15

(a) The Information Technology Act, 2000, though appears to be self sufficient, takes mixed stand when it comes to many practical situations.

Outline some places where it looses its certainty.

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(b) THOMAS HOLDINGS LTD. is a Mutual Fund which made its Blue Chip NFO (New Fund Offer) on 5th April 2013 @ ₹ 10 Face value per unit. Subscription was received for 70 lakh units. An underwriting arrangement was also entered into with ASHLEEN CAPITAL MARKET LTD. that agreed to underwrite the entire NFO of 80 lakh units on a commission of 1.25%.

Out of the monies received, ₹ 714 lakh was invested in various Capital Market instruments.

The Marketing expenses for the NFO amounted to ₹ 9 lakh. During the Financial year ended on 31st March, 2014, the Mutual Fund (T.H.Ltd.) sold securities having cost of ₹ 101.80 lakh (F.V.₹ 43.40 lakh) for ₹ 113 lakh.

The Mutual Fund (T.H.Ltd.) in turn purchased securities for ₹ 104 lakh. The Management expenses of the Fund are regulated by SEBI stipulations which state that the same shall not exceed 0.25% of the average Funds invested during the year. The actual amount spent towards management expenses was ₹ 1.60 lakh. The dividends earned on the investments held amounted to ₹2.00 lakh of which a sum of ₹20,000 is yet to be collected. The Mutual Fund (T.H. Ltd) distributed 80% of realised earnings. The closing market value of the Portfolio was ₹896.20 lakh.

(Note: Ignore Entry and Exit load)

You are required to determine the closing per unit NAV of the Blue chip Fund.

2+2+2+2=8

(c) The stock of MERLIN LTD. (M.L.) is currently trading at ₹830 and PUT OPTION exercisable in three months' time has an exercise rate of ₹800. The annual standard deviation of its continuously compounded rate of return is 22 per cent.

The Annualised Treasury Bill rate corresponding to this option life is 5 per cent.

Based on the assumption that Merlin Ltd. is not going to declare any dividend over the next three months, is the option worth buying for ₹ 15?

#### Required:

- (i) Calculate the value of a three month PUT OPTION on the stock of MERLIN LTD. based on BLOCK and SCHOLES valuation Model.
- (ii) Comment on whether the option is underpriced or overpriced?

*Note*: Extracted from the respective Tables:

- (1) ln(1.0375) = 0.03681, ln(0.96386) = -0.03681
- (2) Value of  $e^{-x}$ :  $e^{-0.01} = 0.99005$ ,  $e^{-0.0125} = 0.98758$
- (3) Cumulative standardized normal probability distribution: NCX

When  $X \ge 0$ : N (0.50327) = 0.6926, N (0.39327) = 0.6529

When 
$$X \le 0$$
: N (-0.50327) = 0.3074, N (-0.39327) = 0.3471

6+1=7

- 4. (a) Explain briefly "Buy Back of Securities" and give the Management Objectives of Buying Back Securities.

  1+4=5
  - (b) The following information relates to an issue of Bond made by ALLWIN COMPANY LTD.

Face Value ₹ 1,000

Coupon Rate 15% payable Annually

Market Price ₹ 1,020
Tenure 8 years

It is Callable after 4 years at ₹ 1,050

# Required:

- (i) Calculate the Yield to Maturity (YTM) of the Bond.
- (ii) Calculate the duration of the Bond.
- (iii) Calculate the Yield to Call (YTC) of the Bond.
- (iv) If the market yield on similar instruments is expected to fall to arround 11.50% at the end of 4 years, which of the above yields as calculated in (i) and (iii) above is more realistic? Explain.

#### Note:

- (a) Ignore Floation Costs and transaction costs.
- (b) Extracted from the tables of PVIF and PVIFA:

Interest Rate	12%	14%	14.60%	15%	16%	
PVIFA (4 years)	3.037	2.914	2.878	2.855	2.798	
PVIFA (8 years)	4.968	4.639	4.548	4.487	4.344	
PVIF (4 years)	0.636	0.592	0.580	0.572	0.552	
PVIF (8 years)	0.404	0.351	0.336	0.327	0.305	2+2+3+1=8

(c) MS. ARTHITI an investor, purchases RELIANCE November Future (600 Shares Tick Size) at ₹ 1,610 and writes a ₹ 1,666 November Call Option at a premium of ₹ 14 (600 Shares Tick Size).

As on November 28, Spot price rises and also the Future price and the Call premium. Future price rises to ₹ 1,652 and Call premium rises to ₹ 22. Brokerage is 0.045% for the transaction value of Future and Strike price net of Call premium for option.

(Assuming no transaction taxes and service taxes exist.)

#### Required:

Find out the Profit/(Loss) of the investor, if she settles the transactions on that date and at stated prices.

2+2+2+1=7

## Section B (40 Marks)

# (Corporate Laws)

Answer Question No. 5 (carrying 10 marks) which is compulsory and answer any two (carrying 15 marks each) from the remaining three questions in this section.

- 5. (a) Choose the most appropriate one from the stated options and write it down (only indicate A or B or C or D as you think correct).
  - (i) Where an appeal is being preferred against an order made by the public information officers under section 11 of the RTI Act to disclose third party information, the appeal by the concerned third party must be made
    - (A) within 7 days of the order
    - (B) within 30 days of the order
    - (C) within 60 days of the order
    - (D) within 3 months of the order
  - (ii) In the context of classification of Risks, obsolescence Risks will fall under
    - (A) Management and Operation Risks
    - (B) Systems Risks
    - (C) Disaster Risks
    - (D) Industry and Services Risks

	<ul> <li>(iii) A merger of two or more firms operating in different and unrelated industries is called</li> <li>(A) Reverse marger</li> <li>(B) Conglomerate merger</li> <li>(C) Market extension merger</li> <li>(D) Product extension merger</li> </ul>	
	<ul> <li>(iv) Which audit ensures application of the basics economic principles so that resources flow into most remunerative channels; in the context of Corporate Governance?</li> <li>(A) Compliance audit</li> <li>(B) Proprietary audit</li> <li>(C) System audit</li> <li>(D) Efficiency audit</li> </ul>	the
	<ul> <li>(v) The sale of goods or provisions of services at a price which is below the cost, as may be determine by regulations, of production of the goods or provisions of services, with a view to reduce competities known as</li> <li>(A) Anticipatory price</li> <li>(B) Predatory price</li> <li>(C) Aggregate price</li> <li>(D) Minimum rate price</li> </ul>	ion
	<ul> <li>(vi) State which of the following statement is not correct. According to the provisions of the Companies Act, 2013</li> <li>(A) dividend includes any interim dividend.</li> <li>(B) share means a share in the share capital of a company and does not include stock.</li> <li>(C) body corporate or corporation includes a company incorporated outside India.</li> <li>(D) wholetime director includes a director in the wholetime employment of the company.</li> </ul>	v
(b)	ill in the blanks in the following sentences by using appropriate word(s)/phrase(s)/number(s): 1×4  (i) A person who fails to get appointed as a director in a general meeting can not be appointed as director.	
	<ul> <li>(ii) Under RTI Act where the information sought for concerns the life and liberty of a person, the satisfaction should be provided within of the receipt of the request.</li> <li>iii) A deal that enables a private company to get publicly listed in a relatively short time period</li> </ul>	
	iv) As per clause 49 of the listing agreement, if the chairman is a non-executive director, at least one this of board should consists of	ird
(a)	TULTISOFT LTD. (M.L.) was in corporated on April, 2012. On September 15, 2014 a political part opproaches the company (M.L.) for a contribution of ₹ 15 lakh for political purpose. dvise in respect of the following with reference to the provisions of the Companies Act, 2013:  (i) Is the company legally authorised to give this political contribution?  (ii) Will it make any difference, if the company was in existence on March 30, 2011?	rty
	ii) Can the company be penalized for defiance of Rules in this regard? 2+3+1:	=6

6.

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(b) RIMJHIM LTD. a Private Mobile Operator had furnished confidential information relating to customer complaints lodged with the company during the quarter ended June 30, 2014 to a public authority. On an application under the Right to Information Act, 2004, the public authority wants to furnish the said information. The Authority seeks the objections of RIMJHIM LTD.

Can RIMJHIM LTD. ask the Public Authority not to furnish the same on the grounds that the said information is confidential and that it may endanger its image in the Market?

What decision should the Public Authority take?

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(c) The Board of Directors of SIDDHA LTD. in its meeting held on 10th June, 2014, declared an interim dividend payable on paid up Equity Share Capital of the company. In the Board Meeting scheduled for 25th June, 2014, the Board wants to revoke the said declaration.

**You are required** to state with reference to the Provisions of the Companies Act, 2013, whether the Board of Directors of the Company can do so.

- 7. (a) Explain how the Provisions of the Companies Act, 1956, relating to Audit Committee will help in achieving some of the objectives of Corporate Governance.
  - (b) Discuss the role of Nomination Committee in the context of the principle of Corporate Governance.

What are the Principal functions and Responsibilities of the Governance and Nomination Committee in this regard?

(Note: Answer to Question keeping in view the Provisions of the Companies Act, 1956.)

2+6=8

- 8. (a) Mr. SURAJIT G., an officer of MACLEODS PHARMACEUTICAL LTD. was in possession of ₹ 1·25 lakh and occupation of the quarter of the company even after his retirement and neglected the notice of the company to return back the properties.
  - What action can be taken by the company to return back the properties including cash under the Companies Act, 2013?
  - (b) GANGETICA TEXTILE MILLS LTD. is of the view that MEGLOW LTD. is abusing its dominant position in the Textiles Industry. It wishes to lodge a complaint against Meglow Ltd. before the Competition Commission.

Explain briefly the factors that will be considered by the commission to ascertain whether MEGLOW Ltd. enjoys a dominant position in the Industry.

(c) Discuss the Role of Independent Directors in Corporate Governance.

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