FINAL EXAMINATION

[GROUP-III]

SUGGESTED ANSWER TO QUESTIONS

DECEMBER 2011

PAPER – 11 : CAPITAL MARKET ANALYSIS & CORPORATE LAWS

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

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

Section I (60 Marks)

(Capital Market Analysis)

Answer Question No 1 which is compulsory and any *two* from the rest in this section.

Question

1. (a) In each of the cases given below, one out of four is correct. Indicate the correct answer and give Workings / reasons briefly in support of your answer:

(i) The Market Price of Stock of ATCO Ltd is ₹ 102 and its Alpha is – 1.3%. The realized return on the stock is 16% p.a. and the Risk-free rate of return is 7.02%p.a. Market Risk premium is 7% p.a. What would be the required rate of return on the Stock of ATCO Ltd., if its co-variance with the market portfolio declines by 50%?

A. 14.235%

B. 13.125%

C. 12.165%

D. None of the above

(ii) The buy and sell value of two securities in stock exchange are as under:

Security	Buy Value (₹)	Sell Value (₹)
L	5,00,000	2,00,000
M	3,00,000	7,00,000

The Gross Exposure Margin is

A. ₹ 17,00,000

B. ₹ 7,00,000

C. ₹ 12,00,000

D. Insufficient information

(iii) The Stock of VENTEX LTD (FV ₹10) quotes ₹ 920 on NSE and the 3 months futures price quotes at ₹ 950 and borrowing rate is given as 8% p.a. If the expected annual dividend yield is 15% p.a. payable before expiry, then the theoretical price of 3 month Ventex Ltd. Futures would be

A. ₹ 948.80

B. ₹ 939.90

C. ₹ 936.90

D. ₹ 928.40

(iv) The following two types of securities are available in the market for investment:

Security	Return (%)	Standard Deviation (%)
Gilt-edge Security	7	0
Equity	25	30

Using the above two securities, if you are planning to invest ₹ 1,00,000 to construct a Portfolio with a standard deviation of 24%, the return of such portfolio is

A. ₹ 10,900

B. ₹ 15,600

C. ₹ 21,400

D. None of the above

(v) MS. VASUDA is considering an investment in a Mutual Fund with a 2% load. As another alternative, she can also invest in a Bank deposit paying 10% interest. Her investment planning period is 3 years. What should be the annual rate of return on Mutual fund so that she prefers the investment in the fund to the investment in Bank Deposit?

A. 10.743%

B. 11.282%

C. 11.884%

D. None of the above **[**2×5=10]

(b) Choose the most appropriate one from the stated options and write it down (only indicate A,B,C, Or D as you think correct):

(i) Green shoe option denotes an option

A. of allocating shares in excess of the shares include in the public issue
B. of allocating of shares lower than the shares included in the public issue
C. to buy shares at a specified price in the stock exchange
D. none of the above

(ii) An appeal against the order of the Banking ombudsman can be made to

A. No appeal is possible
B. The Finance Ministry
C. The Deputy Governor's Office of the RBI
D. The Central Government

(iii) The conversion of existing assets into marketable securities is known as

A. Future flows securitisation
B. Asset-backed securitisation
C. Venture funds
D. None of the above

(iv) Which of the following statements is true?

A. If market price = face value, then coupon rate>YTM>current yield
B. If market price = face value, then coupon rate< current yield<YTM
C. If market price > face value, then coupon rate>current yield>YTM
D. If market price < face value, then coupon rate= current yield=YTM

(v) A portfolio holding 90% of its assets in CNX Nifty Stocks in proportion to their market capitalization and 10% in Treasury bills is more sensitive to

A. Index Risk
B. Systematic Risk
C. Unsystematic Risk
D. Both (A) and (B) of above [1×5=5]

(c) Fill in the blanks in the following sentences by using appropriate words / phrases / numbers:

(i) Inter-bank market for deposits of maturity beyond.....................................is covered in money market instruments.

(ii) SEBI was constituted in the year............................

(iii) A prospectus is said to be a ....prospectus which contains all information as per prospectus contents but does not have information on price of securities offered and number of securities (quantum) offered through document.

(iv) The RBI performs the financial supervision function under the guidance of ....

(v) Buying and selling call or put option with same strike price but different expiration dates is called ....spread. [1×5=5]

Answer to Question No 1(a):

(i) C : 12.165%

Market Return = 7+7.02=14.02%

Required Return = 7.02 + (14.02 – 7.02)β = 16 + 1.3 = 17.3%

∴ Required Beta (β) = (17.3-7.02) ÷ 7=1.4686 i.e.1.47

If covariance of stock with the market declines by 50%, its beta also declines by 50%.

Hence New Beta = 50% of 1.47 = 0.735

∴ Required rate of return on stock of ATCO Ltd.: 7.02+0.735X7=12.165%

(ii) B : ₹ 700000

Security	Buy Value (₹)	Sell Value (₹)	Buy Value-Sell Value (₹)
L	500000	200000	300000
M	300000	700000	- 400000

The Gross Exposure Margin : S(I300000I+I-400000I)

= ₹ 700000

(iii) C : ₹ 936.90 :

Future Price = Spot Price + Costs of Carrying-Dividend

= 920+920X0.08X3/12-10X0.15

=920+18.40-1.50= ₹ 936.90

(iv) C : ₹ 21,400

$\sigma p^2 = w_1^2\sigma_1^2+w_2^2\sigma_2^2+2w_1^2w_2^2\sigma_1\sigma_2 P_{12}$

Since, standard deviation of Gilt-edged securities is 0 and its co-relation with the Equity is also 0, the formula will be reduced to $\sigma p^2 = w_2^2\sigma_2^2$ or

$\sigma p = w_2\sigma_2$ or $0.24=0.30w_2$ or $w_2 =0.8$

$Rp = w_1R_1+w_2R_2=0.2X0.07+0.8X0.25=0.214$

Return in Rupees = 100000X0.214=₹ 21400

(v) A: 10.743%

$(1-0.02)X(1+r)^3 \geq (1.10)^3$

or, $0.98 X (1+r)^3 \geq 1.331$ or $(1+r)^3 \geq (1.331 \div 0.98)$ or, $(1+r)^3 \geq 1.358163$

or $(1+r) \geq (1.107433)$ or, r = (1.107433-1) or r = 0.107433 i.e r = 10.743%

The annual rate of return on mutual fund = 10.743%

Answer to Question No 1(b):

(i) A
(ii) C
(iii) B
(iv) C
(v) B

Answer to Question No 1(c):

(i) 14 days
(ii) 1988
(iii) Red-Herring
(iv) Board of Financial Supervision (BFS)
(v) Horizontal Option / Calender Option

Question

2. (a) What is “money market”?

Explain the terms “Treasury bills” and “Certificate of Deposits” in this context. [1+2+3=6]

(b) Mr. VASANT SHAH an analyst of REVAMP SECURITIES LTD has made risk and return projections for the securities of SPARX LTD and DEPROTIV LTD which are as follows:

Scenario	Probability	Returns % associated with		
		SPARX LTD	DEPROTIV LTD	Market Index
Recession & High Interest Rate	0.20	-13	-4	-9
Recession & Low Interest Rate	0.15	16	-2	8
Boom & High Interest Rate	0.40	32	21	16
Boom & High Interest Rate	0.25	12	20	20

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

You are required to

(i) Calculate the ex-ante Betas for Sparx Ltd and Deprotiv Ltd

(ii) Comment on the proportions of systematic and unsystematic Risk in the two stocks.

(iii) Recommend for fresh investment in any of these two stocks.

-Show all the necessary calculations. [6+4+(2+2)=14]

Answer to Question No 2(a):

Money Market

The money market can be defined as a market for short-term money and financial assets that are near substitutes for money. The term ‘short-term’ means generally a period up to one year and ‘near substitutes to money’ is used to denote any financial asset which can be quickly converted into money with minimum transaction cost.

Treasury Bills

Treasury Bills are short term (up to one year) borrowing instruments of the union government. It is an IOU of the Government. It is a promise by the Government to pay a stated sum after expiry of the stated period from the date of issue (14/91/182/364 days i. e .less than one year) They are issued at a discount to the face value, and on maturity the face value is paid to the holder. The rate of discount and the corresponding issue price are determined at each occasion.

Certificate of Deposits

Certificates of Deposit (CDs) is 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 institution for a specified time period. Guidelines of issue of CDs are presently governed by various directives issued by the Reserve Bank of India, as amended from time to time. CDs can be issued by (i) scheduled commercial banks excluding Regional Rural Banks (RRBs) and Local Area Banks (LABs): and (ii) selected All India Financial Institutions that have been permitted by RBI to raise short-term resources within the umbrella limit fixed by RBI. Banks have the freedom to issue CDs depending on their requirements. An FI may issue CDs within the overall umbrella limit fixed By RBI, i.e. issue of CD together with other instruments viz, term money, term deposits, commercial papers and their inter- corporate deposits should not exceed 100 percent of its net owned funds, as per the latest audited balance sheet.

Answer to Question No 2(b):

REVAMP SECURITIES LTD

(i) Stock-SPARX LTD.

Prob	Rs	Prob × Rs	Rs- $\overline{Rs}$	(Rs-$\overline{Rs}$)^2	Probx(Rs-$\overline{Rs}$)^2
0.20	-13	-2.6	-28.6	817.96	163.592
0.15	16	2.4	0.4	0.16	0.024
0.40	32	12.8	16.4	268.96	107.584
0.25	12	3.0	-3.6	12.96	3.240
		15.6 ($\overline{Rs}$)			274.440(σ_S^2)

Expected Return of Sparx ($\overline{Rs}$) = 15.6%

Variance of Sparx (σ_S^2) = 274.44

∴ σ_S = 16.57%

Stock-DEPROTIV LTD.

Prob	R_D	Prob × R_D	$R_D - \overline{R}_D$	$(R_D - \overline{R}_D)^2$	Prob × $(R_D - \overline{R}_D)^2$
0.20	-4	- 0.8	-16.3	265.69	53.138
0.15	-2	- 0.3	-14.3	204.49	30.674
0.40	21	8.4	8.7	75.69	30.276
0.25	20	5.0	7.7	59.29	14.822
		12.30 ($\overline{R}_D$)			128.910(σ_D^2)

Expected Return of Deprotiv ($\overline{R}_D$) = 12.30%

Variance of Deprotiv (σ_D^2) = 128.91

∴ σ_D = 11.35%

MARKET RETURN

Prob	R_M	Prob × R_M	$R_M - \overline{R}_M$	$(R_M - \overline{R}_M)^2$	Prob × $(R_M - \overline{R}_M)^2$
0.20	-9	-1.8	-19.8	392.04	78.408
0.15	8	1.2	-2.8	7.84	1.176
0.40	16	6.4	5.2	27.04	10.816
0.25	20	5.0	9.2	84.64	21.160
		10.8 ($\overline{R}_M$)			111.56(σ_M^2)

Expected Return of Market ($\overline{R}_M$) = 10.80%

Variance of Market (σ_M^2) = 111.56

∴ σ_m = 10.56%

Covariance (Sparx, Market) = $\sum$Prob $(R_s - \overline{R}_s)(R_M - \overline{R}_M)$

0.20X(-28.6X-19.8)+0.15X(0.4X-2.8)+0.40X(16.4X5.2)+0.25X(-3.6X9.2)

= 113.256-0.168+34.112-8.28

=138.92%

Covariance (Deprotiv, Market) = $\sum Prob(R_D-\overline{R}_D)(R_M-\overline{R}_M)$

0.20X(-16.3X-19.8)+0.15X(-14.3X-2.8)+0.40X(8.7X5.2)+0.25X(7.7X9.2)

= 64.548+6.006+18.096+17.710

=106.360%

Beta of Sparx (βs) = Cov (Sparx,Market)÷ σ_M^2 = (138.92÷111.56) =1.25

Beta of Deprotiv(β_D) = Cov (Deprotiv,Market)÷ σ_M^2 = (106.360÷111.56) =0.95

(ii) Systematic Risk of Sparx = $\sigma^2_M X \beta^2_s$ = 111.56X$(1.25)^2$ = 174.31%

Unsystematic Risk of Sparx = 274.44-174.31=100.13%

Proportion of systematic Risk = (174.31)÷(274.44)X100 =63.51%

Proportion of unsystematic Risk = (100.13÷274.44)X100 =36.49%

Systematic Risk of Deprotiv = $\sigma^2_M X \beta^2_D$ = 111.56X$(0.95)^2$ = 100.68%

Unsystematic Risk of Deprotiv = 128.91-100.68=28.23%

Proportion of systematic Risk = (100.68÷128.91)X100 =78.10%

Proportion of unsystematic Risk = (28.23÷128.91)X100 =21.90%

Comment:

Both the securities therefore have little Unsystematic risk as compared to Systematic Risk. But comparatively Sparx has a higher Component of Unsystematic Risk as compared to Deprotiv.

(iii) Normal Retun = $R_f+\beta(R_M-R_f)$

SPARX Ltd: 7+1.25(10.8-7) = 11.75%

Alpha / Excess Return = 15.6-11.75=3.85%

Deprotiv Ltd : 7+0.95(10.8-7) = 10.61%

Alpha / Excess Return = 12.30-10.61=1.69%

The Alpha excess return of both the companies is positive. Hence the stock of Sparx Ltd and Deprotiv Ltd is under priced.

Sparx Ltd:

Excess return / Std deviation: (3.85÷16.57) = 0.23

Deprotiv Ltd

Excess return / Std deviation: (1.69÷11.35) = 0.15

As the excess return / Alpha to Standard deviation is higher for the stock of Sparx Ltd, Investment on the said stock (Sparx Ltd) may be recommended.

Question

3. (a) Briefly state the objective behind issuance of SEBI (Disclosure and Investor Protection) Guidelines, 2000.

    (i) To Whom are the said guidelines applicable?

    (ii) To whom are the said guidelines not applicable? [1+1+2=4]

   (b) For an important business offer made by your client BEAUTIFUL LTD, the offeree is ready to send a digitally signed e mail, accepting the offer. Your client wants to know if the same is legally binding. Advise the client suitability. [5]

   (c) The Stock of GREENENVIRON LTD.(G.L.) is currently trading at ₹ 796.17 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 20 percent.

   The annualised Treasury Bill rate corresponding to this option life is 6 percent.

   Requirement:

   Calculate the value of a three month PUT OPTION on the stock of GREENENVIRON LTD. (Using Black and Scholes Model)

   Note: Extracted from the Tables:

   1. In (0.99521)= - 0.00480, In (1.0048) = 0.004788
   2. Value of e^{-x}:$e^{-0.01}$= 0.99005, $e^{-0.015}$=0.98511
   3. Cumulative standardized normal probability distribution : NCX

      When $X \geq 0$: N(0.152)= 0.5604, N(0.052)=0.5207

      When $X \leq 0$: N(0-0.152)= 0.4396, N(-0.052)=0.4793 [2+1+1+3=7]

   (d) The following table gives an analyst's expected return on two stocks for particular market returns:

Market Return	Bulls Ltd	Bears Ltd
8%	4%	7%
18%	25%	15%

Required :

(i) Compute the Beta of the two stocks.

(ii) If the risk-free rate is 6% and the market return is equally likely to be 8% or 18%, what are the required Rate of Returns of the two Stocks? [2+2=4]

Answer to Question No 3(a):

SEBI (Disclosure and Investor Protection) Guidelines, 2000

New set of guidelines were issued in the year 2000 called SEBI (Disclosure and investor Protection) Guidelines, 2000, which are also amended subsequently. The said guidelines are issued by SEBI under section 11 of the Securities and Exchange Board on India Act, 1992. It provides a comprehensive framework for primary capital issues by the companies.

The guidelines are applicable to:

(i) All public issues by listed and unlisted companies.

(ii) All offers for sale and rights issues exceeding ₹ 50 lakhs by listed companies whose equity share capital is listed.

The guidelines are not applicable to:

(a) A banking company including local area bank

(b) Public sector banks

(c) Infrastructure companies

(d) Rights issue by a listed company.

Answer to Question No 3(b):

The Information Technology Act, will be of help to the client.

Section 4 and 5 of the Act may be referred to in this context. Section 4 accords legal recognition of electronic records. As per this section, where any law provides that information or any other matter shall be in writing or in the typewritten or printed form, then, notwithstanding anything contained in such law, such requirement shall be deemed to have been satisfied if such information or matter is:

(i) Rendered or made available in an electronic form, and

(ii) Accessible so as to be for a subsequent reference.

Section 5 speaks of legal recognition of digital signatures. Accordingly, where any law provides that information or any other matter shall be authenticated by affixing the signature or any document shall be signed or bear the signature of any person then, notwithstanding anything contained therein such law, such requirement shall be deemed to have been satisfied, if such information or matter is authenticated by means of digital signature affixed in such manner as may be prescribed by the Central Government. The Explanation to this section states that for the purposes of this section, “signed’, with its grammatical variations and cognate expressions, shall, with reference to a person, mean affixing of his hand written.

The client should ensure that in respect of this important e-mails / e-documents / e-records, the sender affixes his digital signature. A digitally signed document is a perfect piece of legal evidence as to its timing, contents, integrity and authenticity.

Answer to Question No 3(c):

Since d_1 and d_2 are the required inputs for Black and Scholes Option Pricing Model.

Since $d_1 = \frac{1n\,(VS/E)+(r+1/2\,\sigma^2)\times t}{\sigma\sqrt{t}}$ Where, Vs = Current Price of Stock = ₹ 796.17

E = Exercise Price = ₹ 800, r = Risk free Rate = 0.06

t = Time remaining until expiration = 3/12 =0.25

$$d_1 = \frac{1n\,(796.17/800)+[0.06+1/2(0.20)^2]0.25}{0.20\sqrt{0.25}}$$

$$= \frac{1n\,(0.99521)+0.02}{0.10}$$

$$= \frac{-0.00480+0.02}{0.10}$$

$$= \frac{0.0152}{0.10}$$

= 0.152

$d_2 = d_1 - \sigma\sqrt{t} = 0.152 - 0.20\sqrt{0.25} = 0.052$

$N(d_1)$ = N (0.152) = 0.5604, $N(d_2)$ = N (0.052) = 0.5207

Value of PUT OPTION : $Ee^{-rt}\,[1-N(d_2)] - Vs\,[1-N(d_1)]$

[Where $e^{-rt} = e^{-0.06x0.25} = e^{-0.015}$ =0.98511]

P = 800X0.98511 [1-0.5207]-796.17[1-0.5604]

= (788.088X0.4793) – (796.17X0.4396)

= 377.7306- 349.9963 = ₹ 27.7343 = ₹ 27.73

Answer to Question No 3(d):

The Betas of the two stocks are:

Bulls Ltd : (25-4) ÷ (18-8) = 21 ÷ 10 = 2.10

Bears Ltd : (15-7) ÷ (18-8) = 8 ÷ 10 = 0.80

The Expected Return on the market portfolio:

0.5×8% + 0.5×18% = 13%

The required Rate of Return of two Stocks:

Bulls Ltd: 6% + 2.10(13% - 6%) = 6% + 2.10×7 = 20.70%

Bears Ltd : 6% + 0.80(13% - 6%) = 6% + 0.80×7 = 11.60%

Question

4. (a) Explain in brief the differences between futures and option. [2+2=4]

(b) SUN MUTUAL FUND LTD promoted an open-ended equity oriented scheme in 2004 with two plans-Dividend Re-investment Plan (Plan-D) and a Bonus Plan (Plan-B). The face value of the units was ₹ 10 each. MS. ADITA invested ₹2,00,000 each on 1.4.2006 in Plan-D and Plan-B respectively, when the NAV was ₹38.20 for Plan-D and ₹35.60 for Plan-B. MS. ADITA redeemed her units in Plan–D and Plan-B respectively on 31.03.2011

Particulars of dividend and bonus declared over the period were as follows:

Date	Dividend (%)	Bonus Ratio	Net Asset Value (Rs.)	
			Plan-D	Plan-B
30.09.2006	10	-	39.10	35.60
30.06.2007	-	1:5	41.15	36.25
31.03.2008	15	-	44.20	33.10
15.09.2009	13	-	45.05	37.25
30.10.2009	-	1:8	42.70	38.30
27.03.2010	16	-	44.80	39.10
11.04.2010	-	1:10	40.25	38.90
31.03.2011	-	-	40.40	39.70

Required :

Calculate the Annual rate of return in respect of Plan-D and Plan-B for Ms. Adita.

Note: Ignore:

(i) Income Tax of Capital gains

(ii) Security Transaction Tax (STT) [4+4=8]

(c) The settlement price of a NIFTY FUTURES contract, on a particular day in a particular month of the year 2011 on NSE was 8288.4. The multiple associated with the contract is 50. The initial margin for the contract is ₹ 30,000 and the maintenance margin is set at ₹ 20,000.The settlement prices on subsequent 8 (eight) days were as follows:

Day	Settlement Price (₹)
1	7968.40
2	8429.70
3	8580.00
4	8307.70
5	7754.60
6	8143.00
7	8231.00
8	8444.00

Required :

Calculate the Mark to Market (MTM) cash flows, the daily Closing Balances and Net-Profit (or loss) in the Account of MR.S.BAKSHI an investor who has gone:

(i) Long at 8288.40

(ii) Short at 8288.40 [4+4=8]

Answer to Question No 4(a):

The key difference between futures and options is that the former involve obligations, whereas the latter confer rights. Futures are a Contractual obligation to buy and sell at an agreed price at a future date. The contract terms are standardised by futures exchanges and the obligation from both buyer and seller, is confirmed when the initial margin, or deposit, changes hands. An option does not carry the same obligations.

The fundamental differences between Futures and Option are tabulated below:

Futures	Options
1.Both the parties are obliged to perform the Contract.	1.Only the seller (writer) is obliged to perform the contract.
2.No premium is paid by either parties.	2.The buyer pays the seller (writer) a premium.
3.The holder of the contract is exposed to the entire spectrum of downside risk and has potential for all the upside return.	3.The buyer's Loss is restricted to downside risk to the premium paid but retains upward indefinite potential.
4.The parties of the contract must perform at the settlement date. They are not obligated to perform before the date.	4.The buyer can exercise option any time prior to the expiry date.

Answer to Question No 4(b):

SUN MUTUAL FUND LTD

1. PLAN-D (Dividend Re-investment Plan)

Date	Particulars	No. Of Units	NAV (₹)
01.04.2006	Purchase for ₹ 200000 (200000÷38.20)	5235.602	38.20
30.09.2006	Dividend @10% (5235.602×1.0)÷39.10 Balance	133.903 5369.505	39.10
31.03.2008	Dividend @15% (5369.505×1.5)÷44.20 Balance	182.223 5551.728	44.20
15.09.2009	Dividend @13% (5551.728×1.3)÷45.05 Balance	160.205 5711.933	45.05
27.03.2010	Dividend@16%(5711.933×1.60)÷44.80 Balance	203.998 5915.931	44.80
31.03.2011	Balance	5915.931	40.40

Redemption Value (as on 31.03.2011) :5915.931X40.40=₹ 239003.61

Investment	200000.00
Return	39003.61
Net Proceeds :	₹ 239003.61

CALCULATION OF ANNUAL RATE OF RETURN:

Rate of Return : $\sqrt[n\ years]{\text{Net Proceeds} \div \text{Initial Investment}}$ -1

= $(239003.61 \div 200000)^{1/5} - 1 = 1.0363 - 1 = 0.0363 = 3.63\%$

ALTERNATIVE SOLUTION

Annual Rate of Return:

Net proceeds discounted at annual growth rate of 3% i.e [PVIF(3%,5years)]

0.86261×239003.61 = ₹206166.90

Net proceeds discounted at annual growth rate of 4% [PVIF (4%,5 years)

0.82193×239003.61 = ₹196444.24

∴ Annual Rate of Return:

3+[(206166.90-200000)÷(206166.90-196444.24)X1]

= 3+(6166.90÷9722.66)X1=3.63% (by Interpolation)

2. PLAN-B (Bonus Plan):

Date	Particulars	No. Of Units	NAV (₹)
01.04.2006	Purchase for ₹ 200000	5617.978	35.60
30.06.2007	Bonus Units:(5617.978÷5)X1 Balance	1123.596 6741.574	36.25
30.10.2009	Bonus Units:(6741.574÷8)X1 Balance	842.697 7584.271	38.30
11.04.2010	Bonus Units:(7584.271÷10)X1 Balance	758.427 8342.698	38.90
31.03.2011	Balance	8342.698	39.70

Redemption Value (as on 31.03.2011) : 8342.698X39.70=₹ 331205.11

Investment 200000.00

Return 131205.11

Net Proceeds : ₹ 331205.11

CALCULATION OF ANNUAL RATE OF RETURN:

Rate of Return : $\sqrt[n\ years]{\text{Net Proceeds} \div \text{Initial Investment}}$ -1

$= (331205.11 \div 200000)^{1/5} - 1 = 1.1061-1=0.1061=10.61\%$

ALTERNATIVE SOLUTION

Annual Rate of Return:

Net proceeds discounted at annual growth rate of 10% i.e [PVIF (10%,5years)]

0.62092X331205.11 = ₹205651.88

Net proceeds discounted at annual growth rate of 11% i.e [PVIF (11%,5years)]

0.59345×331205.11 = ₹196553.67

∴ Annual Rate of Return:

10+[(205651.88 - 200000)÷(205651.88 – 196553.67)]×1
= 10+(5651.88÷9098.21)×1=10+0.62=10.62% (by Interpolation)

Answer to Question No 4(c):

MR S.BASHI
CALCUALTION OF MARK TO MARKET CASH FLOWS, DAILY CLOSING BALANCES AND NET PROFIT / (LOSS)

1. Investor who has gone long, the Index at 8288.40 (Fig in ₹)

Day	Settlement Price	Opening Balance	Mark to Market	Margin Cash	Closing Balance
1	7968.40	30000	(16000)	16000	30000
2	8429.70	30000	23065	-	53065
3	8580.00	53065	7515	-	60580
4	8307.70	60580	(13615)	-	46965
5	7754.60	46965	(27655)	10690	30000
6	8143.00	30000	19420	-	49420
7	8231.00	49420	4400	-	53820
8	8444.00	53820	10650	-	64470

Net Profit / (Loss) : (16000)+23065+7515+(13615)+(27655)+19420+4400+10650= ₹ 7780

2. Investor (Mr.S.Bakshi) who has gone short, the Index at 8288.40 (Fig in ₹)

Day	Settlement Price	Opening Balance	Mark to Market	Margin Cash	Closing Balance
1	7968.40	30000	16000	-	46000
2	8429.70	46000	(23065)	-	22935
3	8580.00	22935	(7515)	14580	30000
4	8307.70	30000	13615	-	43615
5	7754.60	43615	27655	-	71270
6	8143.00	71270	(19420)	-	51850
7	8231.00	51850	(4400)	-	47450
8	8444.00	47450	(10650)	-	36800

Net Profit / (Loss) : 16000+(23065)+(7515)+13615+27655+(19420)+(4400)+(10650)= ₹(7780).

Section II (40 Marks)

(Corporate Laws)

Answer Question No 5 which is compulsory and answer any two from the rest in this section.

Question

5. (a) Choose the most appropriate one from the stated options and write it down (only indicate A,B,C Or D as you think correct):

(i) In a Public Limited Company there are 10 directors including Managing Director and a nominee of ICICI. How many directors are liable to retire by rotation?

A. Four
B. Five
C. Six
D. Seven

(ii) MR. RAJESH, a director of GROW WELL LTD died in a train accident. The Board of directors would like to appoint MR. ARUN KUMAR in place of MR. RAJESH. Which of the following statements is true?

A. The company has to call for extra-ordinary general meeting
B. The company has to continue with the existing number of Directors till the next Annual General Meeting.
C. The Board can fill up the vacancy at the Board Meeting
D. None of the above

(iii) Buy-back of equity shares in a financial year shall not exceed

A. 25% of total authorised equity capital of the company
B. 25% of total paid-up equity capital of the company
C. 25% of total called-up equity capital of the company
D. None of the above.

(iv) In the context of classification of Risks war risks will fall under

A. Political Risks
B. Credit Risks
C. Disaster Risks
D. Systems Risks [1×4=4]

(b) Fill in the Blanks in the following sentences by using appropriate words/phrases:

(i) As per clause -49 of the listing agreement where chairman is a Non-executive director, at least................................of Board should consist of independent directors.

(ii) After the commencement of the Companies (Amendment) Act,2011, no person, shall, save as otherwise provided in section 276, hold office at the same times as director in more than...................companies.

(iii) Section...................to....................of the Companies Act, 1956 contain elaborate provisions for regulating payment of compensation to directors for loss of office.

(iv) In the case of a public limited company, the director must obtain qualification shares within.................from the date of appointment.

(v) To examine how a result will change if the predicted financial outcomes are not achieved or if an underlying assumption changes, managers can use..........................analysis.

(vi) Related party disclosure requirements are spelt out in IAS................................ [1×6=6]

Answer to Question No 5(a):

(i) C
(ii) C
(iii) B
(iv) A

Answer to Question No 5(b):

(i) One third
(ii) 15
(iii) 318 to 328
(iv) Two months
(v) Sensitivity
(vi) 24

Question

6. (a) MS. SUCHANDA has entered into a transaction with GLAMOUR LTD for a contract value of ₹ 40 lacs. The Articles of Association enjoin that contracts above ₹ 10 lacs should be approved in Board Meeting. Mr. Dhuruv, an officer of the company, produces forged documents to her, which show a resolution having been passed in a Board Meeting approving the contract. Later, the forgery comes to light. MS. Suchanda pleads that she is protected by the Doctrine of Indoor Management.-Discuss. [3+2=5]

(b) Can any fine or penalty be imposed on the Public Information Officer of a Government Department, where he has deliberately delayed the furnishing of information sought for properly, under the RTI Act,2004?
Is such Levy automatic?
How can the fine or penalty imposed, be recovered from him? [1+2+2=5]

(c) "Corporate governance is merely the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled". Critically examine this statement. [5]

Answer to Question No 6(a):

Doctrine of Indoor Management
The Doctrine of Constructive Notice protects a company from outsiders. There is one limitation to that doctrine. The Doctrine of Indoor Management is an exception to the Doctrine of Constructive Notice. The Doctrine of Constructive Notice provides that an outsider must read the Memorandum and Articles of a company. But he is not expected to do more. As far as internal procedures are concerned, an outsider is entitled to presume that every thing has been done according the procedures laid down and there is no irregularity. An outsider cannot find out what is going inside the doors as the doors of the management are closed to an outsider. Therefore protection to such an outsider becomes necessary. Thus while the Doctrine of Constructive Notice is a protection to the company against an outsider, the Doctrine of Indoor Management is protection to the outsiders against the company.
In certain exceptional situations, the doctrine of indoor management is not applicable. The doctrine of indoor management is not applicable where a person relies upon a document that turns out to be a forged since nothing validate forgery. A company cannot be held liable for forgeries committed by its officers.
Thus MS SUCHANDA will not succeed in her Pleading.

Answer to Question No 6(b):

As per section 12(4) of the RTI Act, 2004 subject to sub-section (3), where any Public Information Officer has, without any reasonable cause, failed to supply the information sought, within the period specified under section 7(1), penalty can be levied.

Such levy of penalty is not automatic. The relevant Information Commissioner shall, on appeal, impose a penalty of rupees two hundred fifty, which amount must be increased by regulation at least once every five years, for each day's delay in furnishing the information, after giving such Public Information Officer a reasonable opportunity of being heard.

Any fines imposed under sub-sections (1), (2),and (3) shall be recoverable from the salary of the concerned officer, including the Public Information Officer, or if no salary is drawn, as an arrears of land revenue, recoverable within a maximum of six months of the order imposing the fine.

Answer to Question No 6(c):

Corporate Governance

To say that Corporate Governance is merely the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled , depicts a narrow view. It is much more than this. Corporate Governance also includes the relationships among the many stakeholders involved and the goals for which the corporation is governed. The principal stakeholders are the shareholders, management and the board of directors. Other stakeholders include employees, suppliers, customers, banks and other lenders, regulators, the environment and the community at large.

The stakeholders may be internal stakeholders (promoters, members, employees, management and the board of directors) and external stakeholders (suppliers, customers, lenders, banks, the environment and the community at large, government and regulators.)

Corporate governance is a voluntary ethical code of business of companies. According to Cadbury Committee on financial aspects of corporate governance, “It is the system by which companies are directed and controlled. The Board of directors are responsible for the governance of their companies. The shareholders role in the governance is to appoint the directors and the auditors and to satisfy themselves that an appropriate governance structure is in place”.

Question

7. (a) Discuss the role, membership and operations of a Nomination Committee. [6]

(b) In the context of management audit, what is meant by "control risk" vis-a-vis detection of material misstatements in the financial statements?
In this regard, what is " Control Risk at the maximum" and " Control Risk at less than the maximum"? [6]

(c) An understanding has been reached among the manufacturers of cotton to control the price of cotton, but the understanding is not in writing and it is also not intended to be enforced by legal proceedings.-Examine whether the above understanding can be considered as an 'agreement' within the meaning of section 2(b) of the Competition Act,2002. [3]

Answer to Question No 7(a):

NOMINATION COMMITTEE

Role

The Governance and Nominating Committee's role is to determine the slate of director nominees for election to the Company's Board of Directors, to identify and recommend candidates to fill vacancies occurring between annual shareholder meetings, to review, evaluate and recommend changes to the Company's Corporate Governance Guidelines, and to review the Company's policies and programmes that relate to matters of corporate responsibility, including public issues of significance to the Company and its stakeholders.

Membership

The membership of the Committee consists of at least two directors, each of whom shall meet the independence requirements established by the Board and applicable laws, regulations and listing requirements. The Board appoints the members of the Committee and the chairperson.

The Board may remove any member from the Committee at any time with or without cause.

Operations

The Committee meets at least twice a year. The Committee shall meet periodically in executive session without Company management present. Additional meetings may occur as the Committee or its chair deems advisable. The Committee will cause to be kept adequate minutes of its proceedings, and will report on its actions and activities at the next quarterly meeting of the

Board. Committee members will be furnished with copies of the minutes of each meeting and any action taken by unanimous consent. The Committee is governed by the same rules regarding meetings (including meetings by conference telephone or similar communications equipment), action without meetings, notice, waiver of notice and quorum and voting requirements as are applicable to the Board. The Committee is authorized and empowered to adopt its own rules of procedure not inconsistent with (a) any provision of this Charter, (b) any provision of the Bylaws of the Company, or (c) the laws of the State.

Answer to Question No 7(b):

Assessing Control Risk

Control Risk- the risk that the client's internal control policy and procedures are not effective in preventing or detecting material misstatements in the financial statements.

1. **Control risk at the maximum**

   -Conclusion based upon the auditor's judgement that the client's internal control policies and procedures do not reduce to a low level the potential that the financial statements are free of material errors and / or irregularities.

   -After reaching this assessment the auditor would only be required to document in his/her work papers the fact that control risk is at the maximum and not the basis for reaching this conclusion.

   The auditor may decide control risk is at the maximum based upon management accounting technique called cost benefit decisions.

2. **Control risk at less than the maximum**

   Based upon his / her initial understanding of the internal control components, the auditor may conclude that control risk may be less than the maximum.

   The auditors in this situation must evaluate the cost/benefit of existing his/her understanding of internal controls to make a final decision concerning control risk.

   The cost / benefit decision is based upon the audit time involved in extending the auditor's understanding of internal controls, including tests of control versus the time that may be saved with the possible reduction of substantive audit tests.

Answer to Question No 7(c):

As per section 2 (b) of the Competition Act 2002" "agreement" includes any arrangement or understanding or action in concert-----

(i) Whether or not, such arrangement, understanding or action is formal or in writing; or

(ii) Whether or not such arrangement, understanding or action is intended to be enforceable by legal proceedings;

In view of the above definition of agreement; an understanding reached by the manufacturers of Cotton to Control the price of cotton will be an agreement within the meaning of section 2(b) of the Competition Act 2002 even though the understanding is not in writing and it is not intended to be enforceable by legal proceedings.

Question

8. (a) VAIBHAV POLYMERS LTD has an authorised capital of ₹ 250 lacs. Its paid up capital is ₹ 200 lacs. The free reserves are to the tune of ₹ 120 lacs. The company has advanced to other companies to the tune of ₹ 180 lacs, as on 30th November 2011. On this date, the Board of directors of the company wants to advance ₹ 35 lacs to Vasudha Textiles Ltd., without the prior permission of the shareholders in a general meeting.

- Discuss the correctness of the proposal. [6]

(b) MR. JYOTIRMAYEE has supplied goods worth ₹ 3,000 to TWINKLE LTD. The company proposes to appoint him as an independent director in the Board. The total annual purchases of the company amount to ₹ 4 crores.

- Discuss about the appropriateness and correctness of this proposal, in the light of provisions of the Companies Act, 1956. [5]

(c) A group of shareholders of DECEPTIVE TECHNO LTD. filed an application before the Company Laws Board (CLB) alleging various acts of frauds and mismanagement by MR NAVIN, the Managing Director & his associates. During this course of hearing before the CLB, the authorized representatives of the said company contended that the alleged transactions had taken place several years ago and the company has already removed the Managing Director, who was responsible for such transactions and hence there is no case before the CLB to interfere in the working of the company. Against the submission on behalf of the company, the applicants submitted that although the fraudulent transactions were done in the past and the Managing

Director has been removed, but the company is still controlled by the person, who are in leage with the erstwhile Managing Director and are working as his Henchman.

- State the merits of the applicants' arguments and power of the CLB. [4]

Answer to Question No 8(a):

Inter-corporate loans

According to the provisions of section 372A of the Companies Act,1956, a public company and private company, which is a subsidiary of the public company shall not, directly or indirectly, inter alia, make any loan to any other body corporate, exceeding 60% of its paid up Share Capital and free reserves or 100% of its free reserves, whichever is more without prior authorization by way of a special resolution passed in a general meeting.

In order to arrive at the conclusion whether the directors of Vaibhav Polymers Ltd. Can make the proposed investments without seeking approval from the shareholders, the amount upto which they can invest has to be arrived at. In the given case, the two limits are:

Limit 1	(₹ in lacs)
(i) Paid up Capital	200
(ii) Free reserves	120
(iii) Total	320
(iv) 60% thereof	192

Limit 2

100% of free reserves ₹ 120 lakh

Higher of the two ₹ 192 lacs has to be reckoned.

The company has advanced to companies to the tune of ₹ 180lacs, as on 30th November, 2011. On this date, the company wants to advance ₹ 35 lacs to Vasudha Textiles Ltd. The total comes to ₹ 215 lacs, which exceeds the ceiling limit of ₹ 192lacs.

Hence the Board of Directors of the company cannot advance of ₹ 35 lacs to Vasudha Textiles Ltd,, without the prior permission of the shareholders in a general meeting.

(As required U/s 372A of the Companies Act 1956)

Answer to Question No 8(b):

Independent Directors

There have been a lot of discussions and debates going on in corporate circles and among academicians in recent times on the need for role of and importance of independent directors.

An independent director is defined as a non-executive director who is free from business or other relationship which could materially interfere with the exercise of his “independent judgement”.

The Companies Act provides a negative definition of an independent director, inasmuch as it renders ineligible eleven categories of persons to be appointed as independent directors in a company, for instance, if a person has held any post in a company at any point of time is disqualified to be independent director of the company. Likewise, any vendor, supplier or customer of goods and services of the company would stand disqualified, **notwithstanding the fact that the amounts of transaction are insignificant.**

In the light of the above, the proposal to appoint Mr. Jyotirmayee, who has supplied goods worth ₹ 3000 to Twinkle Ltd. as an independent director of the said company is incorrect. Though the annual purchases may be in crores, the factum of Mr. Jyotirmayee being a vendor, stands in the way of his being appointed as an “independent director”

Answer to Question No 8(c):

The powers of the CLB under section 397 and section 398 can be invoked for obtaining relief from oppression and mismanagement, only where the affairs of the company are being conducted in a manner oppressive of any member or members or in a manner prejudicial to the interest of the company. The words are being conducted would indicate that oppression and mismanagement should be continuous course of conduct and should be present on the date of the application to the CLB.

Thus, the CLB does not have power to interfere with past and concluded transactions entered into by a company. At best, the CLB can exercise its power to set aside any transfer of property effected within 3 months before the date of the application. Further, the CLB can exercise the power conferred by section 406 to direct the delinquent directors, managers and other officers to refund any funds of the company that they have retained or misapplied or pay compensation for loss arising on account of misfeasance or breach of trust. As the applicants have not established the above facts beyond a vague statement that the management of the company is still controlled by the henchman of Mr Navin, the CLB will not exercise its powers under the Act. This view is supported by the decision in Seth Mohanlal Ganpatram v. Shri Satyaji Jubliee Cotton and Jute Mills Company Ltd. (1964) 34 Comp.Cas777.