XLRI JAMSHEDPUR – PGP BM I, FM-II, END-TERM EXAM SOLUTION

SECTION I

Instrument No.	1	2
INSTRUMENT	**CALL OPTION**	**PUT OPTION**
Expiry Date	28-02-2002	28-02-2002
Strike Price	1100	1100
Premium Open/High/Low (Rs.)	14/32/13	31/31/11
Traded Qty.	65200	15200
No. of Contracts	326	76
Notional Value (Rs. Lakhs)	730.36	170.01
Open Interest	91000	14200

Based on the above data answer the following questions:

[Each correct answer: + 1 mark, each wrong answer: -1 mark]

1. A long position in (1) and a short position in (2) is a straddle – No
2. The trading data in the above option suggests that the market closed below its open price (i.e., market fell or crashed) on the above-suggested date – No
3. Given (a) Nifty on 28-02-2002 closes at 1200; and (b) Rana invested a total of Rs. 100 in either of above two instruments on the above date. Rana as a option buyer could make a maximum profit of Rs. 609 – Yes
4. Given (a) Nifty on 28-02-2002 closes at 1200; (b) You invested in a straddle combining the above two instruments (with each of one quantity only). Your minimum profit would be Rs. 37 – Yes
5. If the Nifty on that day traded between 1070 and 1110. A protected call in the above two instruments would cost a maximum of Rs. 1142 – No
6. Without going into detailed calculations and using only the premium open/high/low data one can say that the average premium of call option was more than put option on 7th Feb. 2002 (in the above case) – Yes
7. After a takeover episode, Barath ends up owning all the equity shares of Balrampur Chini Mills Ltd. Listening to this, Sumit says that *"I will view this as Barath owning a call option on the assets of Balrampur Chini Mills with an exercise price equal to the redemption value of its long-term liabilities."* Do you agree with Sumit's statement – No
8. Rashtriya Ispat Nigam Limited (RINL) is a public sector undertaking manufacturing steel (apart from cash losses). Suppose, a new issue of RINL bonds is guaranteed by the Government of India, a major share of benefits would accrue to the existing stock holders (i.e., Government of India) and a minor share of benefits accrues to the existing bond holders – Yes

SECTION II

Mumbai: TATA Engineering & Locomotive Company, at a meeting of its committee of directors on Monday, approved the change in the terms of the simultaneous and unlinked issue of fully convertible debentures with detachable warrants and non-convertible debentures with detachable warrants on a rights basis.

This has been done in the ratio of one FCD for every 4 shares held and one NCD for every 10 shares held of the company, according to a company release.

The company will raise approximately up to Rs 978.65 crore from the proposed rights issue, depending upon the extent of exercise of warrants by the investors. The proposed issue, subject to the necessary regulatory approvals, is slated to open around September-end, 2001.

The proceeds of the rights issue will be used for essential capital expenditure and new product development programmes and repayment/pre-payment of expensive borrowings of the company. The infusion of long-term funds, by way of this rights issue, will also improve cash flows and the debt-equity ratio.

The FCDs will have a face value of Rs 65 and be compulsorily converted into 1 ordinary share of Rs 10 each on March 31, 2002, at a premium of Rs 55 per share. The FCD will carry an interest of 7 per cent on the face value. Every five FCDs will have one detachable and tradeable equity warrant which can be exercised and converted into one ordinary share of Rs 10 each at a price of Rs 120 after 18 months from the date of allotment till September 30, 2004.

The NCDs will have a face value of Rs 100 and carry an interest of 11 per cent per annum payable annually. The NCD will be redeemed in three instalments of Rs 30, Rs 35 and Rs 35 each at the end of the 4th, 5th and 6th year, respectively, from the date of allotment and would also have a put and call option at the end of 24 months from the date of allotment. Every two NCDs will have one detachable and tradeable equity warrant which can be exercised and converted into one ordinary share of Rs 10 each at a price of Rs 120 after 18 months from the date of allotment till September 30, 2004.

The date of allotment would be November 1, 2001.

Name (Previous close), Traded quotes (Traded volume, value (Rs. '000), trades)
Telco shares (124.25) 125.80, 136.70H, 121.70, 135.10 (3997T, 529167, 16624)
Telco 7%-fcd-65 (118.20) 120, 133, 117.80, 129.90 (183T, 23056, 361)
Telco-Deb (119.25) 118.50, 132, 129.10, 132 (39720, 5030, 237)
Telco-Deb (35) 34, 41, 30.25, 39.35 (5944, 229, 100)
Warrants-2004 (35.20) 37.90, 41.40, 36.10, 40.15 (58292, 2307, 118)

It is also known that before rights issue Vishal held 100 common equity shares of Telco and was eligible for all the benefits vide its rights issue announcement as stated above.

Based on the above data and case facts answer the following questions:

[Each correct answer: + 1 mark, each wrong answer: -1 mark]

9. If Vishal takes up all the opportunities of increasing his Telco equity shares that he is eligible for. Vishal will end up with 35 more shares of Telco – Yes
10. The total amount Vishal would need to set aside to invest would be equal to (without considering time value of money) Rs. 3825.00 – Yes
11. The trading data of Telco 7% fcd's and Telco equity shares suggests an average price difference of Rs. 3.80 – Yes
12. Why does a price difference exist between Telco shares and Telco-7%-FCDs in the above trading data (or even previous days closing prices)? Answer in the space provided below

Premium for being able to sell shares in the market before 31st March (additional risk-return).

13. The column in above table indicating the following details *'Telco-Deb (35) 34, 41, 30.25, 39.35 (5944, 229, 100)'* probably gives the trade prices of which security? Answer in the space provided below

NCD Detachable Warrants

14. If Vasudha were to strike a deal for Telco NCD's at its closing prices. The YTM would be less than 5% - Yes
15. Buying Telco NCD's on 7th Feb would have also given me an option to invest in Telco shares at a latter date – No
16. All buyers of Telco warrants at the above prices on 7th Feb are assuming that Telco share prices will be more than Rs. 174.45 on May 1, 2003 – No
17. Given Tata groups' high standing among investors, the public announcement by Telco of its rights issue on August 14, 2001 should have decreased its share price – Agree/Disagree? Why? Answer in the space provided below

Warrant price indication – is to increase (financial signaling) OR

Pecking order theory – says, decrease due to increasing equity from external markets

SECTION III

Read and then answer the questions only in the space provided below them.

18.

(a) Rao believes in cutting the weight around and keeping good health of one and all. So, as soon as Rao joins Vinyl Chemicals Ltd (VCL) he proposes a Voluntary Retirement Scheme (VRS) for the firm to increase its shareholder value by increasing its profitability. Based on a report from Rao, VCL is considering a VRS for all employees above the age of 55 years (around 100). The scheme is expected to cost Rs. 10 crores (in the present year). The cost will be amortized on a straight-line basis over a period of 5 years (starting from next year). The move is expected to benefit the company to the extent of Rs. 3 crores every year for the next 5 years only. Assume a tax rate of 30%. The required rate of return (or cut-off-rate) is 13%. What would be the NPV of the proposed VRS package be? So the proposal should be accepted/rejected?

[5 marks]

Year	**0**	**1**	**2**	**3**	**4**	**5**
Savings/year		3	3	3	3	3
Depreciation		-2	-2	-2	-2	-2
Profit before tax		1	1	1	1	1
Profit after tax		0.7	0.7	0.7	0.7	0.7
Cash Flow = PAT + depreciation		2.7	2.7	2.7	2.7	2.7
Cash Inflow/Outflow	-10	2.7	2.7	2.7	2.7	2.7
Present Value	**-10.00**	**2.39**	**2.11**	**1.87**	**1.66**	**1.47**
Net Present Value	**-0.50**					
Alternatively, calculate the present value of annuity payments for 5 years						($9.50)
deduct the figure from initial investment						-10
						($0.50)
A negative NPV implies reject the project						

(b) **Cost of Forgoing Cash Discount**

$$\text{Cost of forgoing cash discount} = \frac{\text{Cash discount}}{100\% - \text{cash discount}} \times \frac{360}{N}$$

Supplier	Credit Terms	Cost of Forgoing Cash Discount	Evaluation *
	1/10 net 45	(.01 ÷ .99) x (360 ÷ 35) = 10.4%	Forgo
	2/15 net 30	(.02 ÷ .98) x (360 ÷ 15) = 49.0%	Borrow
	2/10 net 35	(.02 ÷ .98) x (360 ÷ 25) = 29.4%	Borrow

* The firm must compare the cost of forgoing the cash discount to the 14% annual interest rate from the bank and borrow if the cost of foregoing the cash discount exceeds the borrowing cost.

Recommendation:

Borrow in order to take the cash discount from Suppliers 2 and 3; forgo the cash discount from Supplier 1.

SECTION V

[Each Correct answer + 1.5 marks; Wrong answer – 1.5 marks]

(b) Refer to the news item below: In paragraph 5 starting **'For instance, an individual …' -** what will be the net asset value (NAV) of each unit after the bonus issue?

(a) Rs. 10.00

(b) Rs. 10.10

(c) Rs. 10.005

(d) None of the above

(c) Refer to the various news items related to RIL, RPL merger below: BASED ON THE ABOVE DISCUSSION Tick all the BELOW CHOICES that you agree to (i.e., there ARE multiple correct answers). Leave all the ones that you disagree to. Remember that each correct tick earns you + 1.5 marks and each wrong tick earns you –1.5 marks. Use your own judgment to decide on the answers (i.e., views, interviews and discussions might be biased)

(e) The merger will bring in sales enchancement

(f) The merger will bring in large scale operating economies

(g) The merger will bring in large scale synergies

(h) The merger will have large scale economies of scope

(i) The merger is a classic case of horizontal integration

(j) The merger will bring in improved management to the new firm

(k) The merger will bring in large benefits of information effect

(l) Hubris hypothesis is the reason behind the merger

(m) Wealth transfers is the main reason behind the merger

(n) The merger will in all probability reduce the overall cost of capital of RIL

(o) Tax benefits are one of the reason behind the merger

(p) The merger will have leverage gains

(q) Managements personal agenda is one of the reason behind the merger

(r) It will give rise to a firm with increased financial clout

(s) With this, the Reliance-Ambani group becomes fully diversified, both in terms of products and the portfolio.

(t) If Girish buys the 12.2% stake that is going to be sold in the post-merger equity of the company. Girish will be known as a strategic investor

(u) If Indian Oil Corp (IOC) buys 15.01% stake from the market in the post-merger equity of the company. IOC will surely be known as a strategic partner
(v) Pricewaterhouse Coopers and S. B. Billimoria & Co are involved in the merger to protect minority investor's interests.
(d) **In a divestment exercise by Government of India, Zuari Industries acquired Paradeep Phosphates.**

Use your own judgment to decide on the answer below:
(w) In all probability, the acquisition will bring in improved management benefits
(x) In all probability, the acquisition will be bring in tax benefits
(y) Both (a) and (b)
(z) None of the above
(e) Refer to the **news items titled 'APTransco plans …' below: Tick all the ones that you agree to (i.e., there may be multiple correct answers).**
(aa) The redeemable bond issue is an example of a junk bond
(bb) APTransco is the guarantor for the issue
(cc) The coupon rates indicate that yields are decreasing with time
(dd) None of the above

SECTION III

[Each Correct answer + 3.0 marks; Wrong answer – 1.0 marks]

(f) Government of India has privatized domestic airline operations. One of the new entrants is Air Sahara. It is known that Air Sahara is on an expansion spree and is in need of money. In the space provided suggest a way using 'Securitization' as a means for raising money for Air Sahara.

Securitization of airline receivables/future ticket revenues/assets (aircrafts)

(g) Refer to the news item titled 'Dabhol likely …' below.

Assuming that BSES wins the bid for DPC and also assuming the game plan of Ambanis given in the newsclip to be true. In the space provided describe any governance problems you perceive.

Since, Ambanis would be using the above firms for their own ends and for maximizing their shareholder value, so, Lenders and Minority/other shareholders would be taken for a ride.

(h) Refer to the **news item titled 'Promoters rush to …' below.**

In the space provided suggest the governance problems (if any) and stakeholder(s) who will suffer due to this
The biggest stakeholder to suffer would be the Government as this would lead to fall in its revenues.

(i) Refer to the **news item titled 'IDBI to redeem 1992 bond …' below.**

In the space provided suggest the governance problems (if any) and stakeholder(s) who will suffer due to this move.
There seems to be no corporate governance problem unless IDBI mentioned the early redemption clause in fine print/small fonts during the issue in 1992.