FINAL EXAMINATION

June 2014

F–P11(CMC)

Syllabus 2008

Capital Market Analysis & Corporate Laws

Time Allowed: 3 Hours | **Full Marks: 100**

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

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.

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

Working notes should form part of the answer.

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) Consider a bullish spread option strategy using a call option on the stock of SOFTEX LTD. with ₹ 50 exercise price, priced at ₹ 5 and a call option with ₹ 60 exercise price, priced at ₹ 3·00. The current market price of stock of Softex Ltd. is ₹ 65. What would be the net profit at expiration, if the price of the stock is ₹ 80 on maturity?

A. ₹ 2·00

B. ₹ 6·50

C. ₹ 8·00

D. None of (A), (B), (C)

(ii) EPITOME LTD. is planning to issue a discount Bond with a par value ₹ 1000, implicit interest rate of 11·50% and a redemption period of 5 years. The company also intends to offer an early bird incentive of 2%. The issue price of the Bond will be (rounded up to nearest rupee): [Given: PVIF (11·5%, 5 years) = 0·5803].

A. ₹ 580

B. ₹ 569

C. ₹ 543

D. Insufficient Information

(iii) ARIHANT LTD. issued right shares which increased the market value of shares of the company by ₹ 120 crore. The existing base year average is ₹ 762·26 crore. What would be the aggregate (old) market value of all the shares included in the index before right issue made, if the new base year average is ₹ 808 crore?

A. ₹ 1999·81 crore
B. ₹ 856·5 crore
C. ₹ 805·0 crore
D. None of the above

(iv) MS. CHAITALI earns 10% on the investments in equity shares. She is considering a recently floated scheme of a Mutual Fund where the initial expenses are 6%. If annual recurring expenses are expected to be 2%, how much should the Mutual Fund earn to provide a return of 10% to MS Chaitali?

A. ₹ 13·50%
B. ₹ 12·64%
C. ₹ 11·25%
D. Insufficient Information

(v) MS. SOMA an investor, has ₹ 400000 to invest in equity and risk-free security. The data given below relates to the two securities.

Investment	Probability	Expected Return
		₹
Equity	0·6	160000
	0·4	(–) 120000
Risk-free Security	1·00	20000

What will be her expected Risk premium in investing in equity versus risk-free securities on the basis of above conditions?

A. ₹ 28000
B. ₹ 36000
C. ₹ 48000
D. ₹ 68000

(vi) MR. SUVA an analyst has made risk and return projection for the securities of ALIN LTD. and BITON LTD., which are as follows:

Scenario	Probability	Rate of Return (%)	
		Alin Ltd.	Biton Ltd.
1	0.5	30	20
2	0.5	10	– 10

Based on the above data, the covariance between the rates of return on securities of Alin Ltd. and Biton Ltd. is

A. 200 $(\%)^2$
B. 150 $(\%)^2$
C. 100 $(\%)^2$
D. 163 $(\%)^2$

(vii) ZENITH LTD. as paid a dividend of ₹ 5 per share with annual growth rate of 8%. The expected return on the market portfolio and the risk free rate of return are estimated to be 15% and 10% respectively. What will be the equilibrium price for the shares of ZENITH LTD., if the market sensitivity index (β) is 1·5?

A. ₹ 56·84

B. ₹ 52·63

C. ₹ 50·00

D. None of the above

(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) Which of the following Act puts forward the proposal for setting up the legal framework essential for the anthentication and origin of electronic records through digital signature?

A. SEBI Act

B. Information Technology Act, 2000

C. IRDA Act

D. None of the above

(ii) Beating the market by analyzing the data obtained from magazines, reports and newspapers means that the markets are in ————. (Fill in the gap from the below):

A. strong form inefficiency

B. semi-strong efficiency

C. semi-strong inefficiency

D. weak form efficiency

(iii) "Riskiness" of a security in the context of security analysis essentially means

A. Variability of the security's returns

B. Market Risk

C. Unsystematic Risk

D. Variability of returns above the benchmark mentioned by clients

(iv) SEBI (Disclosure and Investor Protection) Guidelines 2000 are not applicable to

A. Public Sector Banks

B. Infrastructure Companies

C. Both (A) and (B) above

D. All public issues by unlisted companies

(v) The CAPM risk-return relationship described by the SML is

A. an expected or *ex-ante* relationship

B. based on ex *post* beta

C. historical or ex *post* relationship

D. all of the above

(vi) For demat trading the minimum market lot is

A. 1 share

B. 10 shares

C. 50 shares

D. 100 shares

2. (a) Who are the major players of a Depository System? What advantages does the Depository System offer to the clearing member? 2+4=6

(b) MS. NABANITA, an investor purchased 200 units of SUN MUTUAL FUND AT ₹ 14·00 per unit on April 01, 2013. As on March 31, 2014 she has received ₹ 2·00 as dividend and ₹ 1·50 as capital gain distribution per unit.

You are required to **calculate**:

(i) The return on the investment if the NAV as on March 31, 2014 is ₹ 15·00.

(ii) The return on the investment as on March 31, 2014 if all dividends and capital gain distributions are re-invested into additional units of the fund at ₹ 14·50 per unit. 2+4=6

(c) The equity share of ADANI LTD. is quoted at ₹ 315. A 3-month CALL OPTION is available at a premium of ₹ 9 per share and a 3-month PUT OPTION is available at a premium of ₹ 8 per share.

(i) Determine the Net Pay offs to the option holder of a Call Option and a Put Option if

(1) the strike price in both cases in ₹ 330; and

(2) the share price on the exercise day is ₹ 300, ₹ 315, ₹ 330 and ₹ 360 respectively.

(ii) Also indicate the price range at which the Call Option and the Put Option may be gainfully exercised.

3+3+2=8

3. (a) The Information Technology Act, 2000, the Cyber Law of India gives the legal framework so that information is not denied legal effect, validity or enforceability.—Comment. 4

(b) MR ROHAN, Chief Analyst of AMTREX SECURITIES LTD. forcasts four economic scenarios which he believes are likely to occur with the given probabilities. Base on these scenarios he makes the following forcasts of the returns for the stocks of RINTEX LTD. and HARISON LTD.

Economic Scenario (GDP Growth Rate)	Probability	Returns associated with (in %)		
		Rintex Ltd.	Harison Ltd.	Market
1·00–4·00%	0·30	3	2	1
4·00–6·00%	0·35	17	14	15
6·00–8·00%	0·25	20	19	17
8·00–9·00%	0·10	22	17	25

It is felt that the interest rate of 7 per cent on the 91-day T-Bill is a good approximation of the Risk-free Rate. Assume that CAPM holds good in the market.

Required:

(i) Calculate the *ex-ante*-Betas for the stocks of Rintex Ltd. and Harison Ltd. and Comment on your findings.

(ii) Find out whether the stocks of Rintex Ltd. and Harison Ltd. are under priced or over priced.

(iii) Comment on the proportions of systematic and unsystematic risk in the two stocks.

(iv) Determine which stock the analyst would suggest to invest. (6+3)+2+3+3=16

4. (a) What are the various Risk associated with Derivatives? 4

(b) The following data for ITC LTD., BKC LTD. and DKB LTD. were complied for your information:

Stock	Expected Return (%)	Standard Deviation (%)	Systematic Risk (%)	Diversifiable Risk (%)
ITC Ltd.	38	22	12	06
BKC Ltd.	22	27	16	11
DKB Ltd.	40	06	06	00

Required:

(i) If a client wants to invest in only one stock, which one would you recommend? Can you unequivocally recommend one?

(ii) Suppose your client already holds a will-diversified portfolio such as the S & P 500 index. Which one stock would you recommend? Why?

(iii) Your client says that BKC Ltd. is far too risky with a standard deviation of 27%, especially compared to the other two firms' standard deviation of 22% and 6%. How would you address his concern? Explain assuming that your client holds a well-diversified portfolio. 2+3+2=7

(c) TRANSINDIA SYSTEMS LTD. issued 13% NCDs with a face value of ₹ 100. The market price of these NCDs as on the date of issue was ₹ 85. Interest is payable semi-annually and the NCDs will be redeemed after three years from the date of issue.

You are required to compute.

(i) The YTM of the NCD as on the date of issue.

(ii) The Realized yield, if an investor re-invests the coupon payments at 11% per annum compounded half yearly.

(iii) What would be the realised yield, if the interest payment are not re-invested.

Note:

(a) Ignore Floation Costs and transaction costs;

(b) Extracted from the tables of P.V. and F.V.

Interest Rate	5%	5.5%	7%	9%	10%	11%
PVIFA (6 years)	5.0760	4.9955	4.7665	4.4859	4.3553	4.2305
PVIF (6 years)	0.7462	0.7252	0.6663	0.5963	0.5645	0.5346
FVIFA (6 years)	6.8019	6.8880	7.1533	7.5233	7.7156	7.9129

4+3+2=9